



NOV 20 2012

Mike Harnden  
AEMETIS Advanced Fuels Keyes, Inc  
P.O. Box 879  
Keyes, CA 95328-0879

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # N-7488  
Project # N-1111864**

Dear Mr. Harnden:

Enclosed for your review and comment is the District's analysis of AEMETIS's application for the Federally Mandated Operating Permit for its ethanol production plant, at 4209 Jessup Road, Ceres, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Rupl Gill, Permit Services Manager, at (209) 557-6400.

Sincerely,



David Warner  
Director of Permit Services

DW:JK/st

Enclosures

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

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

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
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34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585



NOV 20 2012

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

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # N-7488  
Project # N-1111864**

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of AEMETIS's application for the Federally Mandated Operating Permit for its ethanol production plant, at 4209 Jessup Road, Ceres, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Sincerely,

  
David Warner  
Director of Permit Services

DW:JK/st

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Executive Director/Air Pollution Control Officer

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NOV 20 2012

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

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # N-7488  
Project # N-1111864**

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of AEMETIS's application for the Federally Mandated Operating Permit for its ethanol production plant, at 4209 Jessup Road, Ceres, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Sincerely,



David Warner  
Director of Permit Services

DW:JK/st

Enclosures

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

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Modesto Bee

**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 AEMETIS Advanced Fuels Keyes, Inc for its ethanol production plant, at 4209 Jessup Road, Ceres, California.

The District's analysis of the legal and factual basis for this proposed action, project #N-1111864, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. 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 by the public, the District will hold a public hearing regarding issuance of this initial permit. For additional information, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CA 95356-8718.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

## Proposed Initial TV Engineering Evaluation

AEMETIS Advanced Fuels Keyes, Inc.  
N-7488

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## TITLE V APPLICATION REVIEW

**Engineer:** Jagmeet Kahlon  
**Date:** November 20, 2012

**Facility Number:** N-7488  
**Facility Name:** AEMETIS Advanced Fuels Keyes, Inc.  
**Mailing Address:** P.O. Box 879  
Keyes, CA 95328-0879

**Contact Name:** Mike Harnden  
**Title:** EH&S Manager  
**Phone:** (209) 632-4511

**Responsible Official:** Jarrett Hollis  
**Title:** General Manager

**Project # :** N-1111864  
**Deemed Complete:** July 19, 2011

### I. PROPOSAL

AEMETIS Advanced Fuels Keyes, Inc. is proposing that an initial Title V permit be issued for its existing ethanol production facility in Keyes, California. AEMETIS has originally applied presuming their VOC emissions are above the Major Source threshold. Upon review, it was discovered that the facility is neither a Major Source for VOC under Rule 2201 nor a Major Air Toxic Source under Rule 2520. However, the total potential Greenhouse Gases (GHG, in terms of CO<sub>2</sub>e) from simultaneous operation of two out of the three 99 MMBtu/hr (each) natural gas-fired boilers alone are 101,442 short-tons/year. Since the total CO<sub>2</sub>e emissions are greater than 100,000 short-tons/year and the CO<sub>2</sub> emissions are above the Major Source threshold of 100 short-tons/year, the facility became a Major Source for GHG. Therefore, they are required to obtain a Title V permit.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

### II. FACILITY LOCATION

AEMETIS Advanced Fuels Keyes, Inc. is located at 4209 Jessup Road, Ceres, California.

**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 requested to utilize model general umbrella template 0-3.

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

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

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

As discussed above, the applicant has requested to utilize general umbrella template 0-3. Permit conditions associated with the use of umbrella template 0-3 are not subject to further EPA and public review.

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

The applicant has proposed the use of general umbrella template 0-3 (4/27/10). The following applicable requirements are addressed by general umbrella template 0-3.

District Rule 1100, Equipment Breakdown  
(Amended December 17, 1992)

District Rule 1160, Emission Statements  
(Adopted November 18, 1992)

District Rule 2010, Permits Required

(Amended December 17, 1992)

District Rule 2020, Exemptions  
(Amended December 20, 2007)

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

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

District Rule 2070, Standards for Granting Applications  
(Amended December 17, 1992)

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

District Rule 2520, Federally Mandated Operating Permits  
(Amended June 21, 2001) Sections 5.2, 9.1.1, 9.4, 9.5, 9.7, 9.8, 9.9, 9.13.1,  
9.13.2, 9.16, and 10.0

District Rule 4101, Visible Emissions  
(Amended February 17, 2005)

District Rule 4601, Architectural Coatings  
(Amended December 17, 2009)

District Rule 8021, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM<sub>10</sub>) from Construction, Demolition, Excavation, and Extraction Activities  
(Amended August 19, 2004)

District Rule 8031, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM<sub>10</sub>) from Handling and Storage of Bulk Materials  
(Amended August 19, 2004)

District Rule 8041, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM<sub>10</sub>) from Carryout and Trackout  
(Amended August 19, 2004)

District Rule 8051, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM<sub>10</sub>) from Open Areas  
(Amended August 19, 2004)

District Rule 8061, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM<sub>10</sub>) from Paved and Unpaved Roads  
(Amended August 19, 2004)

District Rule 8071, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM<sub>10</sub>) from Unpaved Vehicle/Equipment Areas  
(Amended September 16, 2004)

40 CFR Part 61, Subpart M, National Emission Standard for Asbestos

40 CFR Part 82, Subpart B and F, Stratospheric Ozone

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

District Rule 1070, Inspections  
(Amended December 17, 1992)

District Rule 1080, Stack Monitoring  
(Amended December 17, 1992)

District Rule 1081, Source Sampling  
(Amended December 16, 1993)

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

District Rule 2520, Federally Mandated Operating Permits  
(Amended June 21, 2001) Sections not addressed by Umbrella Template

District Rule 4001, New Source Performance Standards  
(Amended April 14, 1999)

*40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units  
(Amended February 16, 2012)*

*40 CFR Part 60, Subpart DD – Standards of Performance for Grain Elevators  
(Amended October 17, 2000)*

*40 CFR Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984  
(Amended October 15, 2003)*

*40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
(Amended June 2, 2008)*

*40 CFR Part 60, Subpart III - Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes  
(Amended December 14, 2000)*

*40 CFR Part 60, Subpart NNN - Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations  
(Amended December 14, 2000)*

*40 CFR Part 60, Subpart RRR - Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes  
(Amended December 14, 2000)*

*40 CFR Part 60, Subpart XX - Standards of Performance for Bulk Gasoline Terminals  
(Amended December 19, 2003)*

*40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines  
(Amended June 28, 2011)*

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

*40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines  
(Amended March 9, 2011)*

District Rule 4201, Particulate Matter Concentration  
(Amended December 17, 1992)

District Rule 4202, Particulate Matter – Emission Rate  
(Amended December 17, 1992)

District Rule 4301, Fuel Burning Equipment  
(Amended December 17, 1992)

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

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

District Rule 4306, Boilers, Steam Generators and Process Heaters – Phase 3  
(Amended October 16, 2008)

District Rule 4311, Flares  
(Amended June 18, 2009)

District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters greater than 5.0 MMBtu/hr  
(Adopted October 16, 2008)

District Rule 4351, Boilers, Steam Generators and Process Heaters – Phase 1  
(Amended August 21, 2003)

District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants  
(Adopted April 20, 2005)

District Rule 4621, Gasoline Transfer Into Stationary Storage Containers, Delivery Vessels and Bulk Plants  
(Amended December 20, 2007)

District Rule 4623, Storage of Organic Liquids  
(Amended May 19, 2005)

District Rule 4624, Transfer of Organic Liquid  
(Amended December 20, 2007)

District Rule 4701, Internal Combustion Engines – Phase 1  
(Amended August 21, 2003)

District Rule 4702, Internal Combustion Engines  
(Amended August 18, 2011)

District Rule 4801, Sulfur Compounds  
(Amended December 17, 1992)

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

## VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

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

For this facility, condition 41 of the requirements for facility wide permit N-7488-0-1 is based on the rule listed above and is not Federally Enforceable through Title V permit.

## IX. COMPLIANCE

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

#### 1. Facility Wide Requirements

The applicant is proposing to use a general permit template to address federally applicable facility-wide requirements. Section IV of template SJV-UM-0-3 includes a demonstration of compliance for all applicable requirements. Template conditions have been added to the facility wide requirements as condition numbers 1 through 40 to assure compliance with these requirements.

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

#### **District Rule 1070, Inspections**

This rule requires that the inspections shall be made by the enforcement agency for the purpose of obtaining information necessary to determine whether air pollution sources are in compliance with applicable rules and regulations. Further, the District has the authority to require recordkeeping, to make inspections and to conduct tests of air pollution sources.

The facility is required to conduct initial and periodic source test on several units such as regenerative thermal oxidizer (RTO) serving liquefaction,

fermentation, distillation and decantation processes, and boilers etc. to verify compliance with permitted limits. Each permit also includes the necessary recordkeeping requirements. Thus, compliance is expected with this rule.

**District Rule 1080, Stack Monitoring**

This rule grants the APCO authority to request the installation, use, maintenance, and inspection of continuous monitoring equipment. This rule also specifies the performance standards for the equipment and administrative recordkeeping, reporting, and violation and equipment breakdown notification requirements.

This rule does not require installation of continuous monitoring equipment, i.e. CEMS or COMS type equipment for the units at an ethanol production facility. Therefore, no specific conditions are included in the permits as part of this project.

**District Rule 1081, Source Sampling**

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

Periodic sampling sources include: boilers for which NO<sub>x</sub>, CO and O<sub>2</sub> concentrations measurements are required, RTO stack for which VOC (lb-VOC/1,000 gal of ethanol produced) measurement is required and cooling tower water sampling where total dissolved solids are required to be measured to determine compliance with the daily emissions limit. These sources are presumed to be equipped adequate accessible ports to collect samples since these sources had been tested more than once in the past. The following table summarizes the condition(s) enforces compliance with this rule.

Permit #	Conditions
N-7488-5-3 to '-8-3	17
N-7488-16-4, '-17-4, '-18-3	11
N-7488-20-3	7

**District Rule 2201, New and Modified Stationary Source Review Rule**

Permits to Operate (PTO) N-7488-1-1 to '-4-1, '-5-4 to '-15-4, '-16-3 to '-17-3, '-18-2, '-19-1, '-20-1, '-21-4, '-22-1 and '-23-2 were subject to District's NSR

Rule (Rule 2201) at least once prior to the preparation of this Title V document. The NSR conditions included in these permits are now federally-enforceable through the Title V permit per guidance in the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995. The following table summarizes permit number, NSR conditions in the PTO and NSR conditions in the Title V being issued as part of this project.

Permit #	NSR conditions in PTO	NSR conditions in Title V
N-7488-1	3 to 16	2 to 14
N-7488-2, '-3, '-4	3 to 18	2 to 16
N-7488-5	2 to 15, 19 to 27	1 to 14, 18 to 26
N-7488-6, '-7, '-8	2 to 15, 19 to 26	1 to 14, 18 to 25
N-7488-9, '-10, '-11, '-12	2 to 12	1 to 11
N-7488-13, '-14	2 to 16	1 to 15
N-7488-15	2 to 18	1 to 18
N-7488-16, '-17	3, 5, 6, 8 to 11, 13	2, 4, 5, 7 to 10
N-7488-18	3, 5, 6, 8 to 11, 13	2, 4, 5, 7 to 10, 12, 14, 20, 21
N-7488-19	1 to 10	1 to 10
N-7488-20	4 to 10	3 to 6, 8 to 10
N-7488-21	3 to 6, 8, 9, 11 to 13	2 to 7
N-7488-22	3, 5, 6	2, 4, 5
N-7488-23	3 to 13	2 to 10, 14

**District Rule 2520, Federally Mandated Operating Permits**

Except for the discussion below, the proposed use of a facility-wide template SJV-UM-0-3 covers the requirements of this Rule.

There are no federally applicable 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.

**District Rule 4001, New Source Performance Standards**

Review of the applicable NSPS is as follows:

**40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

This subpart applies to steam generating units that are constructed, reconstructed, or modified after 6/9/89 and have a maximum design heat

input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. Subpart Dc has standards for SO<sub>x</sub> and PM<sub>10</sub>.

This facility has three 99 MMBtu/hr natural gas-fired boilers that were constructed sometimes in 2007-2008 time frame, long after the cut-off date of 6/9/89. Therefore, these units are subject to this subpart. These boilers are covered under permits N-7488-16, '-17 and '-18.

*60.42c – Standards for sulfur dioxide*

Since coal is not combusted in the boilers, the requirements of this section are not applicable.

*60.43c – Standards for particulate matter*

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

*60.44c – Compliance and performance tests methods and procedures for sulfur dioxide*

The boilers are not subject to the sulfur dioxide requirements of this subpart. Therefore, this section is not applicable.

*60.45c – Compliance and performance test methods and procedures for particulate matter*

The boilers are not subject to the particulate matter requirements of this subpart. Therefore, this section is not applicable.

*60.46c – Emission monitoring for sulfur dioxide*

The boilers are not subject to the sulfur dioxide requirements of this subpart. Therefore, this section is not applicable.

*60.47c – Emission monitoring for particulate matter*

The boilers are not subject to the particulate matter requirements of this subpart. Therefore, this section is not applicable.

*60.48c – Reporting and recordkeeping requirements*

Section 60.48c (a) 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 listed on the equipment description of each boiler permit N-7488-16 to '-19. Thus, continued compliance is expected.

- (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 the boilers N-7488-16 to '-19 are not subject to §60.42c or §60.43c.

- (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 not proposed annual capacity factor for the boilers under permits N-7488-16 to '-19; 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 boilers N-7488-16 to '-19 will not be equipped with an emerging technology used to control SO<sub>2</sub> emissions.

Section 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. Conditions 3 and 28 of the draft Title V permits N-7488-16-4, '-17-4, and '-18-3 will ensure continue compliance with this section.

Section 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 4305, 4306, and 4320 requires that all records shall be kept for a period of at least five years from the date each record is entered in a log book. Condition 29 of the draft Title V permits N-7488-16-4, '-17-4 and '-18-3 will ensure continue compliance with this section.

40 CFR Part 60, Subpart DD: Standards of performance for Grain Elevators

§ 60.300 Applicability and designation of affected facility

Pursuant to Section 60.300(a), the provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under 40 CFR Section 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

§ 60.301 Definitions

Pursuant to Section 60.301(c), a grain terminal elevator is defined as any grain elevator which has a permanent storage capacity of more than 88,100 m<sup>3</sup> (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

Pursuant to Section 60.301(f), a grain storage elevator is defined as any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m<sup>3</sup> (ca. 1 million bushels).

The facility receives and stores corn for the sole purpose of producing ethanol. Therefore, it does not meet the definition of a grain storage elevator. Furthermore, this facility's corn storage capacity is 12,500 bushels (350 tons of corn). Therefore, the grain processing operation at this facility does not meet the definition of a grain terminal elevator.

Since the grain processing operation at this facility does not meet the definition of a *grain terminal elevator* or a *grain storage elevator*, the requirements of this subpart are not applicable and no further discussion is required.

40 CFR Part 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

§ 60.110b Applicability and designation of affected facility

(a) Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m<sup>3</sup>) (equivalent to 19,813 gal) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

(b) This subpart does not apply to:

- Storage vessels with a capacity greater than or equal to 151 m<sup>3</sup> (equivalent to 39,890 gal) storing a liquid with a maximum True Vapor Pressure (TVP) less than 3.5 kilopascals (kPa) (equivalent to 0.5 psi); or
- Storage vessels with a capacity greater than or equal to 75 m<sup>3</sup> (equivalent to 19,813 gal) but less than 151 m<sup>3</sup> (equivalent to 39,890 gal) storing a liquid with a maximum true vapor pressure less than 15.0 kPa (equivalent to 2.2 psi).

§ 60.111b *Definitions*

*Storage vessel* means each tank, reservoir, or container used for the storage of volatile organic liquids but does not include:

- (1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors;
- (2) Subsurface caverns or porous rock reservoirs; or
- (3) Process tanks.

Further, a *process tank* is defined as a tank that is used within a process (including a solvent or raw material recovery process) to collect material discharged from a feedstock storage vessel or equipment within the process before the material is transferred to other equipment within the process, to a product or by-product storage vessel, or to a vessel used to store recovered solvent or raw material. In many process tanks, unit operations such as reactions and blending are conducted. Other process tanks, such as surge control vessels and bottoms receivers, however, may not involve unit operations.

There are several process tanks covered under N-7488-5, '-6, '-7, and '-8 in the ethanol production process. These tanks are not intended to store volatile organic liquids; rather they are there to assist processes that lead to the ultimate production of ethanol; therefore, these tanks do not meet the definition of a storage vessel. Since these tanks do not meet the definition of a storage vessel, the requirements of this subpart are not applicable and no further discussion is required.

The following table summarizes the applicability determination of the tanks subject to this subpart.

Permit #	Tank Capacity (gallons)	Tank Type and liquid stored	TVP (psia)	Tank Capacity, TVP Threshold (psi) per § 60.110b(b)	Subject to 40 CFR Part 60 Kb?
N-7488-9-3	210,000	Fixed roof, 200 proof ethanol	>1.15	>39,890 gal, <0.5	Yes
N-7488-10-3	210,000	Fixed roof, 200 proof ethanol	>1.15	>39,890 gal, <0.5	Yes
N-7488-11-3	63,000	Fixed roof, 190 proof ethanol	>1.15	>39,890 gal, <0.5	Yes
N-7488-12-3	1,050,000	Fixed roof, denatured ethanol* tank	>1.15	>39,890 gal, <0.5	Yes
N-7488-13-3	30,000	Gasoline	>4.87	19,813 gal ≤TC< 39,890 gal, <2.2	Yes
N-7488-14-3	30,000	Gasoline	>4.87	19,813 gal ≤TC< 39,890 gal, <2.2	Yes

\*Denatured ethanol = 2.5% or more gasoline and 97.5% or less ethanol

§ 60.112b Standard for volatile organic compounds (VOC)

Section 40 CFR 60.112b requires the facility to equip each vessel with one of the following:

1. A fixed roof in combination with an internal floating roof; or
2. An external floating roof; or
3. A closed vent system and control device (no detectable emissions, 95% control)

Headspace of the tanks, N-7488-9 to '-14, is blanketed with natural gas to eliminate emissions from tank operations. When a tank is being filled, natural gas along with some product vapors (ethanol or gasoline or denatured ethanol, depending on the product being stored in the tank) will release into a header connected to tank vapor recovery system (TVR, a closed vent system) where condensable are returned to product storage via knockout drums and the non-condensable vapors are routed to the boilers (N-7488-16, '-17 or '-18) or the standby flare (N-7488-19) in case boilers are shutdown or when an unsafe condition has occurred, such as liquid collected in the vapor line, which would cause harm to the equipment or personnel if the vapors are fed to the boilers. Components in the TVR system are required to be operated with no detectable emissions, as indicated by an instrument reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with

the procedures specified in EPA Test Method 21. Boiler or flare is expected to reduce at least 95% of the collected vapors. The following table summarizes the conditions enforcing compliance with this section.

Permit #	Conditions
N-7488-9-3, '-10-3, -11-3, and '-12-3	1, 2, 12
N-7488-13-3, '-14-3	1, 2, 16

*§ 60.113b Testing and procedures*

Section 40 CFR 60.113b(c) states that the owner or operator of each source that is equipped with a closed vent system and control device as required in 40 CFR 60.112b (a)(3) or (b)(2) (other than a flare) is exempt from 40 CFR 60.8 of General Provisions (Performance Tests) and shall meet the following requirements:

1. Submit an operating plan by including: a.) An information that the control device will achieve 95% control efficiency during maximum loading conditions. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum 810 C (1500 F) is used to meet 95% requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b.) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and explanation of the criteria used for selection of that parameter (or parameters).
2. Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan

Vapors collected by TVR system are incinerated in one of the three boilers under normal operating conditions. In general, boilers are capable of achieving at least 95% control for VOCs. Therefore, this facility is expected to meet the control efficiency requirement. The following table summarizes the conditions enforcing compliance with this section.

Permit #	Conditions
N-7488-9-3, '-10-3 and '- 11-3, '-12-3	12, 13
N-7488-13-3, '-14-3	16, 17

*§ 60.114b Alternative means of emission limitation*

The owner or operator seeking permission for "Alternative means of emission limitation" shall submit to the administrator (in this case EPA) a written

application in accordance with 40 CFR 60.114b.

The applicant is not requesting alternative means of emission limitation (see page 6 of TVFORM-004 filed with the application). Therefore, no further discussion is necessary.

*§ 60.115b Reporting and recordkeeping requirements*

Section 40 CFR 60.115b(c) and (d) requires the owner or operator to keep records for the closed vent system and control device (and flare). The following table summarizes the conditions enforcing compliance with this section.

Permit #	Conditions
N-7488-9-3, '-10-3 and '-11-3, '-12-3	14, 15
N-7488-13-3, '-14-3	18, 19

*§ 60.116b Monitoring of operations*

Section 40 CFR 60.116b requires an operator to maintain records showing the dimension of the storage vessel, liquid stored in the vessel, maximum true vapor pressure (TVP) and methods to determine TVP. The following table summarizes the conditions enforcing compliance with this section.

Permit #	Conditions
N-7488-9-3, '-10-3 and '-11-3, '-12-3	16 to 18
N-7488-13-3, '-14-3	20 to 23

Compliance is expected with this Subpart.

40 CFR Part 60, Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

*§ 60.480a Applicability and designation of affected facility*

Pursuant to Section 60.480a(a), the provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry for which construction, reconstruction, or modification occurs after November 7, 2006.

Section 60.480a(a)(2) states that the group of all equipment (defined in §60.481a) within a process unit is an affected facility.

**§ 60.481a Definitions**

Pursuant to Section 60.481a, Synthetic organic chemicals manufacturing industry is defined as the industry that produces, as intermediates or final products, one or more of the chemicals listed in Section 60.489 (40 CFR Part 60 VV), which includes ethanol.

Section 60.481 defines equipment as each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.

Since this facility was constructed after November 7, 2006, and ethanol is listed as synthetic organic chemical in Section 60.489, the requirements of this subpart are applicable to this facility. Except for the liquefaction process under permit N-7488-5 (VOC content of fluid streams <10% by wt.), all the equipment at this facility will be *in VOC service*. Therefore, the requirements of 40 CFR 60, Subpart VVa will be applicable to these processes. The applicable standards are listed below:

*§60.482-1a: Standards (general)*

*§60.482-2a: Standards: Pumps in light liquid service*

*§60.482-3a: Standards: Compressors*

*§60.482-4a: Standards: Pressure relief devices in gas/vapor service*

*§60.482-5a: Standards: Sampling connection systems*

*§60.482-6a: Standards: Open-ended valves or lines*

*§60.482-7a: Standards: Valves in gas/vapor service and in light liquid service*

*§60.482-8a: Standards: Pumps, valves and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service*

*§60.482-9a: Standards: Delay of repair*

*§60.482-10a: Standards: Closed vent systems and control devices*

*§60.482-11a: Standards: Connectors in gas/vapor service in light liquid service*

The following table summarizes the conditions enforce compliance with this section.

Permit #	Conditions
N-7488-9-3, '-10-3 and '-11-3, '-12-3	19 (42 to 119 on N-7488-0-1)
N-7488-13-3, '-14-3	24 (42 to 119 on N-7488-0-1)

Compliance is expected with this subpart.

40 CFR Part 60, Subpart III: Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes

*§ 60.610 Applicability and designation of affected facility*

Pursuant to Section 60.610(a), the provisions of this subpart apply to each affected facility designated in paragraph (b) of this section that produces any of the chemicals listed in §60.617 as a product, co-product, by-product, or intermediate, except as provided in paragraph (c) of this section.

§60.617 do not list ethanol as a product, co-product, by product, or intermediate chemical. Therefore, this ethanol production facility is not subject to the requirements of this subpart and no further discussion is required.

40 CFR Part 60, Subpart NNN: Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations

And

40 CFR Part 60, Subpart RRR: Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes

Based on a memorandum from the Environment Protection Agency (EPA), Washington DC, dated October 7, 1996, and the memorandum from EPA Washington DC, dated September 6, 1998, 40 CFR Part 60 Subpart NNN (Distillation Processes) and Subpart RRR (Reactor Processes) are applicable to facilities involved in the synthesis of organic chemicals using petroleum based feedstocks and not biological fermentation processes.

The facility produces ethanol by fermenting sugars in corn using yeast. This process is considered a biological fermentation process. Therefore, the requirements of 40 CFR Part 60 Subpart NNN and Subpart RRR are not applicable to this facility and no further discussion is required.

40 CFR Part 60, Subpart XX: Standards of Performance for Bulk Gasoline Terminals

*§ 60.500 Applicability and designation of affected facility*

Pursuant to Section 60.500(a), the provisions of this subpart apply to loading racks at bulk gasoline terminals that deliver liquid product into gasoline delivery trucks.

§ 60.501 *Definitions*

Section 60.501 defines *Bulk Gasoline Terminal* as any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State or local law and discoverable by the Administrator and any other person.

This facility does not receive gasoline by pipeline, ship, or barge, so it does not meet the definition of *Bulk Gasoline Terminal*. Therefore, this facility is not subject to the requirements of this Subpart.

40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

§ 60.4200 *Am I subject to this subpart?*

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:
- (i) 2007 or later, for engines that are not fire pump engines;
  - (ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.
- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:
- (i) Manufactured after April 1, 2006, and are not fire pump engines, or
  - (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
- (3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
- (4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

The facility had installed a 400 bhp diesel-fueled emergency fire pump engine under permit N-7488-22. This engine was ordered sometime early 2007. Furthermore, the engine was manufactured in February 2007. Therefore, this engine is subject to this subpart pursuant to section 60.4200(a)(2)(ii) and 60.4200(a)(4) stated in the above section.

*Emission Standards for Owners and Operators*

*§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?*

Section (c) states owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

The following table compares the emissions standard with the emissions from the engine taken from the data sheet in project file N1070453.

Max. engine power		Model year(s)	NMHC + NOx	CO	PM
			g/kW-hr (g/hp-hr)	g/kW-hr (g/hp-hr)	g/kW-hr (g/hp-hr)
Standard	225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
Engine	400 bhp	2007	5.151 (3.841)	1.0 (0.746)	0.123 (0.091)

Conditions 4 and 5 in the draft permit N-7488-22-2 enforce compliance with this section.

*Fuel Requirements for Owners and Operators*

*§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?*

Section (b) states that beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel (maximum diesel fuel sulfur content of 15 ppm per 40 CFR 80.510(b)(1)(i)).

The engine is required to use diesel fuel containing no more than 15 ppm (by weight) sulfur. Condition 2 in the draft permit N-7488-22-2 enforces compliance with this section.

*Compliance Requirements*

*§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?*

Section (f) states emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

The engine is limited to operate only for maintenance, testing, required regulatory purposes, and during emergency situations. Total hours of operation for all maintenance, testing, and required regulatory purposes are limited to 100 hours per calendar year. Condition 8 on permit N-7488-22-2 enforces compliance with this section.

*Notification, Reports, and Records for Owners and Operators*

*§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?*

Section (b) states that if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and

the reason the engine was in operation during that time. Table 5 to the subpart is as follows:

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

The model year of the engine is 2007. Therefore, this section is not applicable to this engine and no further discussion is necessary.

**District Rule 4002, National Emission Standards for Hazardous Air Pollutants**

Review of the applicable NESHAP is as follows:

**40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

***§ 63.6585 Am I subject to this subpart?***

This subpart applies to owners and operators of stationary reciprocating internal combustion engines (RICE) operated at a major or area source of Hazardous Air Pollutant (HAP) emissions.

Section (b) states a major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

Section (c) states an area source of HAP emissions is a source that is not a major source.

This facility's potential single HAP and combined HAP emissions are 473 lb/yr and 894 lb/yr respectively (see attached in Attachment IV of this document). These emissions are less than 10 tons/yr for single HAP and 25 tons/yr for combined HAP emissions. Therefore, this facility is not a major source for HAP emissions.

The facility is an area source for HAP emissions.

§ 63.6590 *What parts of my plant does this subpart cover?*  
This subpart applies to each affected source.

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

(1) *Existing stationary RICE*

- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE*

- (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.
- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

The engine is a new stationary rice engine since it is located at an area source of HAP emissions and has commenced construction after June 12, 2006.

*Section (c) Stationary RICE subject to Regulations under 40 CFR Part 60*

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

- (1) A new or reconstructed stationary RICE located at an area source;
- (2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

The engine is a new RICE engine located at an area source and is subject to requirements in 40 CFR part 60 subpart IIII (discussed previously). Therefore, no further requirements apply to this engine under this subpart.

**District Rule 4201, Particulate Matter Concentration**

Section 3.0 prohibits the release or discharge into the atmosphere from any single source operation, dust, fumes, or total suspended particulate matter

emissions in excess of 0.1 grain per cubic foot of gas at dry standard conditions, as determined by the test methods in section 4.0.

*N-7488-1: Grain Receiving and Handling Operation*

*Grain Receiving Baghouse:*

The equipment under this permit is served by a 4,000 cfm baghouse. It is assumed that 50% of the total PM is PM<sub>10</sub>. Therefore,

$$\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( 2.6 \frac{\text{lb-PM}_{10}}{\text{day}} \right) \left( 7,000 \frac{\text{gr-PM}}{\text{lb-PM}} \right) \left( \frac{\text{lb-PM}}{0.5 \text{ lb-PM}_{10}} \right)}{\left( 4,000 \frac{\text{ft}^3}{\text{min}} \right) \left( 1,440 \frac{\text{min}}{\text{day}} \right)} = 0.0063 \frac{\text{gr-PM}}{\text{dscf}}$$

*Storage Silo Bin Vent Filters:*

The storage silos are served by bin vent filters. The airflow going through the bin vent filters is generated as the grain entering the storage silo displaces the air that is already inside. As a conservative estimate, it will be assumed that the maximum airflow through the bin vent filters is 1,000 cfm. Therefore, the particulate matter emission concentration is:

$$\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( 2.6 \frac{\text{lb-PM}}{\text{day}} \right) \left( 7,000 \frac{\text{gr-PM}}{\text{lb-PM}} \right) \left( \frac{\text{lb-PM}}{0.5 \text{ lb-PM}_{10}} \right)}{\left( 1,000 \frac{\text{ft}^3}{\text{min}} \right) \left( 1,440 \frac{\text{min}}{\text{day}} \right)} = 0.03 \frac{\text{gr-PM}}{\text{dscf}}$$

*N-7488-2: Grain Grinding Operation #1*

*N-7488-3: Grain Grinding Operation #2*

*N-7488-4: Grain Grinding Operation #3*

There is no increase in PM emissions from the grinding operations. Thus, continued compliance is expected with this Rule.

*N-7488-5: Liquefaction Process*

*N-7488-6: Fermentation Process*

*N-7488-7: Distillation Process*

*N-7488-8: Decantation Operation*

*N-7488-9: 210,000 Gallon Fixed-Roof Ethanol Storage Tank*

*N-7488-10: 210,000 Gallon Fixed-Roof Ethanol Storage Tank*

*N-7488-11: 63,000 Gallon Fixed-Roof Ethanol Storage Tank*

*N-7488-12: 1,050,000 Gallon Fixed-Roof Ethanol Storage Tank*

*N-7488-13: 30,000 Gallon Gasoline Storage Tank*

*N-7488-14: 30,000 Gallon Gasoline Storage Tank*

*N-7488-15: Two Ethanol Loading Racks*

None of these operations generate particulate matter emissions. Therefore, none of these operations are subject to this Rule.

*N-7488-16: 99 MMBtu/hr Boiler*

*N-7488-17: 99 MMBtu/hr Boiler*

*N-7488-18: 99 MMBtu/hr Boiler*

It is assumed that PM emitted from the boilers is emitted as PM<sub>10</sub>. Thus,

$$\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( 0.0044 \frac{\text{lb - PM}}{\text{MMBtu}} \right) \left( 7,000 \frac{\text{gr - PM}}{\text{lb - PM}} \right)}{\left( 8,578 \frac{\text{dscf}}{\text{MMBtu}} \right)} = 0.0036 \frac{\text{gr}}{\text{dscf}}$$

*N-7488-19: Standby Flare*

Assuming all of the PM emitted from this flare is emitted as PM<sub>10</sub>, the particulate matter emission concentration for each unit is:

$$\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( 0.0088 \frac{\text{lb - PM}}{\text{MMBtu}} \right) \left( 7,000 \frac{\text{gr - PM}}{\text{lb - PM}} \right)}{\left( 8,578 \frac{\text{dscf}}{\text{MMBtu}} \right)} = 0.007 \frac{\text{gr}}{\text{dscf}}$$

*N-7488-20: 25,000 GPM Cooling Tower*

The exhaust flow rate is 318,380 acfm at 99°F. Moisture content in the exhaust is assumed to be 10%. Therefore, the exhaust particulate matter emission concentration at 60°F is:

$$\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( 0.80 \frac{\text{lb - PM}}{\text{hr}} \right) \left( 7,000 \frac{\text{gr - PM}}{\text{lb - PM}} \right) \left( \frac{\text{hr}}{60 \text{ min}} \right)}{\left( 318,380 \frac{\text{ft}^3}{\text{min}} \right) \left( \frac{460 + 60}{460 + 99} \right) (1 - 0.10)} = 0.00035 \frac{\text{gr - PM}}{\text{dscf}}$$

*N-7488-21-2: Wet Distillers Grain Storage and Truck Loadout Operation*

This operation is not expected to generate any PM emissions since the wet distiller grain contains significant amount of moisture. Therefore, no further discussion is required.

*N-7488-22-1: 400 bhp diesel-fueled fire pump engine*

Per information in the application under project N, the exhaust flow rate at 400 bhp will be 1,943 acfm @ 917°F. As a conservative estimate, it is assumed the engine exhaust's moisture content is 10%. Therefore, the exhaust particulate matter emission concentration at 60°F would be:

$$PM \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( 0.080 \frac{\text{lb-PM}}{\text{hr}} \right) \left( 7,000 \frac{\text{gr-PM}}{\text{lb-PM}} \right) \left( \frac{\text{hr}}{60 \text{ min}} \right)}{\left( 1,943 \frac{\text{ft}^3}{\text{min}} \right) \left( \frac{460 + 60}{460 + 917} \right) (1 - 0.1)} = 0.014 \frac{\text{gr-PM}}{\text{dscf}}$$

*N-7488-23-0: Lime receiving and storage operation*

Lime receiving silo is vented through the bin vent filter. As a conservative estimate, it will be assumed that the maximum airflow through the bin vent filters is 1,000 cfm. Therefore, the particulate matter emission concentration is:

$$PM \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\left( 0.007 \frac{\text{lb-PM}}{\text{day}} \right) \left( 7,000 \frac{\text{gr-PM}}{\text{lb-PM}} \right) \left( \frac{\text{lb-PM}}{0.5 \text{ lb-PM}_{10}} \right)}{\left( 1,000 \frac{\text{ft}^3}{\text{min}} \right) \left( 1 \frac{\text{hr}}{\text{day}} \right)} = 0.098 \frac{\text{gr-PM}}{\text{dscf}}$$

*Summary:*

PM concentration from each unit is less than 0.1 gr/dscf threshold. Therefore, compliance is expected with this rule.

**District Rule 4202, Particulate Matter Emission Rate**

This rule limits the hourly particulate matter emissions from each Source Operation to the result of the equation that is applicable.

$$E_{\text{Max}} = 3.59 P^{0.62}, \text{ where } P < 30 \text{ tons/hr}$$

$$E_{\text{Max}} = 17.31 P^{0.16}, \text{ where } P > 30 \text{ tons/hr}$$

Where,  $E_{\text{max}}$  = Maximum allowable emissions in lb/hr  
P = Process weight in tons/hr

*N-7488-1: Grain Receiving and Handling Operation*

$$\begin{aligned} P &= 300 \text{ tons/hr} \\ E_{\text{Max}} &= 17.31 (300)^{0.16} = 43.1 \text{ lb-PM/hr} \\ E_{\text{Proposed}} &= 0.1 \text{ lb-PM/hr} \end{aligned}$$

*N-7488-2: Grain Grinding Operation #1*

*N-7488-3: Grain Grinding Operation #2*

*N-7488-4: Grain Grinding Operation #3*

$$\begin{aligned} P &= 100 \text{ tons/hr} \\ E_{\text{Max}} &= 17.31 (100)^{0.16} = 36.2 \text{ lb-PM/hr} \\ E_{\text{Proposed}} &= 0.1 \text{ lb-PM/hr} \end{aligned}$$

*N-7488-5: Liquefaction Process*

*N-7488-6: Fermentation Process*

*N-7488-7: Distillation Process*

*N-7488-8: Decantation Operation*

*N-7488-9: 210,000 Gallon Fixed-Roof Ethanol Storage Tank*

*N-7488-10: 210,000 Gallon Fixed-Roof Ethanol Storage Tank*

*N-7488-11: 63,000 Gallon Fixed-Roof Ethanol Storage Tank*

*N-7488-12: 1,050,000 Gallon Fixed-Roof Ethanol Storage Tank*

*N-7488-13: 30,000 Gallon Gasoline Storage Tank*

*N-7488-14: 30,000 Gallon Gasoline Storage Tank*

*N-7488-15: Two Ethanol Loading Racks*

These operations do not generate PM emissions; therefore, Rule 4202 does not apply.

*N-7488-16: 99 MMBtu/hr Boiler*

*N-7488-17: 99 MMBtu/hr Boiler*

*N-7488-18: 99 MMBtu/hr Boiler*

*N-7488-19: Standby Flare*

Rule 4202 establishes PM emission limits as a function of process weight rate in tons/hr. Gas and liquid fuels are excluded from the definition of process weight. Therefore, Rule 4202 does not apply to these units.

*N-7488-20: 25,000 GPM Cooling Tower*

The weight of the water circulated through the cooling tower is used as the process weight because the "drift" from the water causes the particulate matter emissions. It is assumed all of the PM emitted from the cooling tower is PM<sub>10</sub>.

$$\begin{aligned} P &= (1,500,000 \text{ gal/hr})(8.34 \text{ lb/gal})(\text{ton}/2,000 \text{ lb}) = 6,255 \text{ tons/hr} \\ E_{\text{Max}} &= 17.31 (6,255)^{0.16} = 70.1 \text{ lb-PM/hr} \\ E_{\text{Proposed}} &= 0.8 \text{ lb-PM/hr} \end{aligned}$$

*N-7488-21: Wet Distillers Grain Storage and Truck Loadout Operation*

This operation is not expected to generate any PM emissions since the wet distiller grain contains significant amount of moisture. Therefore, no further discussion is required.

*N-7488-22: 400 bhp diesel-fueled fire pump engine*

Rule 4202 establishes PM emission limits as a function of process weight rate in tons/hr. Gas and liquid fuels are excluded from the definition of process weight. Therefore, Rule 4202 does not apply to this unit.

*N-7488-23: Lime receiving and storage operation*

$$\begin{aligned}
 P &= 22.5 \text{ tons/hr} \\
 E_{\text{Max}} &= 3.59 (22.5)^{0.62} = 24.7 \text{ lb-PM/hr} \\
 E_{\text{Proposed}} &= 0.0 \text{ lb-PM/hr}
 \end{aligned}$$

For each unit, the proposed emission rate is less the maximum allowable emission rate. Thus, compliance is expected with this rule.

**District Rule 4301, Fuel Burning Equipment**

This Rule limits emissions from fuel burning equipment, which is defined as equipment used to burn fuel for the primary purpose of producing heat or power by indirect heat transfer. Section 4.1 provides an exemption for air pollution control equipment. This rule is applicable to the boilers under permit N-7488-16, '-17 and '-18. The requirements of section 5.0 are as follows:

- Combustion contaminants (TSP) - Not to exceed 0.1 gr/dscf @ 12% CO<sub>2</sub> and 10 lb/hr
- SO<sub>x</sub> emissions - Not to exceed 200 lb/hr
- NO<sub>x</sub> emissions - Not to exceed 140 lb/hr

$$\text{PM} \left( \frac{\text{gr}}{\text{dscf}} \right) = \frac{\text{PMEmissions} \left( \frac{\text{lb-PM}}{\text{MMBtu}} \right) \left( \frac{7,000 \text{ gr-PM}}{\text{lb-PM}} \right)}{F_{\text{Factor-CO}_2} \left( \frac{\text{dscf}}{\text{MMBtu}} \right) \left( \frac{100\%}{12\%} \right)}$$

Where, F<sub>Factor-CO<sub>2</sub></sub> for gaseous fuels at 60 °F is 1,024 dscf/MMBtu (from EPA Method 19).

Permit	EF <sub>PM10</sub> (lb/MMBtu)	Fuel Type	PM Conc. (gr/dscf)	PM (lb/hr)	SO <sub>x</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)
N-7488-16, or -17, or '-18	0.0044	Natural Gas	0.0036	0.4	0.3	0.8

The proposed emissions from each unit are within the limits of this Rule and compliance is expected.

**District Rule 4304, Equipment Tuning Procedure for Boilers, Steam Generators and Process Heaters**

Pursuant to District Rules 4305 and 4306, Section 6.3.1, boilers under permits N-7488-16 to '-18 are not required to perform periodic tune-ups since the NO<sub>x</sub> and CO emissions will be periodically monitoring using portable analyzer that meet the District specifications. Therefore, these units are not subject to the requirements in this rule.

**District Rule 4305, Boilers, Steam Generators and Process Heaters – Phase 2**

This rule is applicable to the boilers operating under permits N-7488-16 to '-18.

Since the emission limits of District Rule 4306 and all other requirements (monitoring, testing and recordkeeping) are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4306 requirements will satisfy requirements of District Rule 4305.

**District Rule 4306, Boilers, Steam Generators and Process Heaters – Phase 3**

*Section 2.0 - Applicability*

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. Each boiler under permit N-7488-16 to '-18 is rated at 99 MMBtu/hr; therefore, this rule applies.

*Section 5.1 - NO<sub>x</sub> and CO Emission Limits*

Section 5.1.1 requires that the proposed units shall not emit more than 9 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> and 400 ppmvd CO @ 3% O<sub>2</sub>.

These units are permitted to emit 7 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> (or less) and 15 ppmvd CO @ 3% O<sub>2</sub> (or less). Therefore, compliance is expected with this section. Conditions 6 and 7 in permits N-7488-16-4, '-17-4 and '-18-3 enforce continued compliance with this section.

Section 5.2 lists the requirements for boilers limited to a heat input rate of less than 9 billion Btu per calendar year. The boilers are not limited to a heat input rate of less than 9 billion Btu per calendar year. Therefore, this section is not applicable to these units.

Section 5.3 states that the NO<sub>x</sub> and CO emission limits shall not apply to this unit during start-up and shutdown period provided that the duration of each start-up or each shutdown is not greater than 2.0 hours, and the emission control system is utilized during these periods. These boilers are expected to achieve permitted level of NO<sub>x</sub> and CO within few minutes of startup. Therefore, startup/shutdown conditions are not included in these permits.

*Section 5.4 - Monitoring Provisions*

Section 5.4.1 requires the operator to install and maintain a non-resettable, totalizing mass or volumetric flow meter for the units, which simultaneous uses gaseous and liquid fuels and is subject to the requirements of Section 5.1. The boilers are fired on natural gas. Therefore, they are not required to install and maintain the meter due to this section.

Section 5.4.2 requires the operator to install and maintain an operational APCO approved Continuous Emissions Monitoring System (CEMS) for NO<sub>x</sub>, 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).

This facility uses portable analyzer that meet District specification to measure NO<sub>x</sub>, CO and O<sub>2</sub> on monthly basis. This monitoring scheme satisfies the requirements of this section. Conditions 22 to 26 in permits N-7488-16-4, '-17-4, and '-18-3 enforce continued compliance with this section.

*Section 5.5 - Compliance Determination*

Section 5.5.1 states the operator of any unit have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limit.

This facility has been complying with the NO<sub>x</sub> and CO limits in terms of ppmv corrected to 3% O<sub>2</sub>. Therefore, compliance is expected with this section.

Section 5.5.2 requires 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. Conditions 13 and 14 in permits N-7488-16-4, '-17-4, and '-18-3 enforces continued compliance with this section.

Section 5.5.3 requires that all CEM data shall be averaged over a period of 15-consecutive minutes to demonstrate compliance with the applicable emission limits in this rule. This section does not apply since the facility has chosen to use portable analyzer that meet District specification instead of a CEMS system.

Section 5.5.4 requires emissions monitoring pursuant to Sections 5.4.2, 5.4.2.1, and 6.3.1 using a portable NO<sub>x</sub> 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 readings evenly spaced out over the 15-consecutive-minute period. Condition 24 in permits N-7488-16-4, '-17-4 and '-18-3 enforces continued compliance with this section.

Section 5.5.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, 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. Condition 20 in permits N-7488-16-4, '-17-4 and '-18-3 enforces continued compliance with this section.

*Section 6.1 - Recordkeeping*

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.3 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. Condition 29 in permits N-7488-16-4, '-17-4 and '-18-3 enforces continued compliance with this section.

*Section 6.2 - Test Methods*

Section 6.2 identifies the test methods for NO<sub>x</sub>, CO, O<sub>2</sub> concentrations. Conditions 16 to 19 in permits N-7488-16-4, '-17-4 and '-18-3 enforce continued compliance with this section.

*Section 6.3 - Compliance Testing*

Section 6.3.1 requires that this unit be tested to determine compliance with the applicable requirements of section 5.1 and 5.2.3 not less than once every 12 months. Upon demonstrating compliance on two consecutive compliance source tests, the following source test may be deferred for up to thirty-six months. Condition 12 in permits N-7488-16-4, '-17-4 and '-18-3 enforces continued compliance with this section.

Section 6.3.2 lists compliance testing procedure for units that represent a group of units. Group testing was not proposed or considered during previous permitting actions; therefore, no further discussion is required.

*Section 6.4 - Emission Control Plan (ECP)*

No ECP is due at this time. Therefore, continued compliance is expected with this section.

*Section 7.0 – Compliance Schedule*

The boilers are in full compliance of this Rule since the startup of this ethanol production plant.

Compliance is expected with this Rule.

**District Rule 4311, Flares**

*Section 2.0 - Applicability*

This rule is applicable to operations involving the use of flares.

*Section 3.0 - Definitions*

Section 3.11 defines flare as a direct combustion device in which air and all combustible gases react at the burner with the objective of complete and instantaneous oxidation of the combustible gases. Flares are used either continuously or intermittently and are not equipped with devices for fuel-air mix control or for temperature control.

The unit, *Standby Flare*, under permit N-7488-19 is equipped with an air damper system that is utilized to control combustion temperature. This unit does not meet the above definition of *Flare* and therefore, the rule does not apply.

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

*Section 2.0 - Applicability*

Section 2.0 states that 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. Each boiler under permit N-7488-16 to '-18 is rated at 99 MMBtu/hr; therefore, this rule applies.

*Section 5.0 – Requirements*

Section 5.1 states that 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:

- Operate the unit to comply with the emission limits specified in Sections 5.2 and 5.4; or
- Pay an annual emissions fee to the District as specified in Section 5.3 and comply with the control requirements specified in Section 5.4; or
- Comply with the applicable Low-use Unit requirements of Section 5.5.

The facility had chosen to comply with the emission limits specified in Section 5.2 and 5.4. These limits are summarized below:

NOx: 7 ppmvd @ 3% O<sub>2</sub>

CO: 400 ppmvd @ 3% O<sub>2</sub>

Particulate Matter: Use PUC-quality natural gas, commercial propane, butane, or LPG, or combination of such gases with fuel sulfur content of 5 grains/100 scf or less.

The boilers are permitted at the following emission limits:

NOx: 7 ppmvd @ 3% O<sub>2</sub>

CO: 15 ppmvd @ 3% O<sub>2</sub>

Particulate Matter: Use PUC-regulated natural gas with fuel sulfur content of 1.0 grains/100 scf or less.

Conditions 6 and 7 in permits N-7488-16-4, '-17-4 and '-18-3 enforce continued compliance with this section.

Section 5.6 states that the NOx and CO emission limits shall not apply to this unit during start-up and shutdown period provided that the duration of each start-up or each shutdown is not greater than 2.0 hours, and the emission control system is utilized during these periods. These boilers are expected to achieve permitted level of NOx and CO within few minutes of startup. Therefore, startup/shutdown conditions are not included in these permits.

#### *Section 5.7 - Monitoring Provisions*

NOx, CO and O<sub>2</sub> monitoring provisions of this Rule are similar to that of the Rule 4306. The applicant has proposed a monitoring scheme that complies with the requirements of this Rule. Conditions 22 to 26 in permits N-7488-16-4, '-17-4 and '-18-3 enforce continued compliance with this section.

Section 5.7.6 requires the operator to provide annual fuel sulfur content analysis. Condition 27 in permits N-7488-16-4, '-17-4 and '-18-3 enforces continued compliance with this section.

*Section 5.8 - Compliance Determination*

Compliance determination requirements of this Rule are similar to that of the Rule 4306. The permittee is required to demonstrate compliance with Rule 4306. Conditions 13, 14, 20, and 24 in permits N-7488-16-4, '-17-4 and '-18-3 enforce continued compliance with this section.

*Section 6.1 - Recordkeeping*

Recordkeeping requirements of this Rule are similar to that of the Rule 4306. The applicant is required to keep all records for a period of at least five years. Condition 29 in permits N-7488-16-4, '-17-4 and '-18-3 enforces continued compliance with this section.

*Section 6.2 - Test Methods*

Test Methods in this Rule are similar to the ones listed in Rule 4306. This rule includes SOx testing method. The following condition will be included in the permit as a result of this project:

- Fuel sulfur content shall be determined using EPA Method 11 or EPA Method 15 or District, CARB and EPA approved alternative methods. [District Rule 4320]

Conditions 16 to 19 in permits N-7488-16-4, '-17-4 and '-18-3 enforce continued compliance with this section.

*Section 6.3 - Compliance Testing*

Compliance testing requirements of this Rule are similar to that of Rule 4306. Since the permittee is expected to demonstrate compliance with Rule 4306, compliance is expected with this section. Condition 12 in permits N-7488-16-4, '-17-4 and '-18-3 enforces continued compliance with this section.

*Section 6.4 - Emission Control Plan (ECP)*

No ECP is due at this time. Therefore, continued compliance is expected with this section.

*Section 7.0- Compliance Schedule*

The compliance deadline has long been passed for these units. The recent source test (August 2011) indicate that these units are operating in compliance with the requirements of this rule.

Compliance is expected with this Rule.

**District Rule 4351, Boilers, Steam Generators and Process Heaters –  
Phase 1**

*Section 2.0 – Applicability*

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. This rule does not apply to any unit located west of Interstate Highway 5 located in Fresno, Kern, or Kings County.

This facility is not a Major NOx source (defined in 3.11 of this Rule). Therefore, this rule is not applicable to the boilers under permits N-7488-16 to '-18.

**District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants**

*Section 2.0 - Applicability*

This rule shall apply to components containing or contacting VOC at petroleum refineries, gas liquids processing facilities, and chemical plants.

This facility is considered a chemical plant, which is defined in Section 3.4 of this rule as an establishment that produces organic chemicals and/or manufactures products by organic chemical processes.

*Section 4.0 - Exemptions*

Section 4.1 states that the requirements of this rule shall not apply to components subject to Rule 4623 (Storage of Organic Liquids); or to components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623.

The components, such as valves, flanges, connectors, compressors, threaded connections, pumps, etc. that are not covered under Rule 4623 are subject to the requirements of this Rule. These components are covered under permits N-7488-5 to '-15. Condition 120 in draft permit N-7488-0-1 enforces the requirements of this section.

Section 4.2 except for complying with section 6.1 (Operator Management Plan) and 7.3 (Loss of Exemption from 4.2), the requirements of this rule shall not apply to components described in Sections 4.2.1 through 4.2.8 (given below). An operator claiming an exemption pursuant to Section 4.2 shall provide proof of the applicable criteria to the satisfaction of the APCO.

- Pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0.
- Components buried below ground.
- Components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150°C as determined by the test method specified in Section 6.4.3.
- Components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), as determined by the test methods in Section 6.4.2.
- Components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), as determined by the test method specified in Section 6.4.2.
- Components incorporated in lines exclusively in vacuum service.
- Components exclusively handling commercial natural gas.
- One-half inch nominal or less stainless steel tube fittings which have been demonstrated to the APCO to be leak-free based on initial inspection using the test method specified in Section 6.4.1.

This facility had claimed an exemption that the VOC content in the fluid handled in the liquefaction process under N-7488-5 is less than 10% (by weight) based on a test conducted by a third party contractor. Conditions 4 and 28 enforce compliance with this exemption.

**Section 5.0 - Requirements**

Section 5.0 sets forth the operating requirements for components that are not specifically exempted from the requirements of this rule in accordance with Sections 4.1 and 4.2.

Section 5.1.1 requires that a facility operator shall not use any component that leaks in excess of the applicable leak standards of this rule. A leaking component can be put back into service if it has been identified with a tag for repair, is repaired, or is awaiting re-inspection after being repaired in a timely manner. Section 5.1.2 applies directly to operation of hatches. Sections 5.1.3 identify how to determine compliance with leak standards of the Rule. Section 5.1.4 provides leak standards for all applicable components. The following table summarizes the conditions enforcing compliance with the above sections.

Permit #	Conditions
N-7488-6-3 to '-8-3	28 (120 to 123 on N-7488-0-1)
N-7488-9-3 to '-12-3, '-15-3	20 (120 to 123 on N-7488-0-1)
N-7488-13-3, '-14-3	25 (120 to 123 on N-7488-0-1)

Section 5.2 requires equipment to be inspected and re-inspected for leak detection and leaking equipment identification. The following table summarizes the conditions enforcing compliance with this section.

Permit #	Conditions
N-7488-6-3 to '8-3	28 (124 to 129 on N-7488-0-1)
N-7488-9-3 to '12-3, '15-3	20 (124 to 129 on N-7488-0-1)
N-7488-13-3, '14-3	25 (124 to 129 on N-7488-0-1)

Section 5.3 requires leaking equipment to be tagged and requires repair or replacement upon a schedule based on the leak rate. The following table summarizes the conditions enforcing compliance with this section.

Permit #	Conditions
N-7488-6-3 to '8-3	28 (130 to 134 on N-7488-0-1)
N-7488-9-3 to '12-3, '15-3	20 (130 to 134 on N-7488-0-1)
N-7488-13-3, '14-3	25 (130 to 134 on N-7488-0-1)

Section 5.4 provides specific performance requirements for process pressure relief devices. The following table summarizes the conditions enforcing compliance with this section.

Permit #	Conditions
N-7488-6-3 to '8-3	28 (135 and 136 on N-7488-0-1)
N-7488-9-3 to '12-3, '15-3	20 (135 and 136 on N-7488-0-1)
N-7488-13-3, '14-3	25 (135 and 136 on N-7488-0-1)

Section 5.5 requires clear and visible physical identification of major and critical components. The following table summarizes the conditions enforcing compliance with this section.

Permit #	Conditions
N-7488-6-3 to '-8-3	28 (137 on N-7488-0-1)
N-7488-9-3 to '-12-3, '-15-3	20 (137 on N-7488-0-1)
N-7488-13-3, '-14-3	25 (137 on N-7488-0-1)

*Section 6.0 Administrative and Recordkeeping Requirements*

Section 6 details the administrative and record keeping requirements, including the operation management plan, inspection log, PRD release notification, and test methods.

The latest operator management plan (OMP) was submitted to the District on October 25, 2011. The following table summarizes the conditions enforcing compliance with these sections.

Permit #	Conditions
N-7488-6-3 to '-8-3	28 (138 to 141 on N-7488-0-1)
N-7488-9-3 to '-12-3, '-15-3	20 (138 to 141 on N-7488-0-1)
N-7488-13-3, '-14-3	25 (138 to 141 on N-7488-0-1)

Compliance is expected with this Rule.

**District Rule 4621, Gasoline Transfer Into Stationary Storage Containers, Delivery Vessels and Bulk Plants**

*Section 2.0 - Applicability*

This rule applies to storage containers located at bulk plants with capacities greater than 250 gallons and less than 19,800 gallons; to other stationary storage containers with capacities greater than 250 gallons; and to those storage containers that are not subject to the control requirements of Rule 4623 (Storage of Organic Liquids) Section 5.0. The rule also applies to gasoline delivery vessels.

This facility receives and store gasoline (denaturant) in two 30,000 gallon storage tanks under permits N-7488-13 and '-14. These tanks are subject to the requirements of Sections 5.0 of District Rule 4623. Therefore, this rule does not apply.

**District Rule 4623, Storage of Organic Liquids**

*Section 2.0 - Applicability*

This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

All of the process tanks and storage tanks listed in the processes below at this facility either store or have organic liquid placed in them at some point during the ethanol production process. Therefore, the requirements of this Rule are applicable to the following tanks:

- N-7488-5: Liquefaction Process*
- N-7488-6: Fermentation Process*
- N-7488-7: Distillation Process*
- N-7488-8: Decantation Operation*
- N-7488-9: 210,000 Gallon Fixed-Roof Ethanol Storage Tank*
- N-7488-10: 210,000 Gallon Fixed-Roof Ethanol Storage Tank*
- N-7488-11: 63,000 Gallon Fixed-Roof Ethanol Storage Tank*
- N-7488-12: 1,050,000 Gallon Fixed-Roof Ethanol Storage Tank*
- N-7488-13: 30,000 Gallon Gasoline Storage Tank*
- N-7488-14: 30,000 Gallon Gasoline Storage Tank*

Several of the processing tanks are steam-heated and can reach temperatures as high as 180°F. TVP of the liquids in these tanks is presumed to be within the range of greater than 0.5 psia and less than 11.0 psia.

*Section 5.1 - VOC Control System Requirements*

Except for small producers who are required to comply with the VOC control system requirements in Section 5.1.2, an operator shall not place, hold, or store organic liquid in any tank unless such tank is equipped with a VOC control system identified in Table 1. The specifications for the VOC control system are described in Sections 5.2, 5.3, 5.4, 5.5, and 5.6. Section 5.1.1 identifies the following VOC control systems.

Tank Design Capacity (TDC) (gallon)	True Vapor Pressure (TVP) of Organic Liquid		
	0.5 < TVP (psia) <1.5	1.5 < TVP (psia) <11	TVP (psia) >11
1,100 ≤ TDC ≤ 19,800	Pressure Vacuum Relief Valve, Or Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Pressure Vacuum Relief Valve, Or Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Pressure Vessel, Or Vapor Recovery System

Continue...

Tank Design Capacity (TDC) (gallon)	True Vapor Pressure (TVP) of Organic Liquid		
	0.5 < TVP (psia) <1.5	1.5 < TVP (psia) <11	TVP (psia) >11
19,800 < TDC ≤ 39,600	Pressure Vacuum Relief Valve, Or Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Pressure Vessel, Or Vapor Recovery System
TDC > 39,600	Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Pressure Vessel, Or Vapor Recovery System

This facility is using vapor recovery system to collect vapor from the process tanks under permits N-7488-5, '-6, '-7 and '-8. This vapor recovery system is vented to a combination of water cooled condenser coil system to knockout the condensable and pass on the non-condensable to the RTO chamber maintained at 1500°F. The overall control efficiency of this system is required to be at least 99.5% (by weight). The vapor recovery system is required to be maintained in a leak-free condition. Furthermore, the headspace of the tanks, N-7488-9 to '-14, is blanketed with natural gas to eliminate emissions from tank operations. When a tank is being filled, natural gas along with some product vapors (ethanol or gasoline or denatured ethanol, depending on the product being stored in the tank) will release into a header connected to tank vapor recovery system (TVR, a closed vent system) where condensable are returned to product storage via knockout drums and the non-condensable vapors are routed to the boilers (N-7488-16, '-17 or '-18) or the standby flare (N-7488-19) in case boilers are shutdown or when an unsafe condition has occurred, such as liquid collected in the vapor line, which would cause harm to the equipment or personnel if the vapors are fed to the boilers. Boiler or flare is expected to reduce at least 95% of the collected vapors. The TVR system is required to be maintained in a leak-free condition. Condition 1 in permits N-7488-5-3 to '-14-3 enforces compliance with this section.

*Section 5.6 - Specifications for Vapor Recovery Systems*

Section 5.6.1, fixed roof tanks shall be fully enclosed and shall be maintained in a leak-free condition. An APCO-approved vapor recovery system shall consist of a closed vent system that collects all VOCs from the storage tank and VOC control device. The VOC control device shall be a condensation or vapor return system or a VOC control device capable of

reducing inlet VOC emissions by at least 95% (by weight) as determined by the test method specified in Section 6.4.6. Conditions 1 to 2 in permits N-7488-5-3 to '14-3 enforce compliance with this section.

Section 5.6.2, any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. Condition 3 in permits N-7488-5-3 to '14-3 enforces compliance with this section.

Section 5.6.3, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. Condition 1 in permit N-7488-5-3 to '14-3 enforces compliance with this section.

*Section 5.7 - Voluntary Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program*

This facility has elected not to participate in the voluntary tank preventative inspection and maintenance, and tank interior cleaning program. Therefore, no further discussion is required.

*Section 6.1 – Inspection of Floating Roof Tanks*

The tanks at this facility are fixed roof tanks. Therefore, this section is not applicable.

*Section 6.2 - TVP and API Gravity Testing of Stored Organic Liquid in Uncontrolled Fixed Roof Tanks*

The tanks at this facility are equipped with closed vapor recovery systems. Therefore, this section is not applicable.

*Section 6.3 - Recordkeeping*

This section requires an operator to keep track of storage temperature, TVP, and API gravity, and keep these records for a period of five years. The process tanks in liquefaction, fermentation, distillation, and decantation processes and individual organic liquid storage tanks are being served by vapor recovery systems. Therefore, these tanks are not subject to any recordkeeping requirements of this rule.

*Section 6.4 - Test Methods*

Section 6.4.6, the control efficiency of any VOC destruction device, measured and calculated as carbon, shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25A provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is

calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported. Condition 20 in permits N-7488-5-3 to '8-3, and condition 1 in permits N-7488-9-3 to '14-3 enforce compliance with this section. Note that boiler or flare VOC control efficiency is presumed to be 95% or more on weight basis. Therefore, testing was not considered during the previous permitting actions.

Section 6.4.8 states measurements of a gas-leak concentration shall be determined by US EPA Method 21. Condition 2 in permits N-7488-5-3 to '14-3 enforces compliance with this section.

*Section 7.0 - Compliance Schedule*

The tanks at this facility are expected to be operated in compliance with this rule.

Compliance is expected with this Rule.

**District Rule 4624, Transfer of Organic Liquid**

*Section 2.0 – Applicability*

This rule shall apply to organic liquid transfer facilities as defined in this rule.

*Section 3.0 - Definitions*

**Class 1 Organic Liquid Transfer Facility:** any location transferring 20,000 gallons or more on any one day of organic liquids with a TVP of 1.5 psia or greater to or from tank trucks, trailers, or railroad tank cars.

**Class 2 Organic Liquid Transfer Facility:** any location transferring 4,000 gallons or more but less than 20,000 gallons on any one day of organic liquids with a TVP of 1.5 psia or greater to or from tank trucks, trailers, or railroad tank cars.

Per applicant, TVP of the denatured ethanol is 3.47 psia. Further, this facility transfers more than 20,000 gallons/day of denatured ethanol into tanker trucks. Therefore, this facility is considered a Class 1 organic liquid transfer facility.

*Section 5.0 - Requirements*

Section 5.1 requires a Class 1 organic liquid transfer facility to emit less than or equal to 0.08 lb-VOC/1,000 gallon of organic liquid transfer and use either one of the following systems: bottom loading, or route the vapors to a vapor collection system, or fixed or floating roof or pressure vessel, or a closed VOC emissions control system.

This facility is expected to emit 0.009 lb-VOC/1,000 gallon<sup>1</sup> of ethanol transferred to tanker trucks. Permit conditions limiting number of disconnects, amount of denatured ethanol loaded into trucks, and maximum organic spillage rate will ensure on-going compliance with this limit. Thus, no separate permit condition, lb-VOC/1,000 gallon, is established in the permit as part of this project. Conditions 7, 9, and 11 in draft permit N-7488-15-3 enforce compliance with this section.

Furthermore, all trucks are being bottom loaded (or submerge loaded) using dry break couplers. The facility is utilizing a balance system to route the vapors from truck tanks to the product tank and non-condensable vapors from the product tanks to a TVR system under permit N-7488-9. Conditions 3, 5 and 6 in draft permit N-7488-15-3 enforce compliance with this section.

Section 5.3 requires that a transfer operation utilizing a closed VOC emission control system or utilizing a container that meets the control requirements of Rule 4623 (Storage of Organic Liquids) to meet the emission control requirements of this rule shall demonstrate compliance with Sections 5.1 and 5.2 by complying with the leak inspection requirements of Section 5.9 (i.e. leak inspection requirements). Leak inspections are required for this system. The following conditions will be included in draft permit N-7488-15-3 to enforce compliance with this section:

- A leak is defined as the dripping of VOC containing liquid at a rate of more than 3 drops per minute; or detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane. [District Rule 4624]
- The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter. The leak inspections shall be performed during product transfer using a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Method 21. The instrument shall be calibrated with methane in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4624]
- All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within

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<sup>1</sup>[VOC from hose disconnects] + [VOC from tanker trucks]/[Product Transfer] = [(160 disconnects/day)(0.017 lb-VOC/disconnect) + (40 trucks/day)(1,096 ft<sup>3</sup>-VOC/truck)(1,000 Btu/ft<sup>3</sup>)(0.004 lb/MMBtu)(MMBtu/10<sup>6</sup> Btu)]/[328,000 gallons/day] = 0.009 lb-VOC/1,000 gallon

72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be re-inspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]

- An operator may apply for a written approval from the District to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency would revert back to quarterly and the operator shall contact the District in writing within 14 days. [District Rule 4624]

Section 5.4 requires that the vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and six inches water column vacuum. The following condition will be listed in permit N-7488-15:

- The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded shall not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624]

Section 5.6 requires that transfer rack and vapor collection equipment shall be designed, installed, maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. Section 3.13 defines excess organic liquid drainage: more than 10 milliliters liquid drainage. Such liquid drainage for disconnect operations shall be determined by computing the average drainage from three consecutive disconnects at any one permit unit. Condition 11 in draft permit N-7488-15-3 enforces compliance with this section.

#### *Section 6.1 - Recordkeeping*

Section 6.1.3 requires the operator to keep records of daily liquid throughput and the results of leak inspections. Condition 16 in the draft permit N-7488-15-3 requires daily records of the denatured ethanol loaded into tanker trucks. Further, the following condition will be placed on the permit:

- The operator shall keep records of leak inspections including the date, name of component and its location and measured ppmv value, name of the operator and the company conducting the leak inspection. [District Rule 4624]

Section 6.1.4 requires the operator to keep records for at least five years. Condition 24 in draft permit N-7488-15-3 enforces compliance with this section.

*Section 6.2 – Compliance Testing*

Section 6.2.1 requires the operator of Class 1 or Class 2 organic liquid transfer facility to perform an initial source test of the VOC emission control system. However, facilities equipped with a closed VOC control system are not required to conduct this test. Further, section 6.2.2 requires the operator of any Class 1 or Class 2 organic liquid transfer facility shall perform the source test specified in Section 6.3.2 once every 60 months, but no more than 30 days before or after initial source test anniversary date.

This facility utilizes a balance system to route the displaced VOCs from the tanker truck to the product tank which is connected to the TVR system under permit N-7488-9. This system is a closed loop system. Therefore, source testing is not required.

Section 6.3 contains several test methods. The facility will be required to conduct leak inspections using portable hydrocarbon detector in accordance with EPA Method 21.

*Section 7.0 – Compliance Schedule*

This section lists compliance schedule for existing and new facilities. This facility is expected to operate in compliance with the requirements of this Rule.

Compliance is expected with this Rule.

**District Rule 4701, Internal Combustion Engines – Phase 1**

Since the applicable administrative requirements in Rule 4702 are equivalent or more stringent than that of the Rule 4701, compliance with Rule 4702 requirements will satisfy requirements of Rule 4701.

**District Rule 4702, Internal Combustion Engines**

*Section 2.0 - Applicability*

This rule applies to any internal combustion engine rated at 25 brake horsepower or greater. The engine under permit N-7488-22 is rated at 400 bhp and therefore, this rule is applicable to this engine.

*Section 4.0 – Exemptions*

Pursuant to Section 4.3, except for the requirements of Section 6.2.3, the requirements of this rule shall not apply to an internal combustion engine that meets the following conditions:

- The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood; and
- Except for operations (stated above), the engine is limited to operate no more than 100 hours per calendar year as determined by an operational non-resettable elapsed time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine; and
- The engine is operated with an operational non-resettable elapsed time meter. In lieu of installing a non-resettable elapsed time meter, the operator of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA. The operator of the engine shall properly maintain and operate the non-resettable elapsed time meter or alternative device in accordance with the manufacturer's instructions.

The engine under permit N-7488-22 powers a direct-drive firewater pump assembly. Further, this engine is limited to operate for 100 hours per calendar year for non-emergency purpose. The engine operation is required to be recorded using a non-resettable elapsed time meter or other APCO approved alternative. Thus, the requirements in this rule (with an exception of requirements in 6.2.3) do not apply to this engine. Conditions 3, 6 and 8 on draft permit N-7488-22-2 enforce compliance with this section.

*Section 6.2 – Recordkeeping*

Section 6.2.3 requires that an owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following:

- Total hours of operation,
- The type of fuel used,
- The purpose for operating the engine,
- For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and
- Other support documentation necessary to demonstrate claim to the exemption.

Condition 9 on draft permit N-7488-22-2 enforces compliance with this section.

Compliance is expected with this Rule.

**District Rule 4801, Sulfur Compounds**

This rule is applicable to units that emit sulfur compounds. Units' subject to this rule includes:

- Thermal oxidizer serving units N-7488-5-3 to '-8-3;
- Boilers under permits N-7488-16-3 to '-18-3;
- Flare under permits N-7488-19-3
- Fire pump IC engine under permit N-7488-23-1

District Rule 4801 was last amended on December 17, 1992, and has been submitted to the EPA to replace Stanislaus County Rule 407 in the SIP. This District Rule is at least stringent as the county rule, as demonstrated by the following comparison.

<b>Comparison of District Rule 4801 and Stanislaus County Rule 407</b>		
<b>Requirement</b>	<b>Rule 4801</b>	<b>Rule 407</b>
A person shall not discharge into the atmosphere sulfur compounds exceeding in concentration at the point of discharge 0.2 percent by volume calculated as sulfur dioxide on a dry basis averaged over 15 consecutive minutes.	✓	✓
EPA Method 8 and ARB Method 1-100 shall be used to determine such emissions.	✓	

*Thermal oxidizer serving units N-7488-5-3 to '-8-3;*

*Boilers under permits N-7488-16-3 to '-18-3;*

*Flare under permits N-7488-19-3*

The vapors incinerated in these devices are assumed to have a composition similar to natural gas fuel. Therefore, at a reference state of 60 °F, the Rule 4801 limit of 2,000 ppmvd is equivalent to:

$$\frac{(2000 \text{ ppmvd}) \left( 8,578 \frac{\text{dscf}}{\text{MMBtu}} \right) \left( 64 \frac{\text{lb} - \text{SO}_x}{\text{lb} - \text{mol}} \right)}{\left( 379.5 \frac{\text{dscf}}{\text{lb} - \text{mol}} \right) (10^6)} \cong 2.9 \frac{\text{lb} - \text{SO}_x}{\text{MMBtu}}$$

SOx emissions from each unit are less than 2.9 lb/MMBtu; therefore, compliance is expected with this rule.

The following table summarizes the conditions enforcing compliance with this rule.

Permit #	Conditions
N-7488-5-3 to '-8-3	13
N-7488-16-3 to '-18-3	10
N-7488-19-3	9

*Fire pump IC engine under permit N-7488-23-1*

This facility is required to use diesel-fuel containing 15 ppm<sup>2</sup> (by weight) sulfur. Using the ideal gas equation, SO<sub>x</sub> emissions are expected to be 1.0 ppmv. Condition 2 on the draft proposed permit N-7488-22-2 enforces compliance with this rule.

**40 CFR Part 64, Compliance Assurance Monitoring (CAM)**

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

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

Pollutant	Major Source Threshold (lb/year)
VOC	20,000
NO <sub>x</sub>	20,000
CO	200,000
PM <sub>10</sub>	140,000
SO <sub>x</sub>	140,000

This facility is a Major Source for CO<sub>2</sub> emissions. Therefore, CAM is being evaluated for each pollutant.

*N-7488-1: Grain Receiving and Handling Operation*

This operation has a PM<sub>10</sub> emissions limit, and is served by a bin vent filter and baghouse. Therefore, CAM is being evaluated for this operation.

<sup>2</sup> Volume SO<sub>2</sub> = (n x R x T) + P; where n = moles SO<sub>2</sub>; T (standard temperature) = 60 °F or 520 °R, R (universal gas constant) = 10.73 psi-ft<sup>3</sup>/lb-mol-°R; SO<sub>2</sub> (ppmv) = (15 lb-S/106 lb-fuel)(7.1 lb/gal of diesel)(64 lb-SO<sub>2</sub>/32 lb-S)(1MMBtu/9,051 scf)(1 gal/0.137 MMBtu)(lb-mol/64 lb-SO<sub>2</sub>)(10.73 psi-ft<sup>3</sup>/lb-mol-°R)(520°R)(1/14.7 psi)(10<sup>6</sup>) = 1.0 ppmv

This permit unit limits the PM<sub>10</sub> emissions to 258 lb/yr from the grain receiving and handling operation served by bin vent filters and a baghouse. Bin vent filter and baghouse control efficiency for particulate matter emissions is assumed to be 99%. Using this information, the pre-control PM<sub>10</sub> emissions would be:

$$\begin{aligned} &= (258 \text{ lb-PM}_{10}/\text{yr})/(1-0.99) \\ &= 25,800 \text{ lb-PM}_{10}/\text{yr} \end{aligned}$$

Since the pre-control PM<sub>10</sub> emissions are less than the major source threshold for PM<sub>10</sub>, the grain receiving and handling operation did not trigger CAM for PM<sub>10</sub>.

*N-7488-2: Grain Grinding Operation #1*

*N-7488-3: Grain Grinding Operation #2*

*N-7488-4: Grain Grinding Operation #3*

Each operation has a PM<sub>10</sub> emissions limit, and is served by a baghouse. Therefore, CAM is being evaluated for these operations.

The combined PM<sub>10</sub> emissions from the grain grinding operations are 770 lb/yr. These operations are served by a baghouse with an expected control efficiency of 99%. The pre-control PM<sub>10</sub> emissions would be:

$$\begin{aligned} &= (770 \text{ lb-PM}_{10}/\text{yr})/(1-0.99) \\ &= 77,000 \text{ lb-PM}_{10}/\text{yr} \end{aligned}$$

Since the pre-control PM<sub>10</sub> emissions are less than the major source threshold for PM<sub>10</sub>, the grain receiving and handling operation did not trigger CAM for PM<sub>10</sub>.

*N-7488-5: Liquefaction Process*

*N-7488-6: Fermentation Process*

*N-7488-7: Distillation Process*

*N-7488-8: Decantation Operation*

The emissions units under these permits are vented to a condenser and the RTO system, which is capable of reducing at least 99.5% of the VOC emissions. VOC emissions measured at the RTO stack are limited to 0.081 lb/1,000 gallon of ethanol produced. The ethanol production rate is limited to 63,250,000 gallon/yr. The pre-control VOC emissions would be:

$$\begin{aligned} &= (0.081 \text{ lb-VOC}/1,000 \text{ gallons of ethanol produced})(63,250,000 \\ &\text{gallons/yr})/(1-0.995) \\ &= 1,024,650 \text{ lb-VOC/yr} \end{aligned}$$

Since the pre-control VOC emissions are greater than the major source threshold for VOC, these permit units trigger CAM requirements.

CAM is being satisfied by monitoring and recording RTO chamber temperature at least once a day.

- N-7488-9: 210,000 Gallon Fixed-Roof Ethanol Storage Tank*
- N-7488-10: 210,000 Gallon Fixed-Roof Ethanol Storage Tank*
- N-7488-11: 63,000 Gallon Fixed-Roof Ethanol Storage Tank*
- N-7488-12: 1,050,000 Gallon Fixed-Roof Ethanol Storage Tank*
- N-7488-13: 30,000 Gallon Gasoline Storage Tank*
- N-7488-14: 30,000 Gallon Gasoline Storage Tank*
- N-7488-15: Two Ethanol Loading Racks*

The organic liquid storage tanks are served by the Tank Vapor Recovery (TVR) system to route non-condensable vapors to the boilers or flare. Volume of vapors displaced into the TVR system is determined as follows:

Two 210,000 gallon each (200 proof) tanks:

Tank volume	= 28,073 ft <sup>3</sup>
Turnovers	= 105/yr-tank <sup>3</sup>
Volume of vapors	= (28,073 ft <sup>3</sup> /turnover-tank)(105/yr)(2 tanks)
	= 5.90 × 10 <sup>6</sup> ft <sup>3</sup> /yr

One 63,000 gallon (190 proof) tank:

Tank volume	= 8,422 ft <sup>3</sup>
Turnovers	= 301/yr-tank <sup>4</sup>
Volume of vapors	= (8,422 ft <sup>3</sup> /turnover-tank)(301/yr)(1 tank)
	= 2.54 × 10 <sup>6</sup> ft <sup>3</sup> /yr

One 1,050,000 gallon denatured ethanol:

Tank volume	= 140,365 ft <sup>3</sup>
Turnovers	= 301/yr-tank <sup>5</sup>
Volume of vapors	= (140,365 ft <sup>3</sup> /turnover-tank)(60/yr)(1 tank)
	= 8.42 × 10 <sup>6</sup> ft <sup>3</sup> /yr

Two 30,000 gallon each gasoline storage tanks and unloading racks:

Tank volume	= 4,010 ft <sup>3</sup>
Turnovers	= 26/yr <sup>6</sup>
Volume of vapors	= (4,010 ft <sup>3</sup> /turnover-tank)(26/yr)(2 tanks)

<sup>3</sup> (70% 200 proof)(63.25E6 gal/yr)/(210,000 gal/tank-turn × 2 tanks) = 105 turns/yr-tank

<sup>4</sup> (30% 190 proof)(63.25E6 gal/yr)/(63,000 gal/tank-turn) = 301 turns/yr-tank

<sup>5</sup> (63.25E6 gal/yr)/(1,050,000 gal/tank-turn) = 60 turns/yr-tank

<sup>6</sup> (2.5% denaturant)(63.25E6 gal/yr)/(30,000 gal/tank-turn) = 26 turns/yr-tank

$$= 0.21 \times 10^6 \text{ ft}^3/\text{yr}$$

Two Ethanol Loading Racks:

It is assumed that the truck loaded at the racks will have some vapors that will eventually be vented to the TVR system. These vapors are estimated as follows:

Tank volume	= 1,096 ft <sup>3</sup> /truck delivery
Max truck deliveries	= 7,927 trucks/yr (65E6 gal/yr ÷ 8,200 gal/truck)
Volume of vapors	= (1,096 ft <sup>3</sup> /truck delivery)(7,927 trucks/yr)
	= 8.69 × 10 <sup>6</sup> ft <sup>3</sup> /yr

The total volume of vapors displaced into the TVR system would be:

$$= 5.90 \times 10^6 \text{ ft}^3/\text{yr} + 2.54 \times 10^6 \text{ ft}^3/\text{yr} + 8.42 \times 10^6 \text{ ft}^3/\text{yr} + 0.21 \times 10^6 \text{ ft}^3/\text{yr} + 8.69 \times 10^6 \text{ ft}^3/\text{yr}$$

$$= 25.76 \times 10^6 \text{ ft}^3/\text{yr}$$

HHV of the vapors is assumed to be 1,000 Btu/scf, same as natural gas fuel since majority of the gas vapors are expected to constitute natural gas. Thus,

$$= (25.76 \times 10^6 \text{ ft}^3/\text{yr})(1,000 \text{ Btu/ft}^3)(\text{MMBtu}/10^6 \text{ Btu})$$

$$= 25,760 \text{ MMBtu/yr}$$

These vapors are combusted in the boilers with a VOC emission rate of 0.004 lb/MMBtu. Assuming 95% control for the boiler, the pre-control emissions would be:

$$= (0.004 \text{ lb-VOC/MMBtu})(25,760 \text{ MMBtu/yr})/(1-0.95)$$

$$= 2,061 \text{ lb-VOC/yr}$$

Since the pre-control VOC emissions are less than the major source threshold for VOC, these permit units do not trigger CAM requirements.

*N-7488-16: 99 MMBtu/hr Boiler*

*N-7488-17: 99 MMBtu/hr Boiler*

*N-7488-18: 99 MMBtu/hr Boiler*

These permit units have emissions limits for SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC but they do not have add-on controls for these criteria pollutants. Therefore, these permit units are not subject to CAM for SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC.

These permits may be subject to CAM for NO<sub>x</sub>, as there is a NO<sub>x</sub> limit, and they do have FGR as an add-control. Based on emission factors from AP-42,

Table 1.4-1, July 1998, the FGR will provide 36% control of NO<sub>x</sub> emissions. The pre-control emissions of each unit would be:

$$\begin{aligned} &= (99 \text{ MMBtu/hr})(0.008 \text{ lb-NO}_x\text{/MMBtu})(8,760 \text{ hr/yr})/(1- 0.36) \\ &= 10,841 \text{ lb-NO}_x\text{/year} \end{aligned}$$

The pre-control NO<sub>x</sub> emissions are less than the major source threshold for NO<sub>x</sub> for each unit. Therefore, these units are not subject to CAM.

*N-7488-19: Standby Flare*

This flare is used to incinerate the non-condensable vapors collected by TVR system when the boilers are not operating. The maximum amount of gas combusted in the flare is limited to 6,709,333 scf per year. Since the head space of the tanks served by the TVR system has natural gas blanket, it is reasonable to assume that the HHV of the vapors would be same as natural gas which is 1,000 Btu/scf. Using 95% control of VOC by the flare, the pre-control emissions would be:

$$\begin{aligned} &= (0.063 \text{ lb-VOC/MMBtu})(6,709,333 \text{ scf/yr})(1,000 \text{ Btu/scf})(\text{MMBtu}/10^6\text{Btu})/(1- \\ &\quad 0.95) \\ &= 8,454 \text{ lb-VOC/yr} \end{aligned}$$

The pre-control NO<sub>x</sub> emissions are less than the major source threshold for VOC. Therefore, this unit is not subject to CAM.

*N-7488-20: 25,000 GPM Cooling Tower*

The drift eliminators are integral part of the cooling tower and passively control the drift from the cooling tower. Per 40 CFR 64, a control device does not include passive control measures that act to prevent pollutants from forming. Therefore, the drift eliminators are not considered add-on control devices, and this unit is not subject to CAM.

*N-7488-21: Wet Distillers Grain Storage and Truck Loadout Operation*

This operation is not equipped with an add-on control device, such as enclosure vented to an RTO, or other similar system. Therefore, this operation is not subject to CAM.

*N-7488-22: 400 Bhp Diesel-Fueled Fire Pump Engine*

This engine is not equipped with add-on pollution control equipment. Therefore, this unit is not subject to CAM.

*N-7488-23-0: Lime Receiving and Storage Operation*

This operation has a PM<sub>10</sub> emissions limit, and is served by a dust collection system. Therefore, CAM is being evaluated for this operation.

The permitted PM<sub>10</sub> emissions from this operation are 3 lb/yr. This operation is served by a dust collection system with an expected control efficiency of 99%. The pre-control PM<sub>10</sub> emissions would be:

$$\begin{aligned} &= (3 \text{ lb-PM}_{10}/\text{yr})/(1-0.99) \\ &= 300 \text{ lb-PM}_{10}/\text{yr} \end{aligned}$$

Since the pre-control PM<sub>10</sub> emissions are less than the major source threshold for PM<sub>10</sub>, the lime receiving and handling operation did not trigger CAM for PM<sub>10</sub>.

## **X. PERMIT SHIELD**

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

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

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

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

The model general permit template contains requirements related to the permit shields. Therefore, no further discussion is necessary.

## **XI. PERMIT CONDITIONS**

See Attachment A – Draft Title V Operating Permit.

## **XII. ATTACHMENTS**

- A. Draft Title V Operating Permit
- B. Detailed Facility List
- C. Exempt Equipment
- D. Permits to Operate
- E. HAP Calculations

**Attachment A**  
**Draft Title V Operating Permit**

# San Joaquin Valley Air Pollution Control District

FACILITY: N-7488-0-1

EXPIRATION DATE: 11/30/2013

## FACILITY-WIDE REQUIREMENTS

1. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: AEMETIS ADVANCED FUELS KEYES INC  
Location: 4209 JESSUP ROAD, CERES, CA

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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22. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. Each owner or operator subject to the provisions of 40 CFR Part 60 Subpart VVa shall demonstrate compliance with the requirements of 40 CFR 60.482-1a through 60.482-10a or 40 CFR 60.480a(e) for all equipment within 180 days of initial startup. [40 CFR 60.482-1a(a)] Federally Enforceable Through Title V Permit
43. Compliance with 40 CFR 60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. [40 CFR 60.482-1a(b)] Federally Enforceable Through Title V Permit
44. An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a as provided in 40 CFR 60.484a. [40 CFR 60.482-1a(c)] Federally Enforceable Through Title V Permit

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45. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, or 60.482-10a, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1a(c)] Federally Enforceable Through Title V Permit
46. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2a to 40 CFR 60.482-10a if it is identified as required in 40 CFR 60.486a(e)(5). [40 CFR 60.482-1a(d)] Federally Enforceable Through Title V Permit
47. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b), except as provided in 40 CFR 60.482-1a(c) and 40 CFR 60.482-2a(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 500 ppmv or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2a(a) and (b) and District Rule 2201] Federally Enforceable Through Title V Permit
48. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2a(c)] Federally Enforceable Through Title V Permit
49. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2a(a) provided the requirements specified in 40 CFR 60.482-2a(d)(1) through (6) are met. [40 CFR 60.482a(d)] Federally Enforceable Through Title V Permit
50. Any PLLS that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-2a(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2a(e)(1), (2), and (3). [40 CFR 60.482-2a(e) and District Rule 2201] Federally Enforceable Through Title V Permit
51. If any PLLS is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10a, it is exempt from the requirements of 40 CFR 60.482-2a(a) through (e). [40 CFR 60.482-2a(f)] Federally Enforceable Through Title V Permit
52. Any pump in PLLS that is designated as an unsafe-to-monitor pump, as described in 40 CFR 60.486a(f)(1), is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2a(a) and 40 CFR 60.482-2a(d)(4) through (6) if:
  - 1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2a(a); and
  - 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2a(c) if a leak is detected. [40 CFR 60.482-2a(g)] Federally Enforceable Through Title V Permit
53. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2a(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2a(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2a(h)] Federally Enforceable Through Title V Permit
54. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3a(c), (h) and (i). Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3a(b)(1), or (2), or (3). [40 CFR 60.482-3a(a), (b), and (c)] Federally Enforceable Through Title V Permit
55. If a barrier fluid system is used for a compressor, the barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system or both. Each sensor shall be checked daily or shall be equipped with an audible alarm. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier system, or both based on the established criterion, a leak is detected. [40 CFR 60.482-3a(d), (e), and (f)] Federally Enforceable Through Title V Permit

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56. If a barrier fluid system is used for a compressor, detected leaks shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3a(g)] Federally Enforceable Through Title V Permit
57. Any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-3a(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3a(i)(1) and (2). [40 CFR 60.482-3a(i) and District Rule 2201] Federally Enforceable Through Title V Permit
58. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3a(a) through (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3a(a) through (e), and (h). [40 CFR 60.482-3(j)] Federally Enforceable Through Title V Permit
59. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, as determined by the methods specified in 40 CFR 60.485a(c). [40 CFR 60.482-4a(a) and District Rule 2201] Federally Enforceable Through Title V Permit
60. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9a. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, by the methods specified in 40 CFR 60.485a(c). [40 CFR 60.482-4a(b) and District Rule 2201] Federally Enforceable Through Title V Permit
61. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10a is exempted from the requirements of 40 CFR 60.482-4a(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit
62. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4a(a) and (b), provided a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9a. [40 CFR 60.482-4a(d)] Federally Enforceable Through Title V Permit
63. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1a(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5a(b)(1) through (4). [40 CFR 60.482-5a(a), (b) and (c)] Federally Enforceable Through Title V Permit
64. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1a(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6a(a) and (c)] Federally Enforceable Through Title V Permit
65. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6a(b)] Federally Enforceable Through Title V Permit
66. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6a(a), (b) and (c). [40 CFR 60.482-6a(d)] Federally Enforceable Through Title V Permit

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67. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6a(a) through (c) are exempt from the requirements of 40 CFR 60.482-6a(a) through (c). [40 CFR 60.482-6a(e)] Federally Enforceable Through Title V Permit
68. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b) and shall comply with 40 CFR 60.482-7a(b) through (e), except as provided in 40 CFR 60.482-7a(f), (g), and (h), 40 CFR 60.483-1a, 40 CFR 60.483-2a, and 40 CFR 60.482-1a(c). A leak is detected if an instrument reading of 100 ppmv or greater is measured. [40 CFR 60.482-7a(a) and (b) and District Rule 2201] Federally Enforceable Through Title V Permit
69. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7a(c)] Federally Enforceable Through Title V Permit
70. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7a(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7a(d) and (e)] Federally Enforceable Through Title V Permit
71. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 100 ppmv above background, is exempt from the requirements of 40 CFR 60.482-7a(a) if the valve meets the requirements specified in 40 CFR 60.482-7a(f)(1), (2), and (3). [40 CFR 60.482-7a(f) and District Rule 2201] Federally Enforceable Through Title V Permit
72. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7a(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7a(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7a(g)] Federally Enforceable Through Title V Permit
73. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7a(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7a(h)] Federally Enforceable Through Title V Permit
74. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps, valves and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485a(b) and shall comply with the requirements of 40 CFR 60.482-8a(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 100 ppmv or greater for valves and connectors and 500 ppmv or greater for pumps and compressor seals is measured. [40 CFR 60.482-8a(a) and (b), and District Rule 2201] Federally Enforceable Through Title V Permit

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75. When a leak is detected in pumps, valves and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7a(c)(2) and 60.482-7a(e). [40 CFR 60.482-8a(c) and (d)] Federally Enforceable Through Title V Permit
76. For closed vent systems and control devices, vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 ppmv, whichever is less stringent. [40 CFR 60.482-10a(b)] Federally Enforceable Through Title V Permit
77. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C. [40 CFR 60.482-10a(c)] Federally Enforceable Through Title V Permit
78. Flare used to comply with subpart VVa shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10a(d)] Federally Enforceable Through Title V Permit
79. Owners or operators of control devices used to comply with the provisions of Subpart VVa shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10a(e)] Federally Enforceable Through Title V Permit
80. Except as provided in 40 CFR 60.482-10a(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in 60.482-10a(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10a(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10a(f) and (g), and District Rule 2201] Federally Enforceable Through Title V Permit
81. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10a(h)] Federally Enforceable Through Title V Permit
82. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2). [40 CFR 60.482-10a(i)] Federally Enforceable Through Title V Permit
83. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10a(j)(1) and (j)(2). [40 CFR 60.482-10a(j)] Federally Enforceable Through Title V Permit
84. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10a(k)(1) through (k)(3). [40 CFR 60.482-10a(k)] Federally Enforceable Through Title V Permit

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85. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486a(c); 4) For each inspection conducted in accordance with 40 CFR 60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10a(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10a(l)] Federally Enforceable Through Title V Permit
86. Closed vent systems and control devices used to comply with provisions Subpart VVa shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10a(m)] Federally Enforceable Through Title V Permit
87. The owner or operator shall initially monitor all connectors in the process unit for leaks by the later of either 12 months after the compliance date or 12 months after the initial startup under this permit. [40 CFR 60.482-11a] Federally Enforceable Through Title V Permit
88. Except as allowed in 40 CFR 60.482-1a(c), 40 CFR 60.482-10a, or as specified in 40 CFR 60.482-11a(e), the owner or operator shall monitor all connectors in gas and vapor and light liquid service as specified 40 CFR Part 60.482-1a(a) and (b)(3). The connectors shall be monitored to detect leaks by the method specified in 40 CFR 60.485a(b) and, as applicable, 40 CFR 60.485a(c). A leak is detected if an instrument reading of 100 ppmv or greater is measured. [40 CFR 60.482-11a(b)(1) and (2) and District Rule 2201] Federally Enforceable Through Title V Permit
89. The owner or operator shall perform monitoring, subsequent to the initial monitoring of all connectors in the process unit, as specified in 40 CFR 60.482-11a(b)(3)(i) through (iii), and shall comply with the requirements of 40 CFR 60.482-11a(b)(3)(iv) and (v). The required period in which monitoring must be conducted shall be determined from 40 CFR 60.482-11a(b)(3)(i) through (iii) using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in 40 CFR 60.482-11a(c). [40 CFR 60.482-11a(b)(3) and 40 CFR 60.482-11a(c)] Federally Enforceable Through Title V Permit
90. When a leak is detected for any connector in gas/vapor service and in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-11a(d)] Federally Enforceable Through Title V Permit
91. Any connector in gas/vapor service and in light liquid service that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor connector is exempt from the requirements of 40 CFR 60.482-11a(a) and (b) if: 1) The owner or operator of the connector demonstrates that the connector is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-11a(a) and (b); and 2) The owner or operator of the connector has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair the equipment according to the procedures in 40 CFR 60.482-11a(d) if a leak is detected. [40 CFR 60.482-11a(e)] Federally Enforceable Through Title V Permit

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92. For any inaccessible, ceramic, or ceramic-lined connectors, any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of 40 CFR 60.682-11a(a) and (b), from the leak repair requirements of 40 CFR 60.682-11a(d), and from the recordkeeping and reporting requirements. An inaccessible connector is one that meets any of the following provisions, as applicable: (i) Buried; (ii) Insulated in a manner that prevents access to the connector by a monitor probe; (iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe; (iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground; (v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; or (vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. If any inaccessible, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical. [40 CFR 60.682-11a(f)] Federally Enforceable Through Title V Permit
93. Except for instrumentation systems and inaccessible, ceramic, or ceramic-lined connectors meeting the provisions of 40 CFR 60.482-11a(f), the owner or operator shall identify the connectors subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. [40 CFR 60.482-11a(g)] Federally Enforceable Through Title V Permit
94. The owner or operator may elect to comply with alternative standards for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1a and 60.483-2a. The owner or operator must notify the Administrator in writing before implementing alternative standards. [40 CFR 60.483-1a and 60.483-2a] Federally Enforceable Through Title V Permit
95. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart VVa. [40 CFR 60.484a(a)] Federally Enforceable Through Title V Permit
96. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485a, except as provided in 40 CFR 60.8(b). [40 CFR 60.485a(a)] Federally Enforceable Through Title V Permit
97. The owner or operator shall determine compliance with the standards in 40 CFR 60.482-1a through 60.482-11a, 60.483a, and 60.484a using Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 of Appendix A-7. [40 CFR 60.485a(b) and District Rule 2201] Federally Enforceable Through Title V Permit
98. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows: 1) The requirements of 40 CFR 60.485a(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 100 ppmv methane for valves and connectors and 500 ppmv methane for pumps and compressor seals for determining compliance. [40 CFR 60.485a(c) and District Rule 2201] Federally Enforceable Through Title V Permit

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99. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260, E168, E169 shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485a(d)] Federally Enforceable Through Title V Permit
100. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H<sub>2</sub>O at 68 degrees F). Standard reference texts or ASTM D2879 shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H<sub>2</sub>O at 68 degrees F) is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485a(e)] Federally Enforceable Through Title V Permit
101. Samples used in conjunction with 40 CFR 60.485a(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485a(f)] Federally Enforceable Through Title V Permit
102. An owner or operator of more than one affected facility subject to the provisions Subpart VVa may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486a(a)(2)] Federally Enforceable Through Title V Permit
103. The owner or operator shall record the following information for each monitoring event required by 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a: (i) Monitoring instrument identification, (ii) Operator identification, (iii) Equipment identification, (iv) Date of monitoring, and (v) Instrument reading. [40 CFR 60.486a(3)] Federally Enforceable Through Title V Permit
104. When each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7a(c) and no leak has been detected during those 2 months; 3) The identification on a connector may be removed after it has been monitored as specified in <sup>1</sup> 60.482-11a(b)(3)(iv) and no leak has been detected during that monitoring; 4) The identification on equipment, except on a valve or connector, may be removed after it has been repaired. [40 CFR 60.486a(b)] Federally Enforceable Through Title V Permit
105. When each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number, except when indication of liquids dripping from a pump are designated as a leak ; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) Maximum instrument reading measured by Method 21 of appendix A-7 of 40 CFR Part 60 at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping; 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdowns that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486a(c) and District Rule 2201] Federally Enforceable Through Title V Permit

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106. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10a shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a. [40 CFR 60.486a(d)] Federally Enforceable Through Title V Permit
107. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1a to 60.482-11a shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart VVa; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e), 60.482-3a(i) and 60.482-7a(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2a(e), 60.482-3a(i), or 60.482-7a(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4a; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2a(e), 60.482-3a(i), 40 CFR 60.482-4a, and 40 CFR 60.482-7a(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; 5) A list of identification numbers for equipment in vacuum service; 6) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service; 7) Records of the information for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of 40 CFR 60 and 40 CFR 60.485a(b). These records shall include: (i) Date of calibration and initials of operator performing the calibration; (ii) Calibration gas cylinder identification, certification date, and certified concentration; (iii) Instrument scale(s) used; (iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of 40 CFR 60; (v) Results of each calibration drift assessment required by 40 CFR 60.485a(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value); and (vi) If an owner or operator makes their own calibration gas, a description of the procedure used; 8) The connector monitoring schedule for each process unit as specified in 40 CFR 60.482-11a(b)(3)(v); and 9) Records of each release from a pressure relief device subject to 40 CFR 60.482-4a. [40 CFR 60.486a(e)] Federally Enforceable Through Title V Permit
108. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7a(g) and (h), all pumps subject to the requirements of 40 CFR 60.482-2a(g), and all connectors subject to the requirements of 40 CFR 60.482-11a(e) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486a(f)] Federally Enforceable Through Title V Permit
109. The following information shall be recorded for valves complying with 40 CFR 60.483-2a: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486a(g)] Federally Enforceable Through Title V Permit
110. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486a(h)] Federally Enforceable Through Title V Permit
111. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480a(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486a(i)] Federally Enforceable Through Title V Permit

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112. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486a(j)] Federally Enforceable Through Title V Permit
113. The provisions of 40 CFR 60.7(b) and (d) do not apply to affected facilities subject to Subpart VVa. [40 CFR 60.486a(k)] Federally Enforceable Through Title V Permit
114. The owner or operator subject to the provisions of 40 CFR Part 60 Subpart VVa shall submit semiannual reports to the Administrator beginning 6 months after the initial startup date. [40 CFR 60.487a(a)] Federally Enforceable Through Title V Permit
115. The initial semiannual report to the Administrator shall include the following information: 1) Process unit identification; 2) Number of valves subject to the requirements of <sup>1</sup> 60.482-7a, excluding those valves designated for no detectable emissions under the provisions of 40 CFR 60.482-7a(f); 3) Number of pumps subject to the requirements of 40 CFR 60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e) and those pumps complying with 40 CFR 60.482-2a(f); 4) Number of compressors subject to the requirements of 40 CFR 60.482-3a, excluding those compressors designated for no detectable emissions under the provisions of 40 CFR 60.482-3a(i) and those compressors complying with 40 CFR 60.482-3a(h); and 5) Number of connectors subject to the requirements of 40 CFR 60.482-11a. [40 CFR 60.487a(b)] Federally Enforceable Through Title V Permit
116. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486a: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7a(b) or 40 CFR 60.483-2a, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7a(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2a(c)(1) and (d)(6), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3a(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3a(g)(1), (vii) Number of connectors for which leaks were detected as described in 40 CFR 40 CFR 60.482-11a(b), (viii) Number of connectors for which leaks were not repaired as required in 40 CFR 60.482-11a(d), and (ix) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487a(a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487a(c)] Federally Enforceable Through Title V Permit
117. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1a and 60.483-2a shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487a(d)] Federally Enforceable Through Title V Permit
118. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart VVa except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487a(e)] Federally Enforceable Through Title V Permit
119. The semiannual reporting requirements of 40 CFR 60.487a(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487a(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487a(f)] Federally Enforceable Through Title V Permit
120. The operator shall meet operating, inspection and re-inspection, maintenance, process pressure relief device (PRD) and component identification requirements of District Rule 4455 (4/20/05) for all components containing or contacting VOC, except for those components specifically exempted in Sections 4.1 and 4.2. [District Rule 4455, 5.0] Federally Enforceable Through Title V Permit

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121. The operator shall not use any component that leaks in excess of the allowable leak standards, except as follows. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the Rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit
122. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit
123. A component shall be considered leaking if one of more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of the Rule exist at the facility. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit
124. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and PRD in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be re-inspected within 24 hours using EPA Method 21. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3 of the Rule. [District Rule 4455, 5.2.1 and 5.2.2] Federally Enforceable Through Title V Permit
125. The operator shall inspect all components at least once every calendar quarter. All new, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5 through 5.2.7. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6, and 5.2.7] Federally Enforceable Through Title V Permit
126. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3 of the rule. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs, which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit
127. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of Rule 4455 exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 and 5.2.10] Federally Enforceable Through Title V Permit
128. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit
129. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit
130. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 and 5.3.2] Federally Enforceable Through Title V Permit
131. The tag shall include date and time of leak detection, date and time of leak measurement, indicate the leak concentration in ppmv (gas leaks), indicate whether it is a major or a minor leak (liquid leaks) and whether the leaking component is an essential component, unsafe-to-monitor component or critical component. [District Rule 4455, 5.3.3] 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.

132. All component leaks shall be immediately minimized to the extent possible, but not later than one hour after detection of leaks, in order to stop or reduce leakage to the atmosphere. As soon as practicable but not later than the time period specified in Table 3 of the Rule, components that have been identified as leaking and have had emissions minimized to the extent possible but do not meet the applicable leak standards of the Rule shall either be: 1) repaired or replaced, or 2) vented to a closed vent system, or 3) removed from operation. [District Rule 4455, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit
133. For any leaking component that is an essential or critical component, and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized but still exceeds any of the applicable leak standards of this Rule, the operator shall repair or replace the component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455, 5.3.6] Federally Enforceable Through Title V Permit
134. For any component that has incurred five repair actions for major gas leaks or major liquid leaks (any combination) within a continuous 12-month period, the operator shall as soon as practicable but not later than 12 months after the date of detection either: 1) replace or retrofit the component with the control technology specified in Table 4 of Rule 4455, or 2) replace the component with Best Available Control Technology (BACT) equipment, as approved by the APCO, or 3) vent the component to an APCO approved closed vent system as defined in Section 3.0 of Rule 4455, or 4) remove the component from operation. Inaccessible components, unsafe-to-monitor components, essential components, or critical components shall satisfy the above-listed requirement as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes earlier. The APCO shall be notified in writing prior to the replacement or retrofitting of any component. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit
135. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit
136. The operator shall comply with the process PRD release notification and recordkeeping requirements specified in Section 6.3 of Rule 4455. After a release from process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. [District Rule 4455, 5.4.3 and 5.4.4] Federally Enforceable Through Title V Permit
137. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other APCO-approved system that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4455, 5.5] Federally Enforceable Through Title V Permit
138. The operator shall keep a copy of the OMP at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing approved Operator Management Plan. [District Rule 4455, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit
139. Operator shall maintain an inspection log containing the information set forth in Sections 6.2.1.1 through 6.2.1.10 of Rule 4455. [District Rule 4455, 6.2.1] 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.

140. The operator shall notify the APCO, by telephone or other APCO-approved methods, of any process PRD release in excess of 500 pounds of VOC in a continuous 24-hour period, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. The operator shall submit a written report to the APCO within thirty calendar days of following notification of process PRD release subject to 6.3.1 of Rule 4455. The written report shall include all of the information set forth in Sections 6.3.2.1 through 6.3.2.5 of Rule 4455. [District Rule 4455, 6.3] Federally Enforceable Through Title V Permit
141. Measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument, calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. Operator shall keep a record of each instrument calibration in accordance with requirements as set forth Section 6.2.3 of Rule 4455. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit
142. On {Month, Day, Year}, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-1-2

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

GRAIN RECEIVING AND HANDLING OPERATION CONSISTING OF TWO ENCLOSED CORN BELT CONVEYORS, TWO TRANSFER ELEVATORS, ONE STORAGE BIN, ONE BIN-WEIGH SYSTEM, ONE SCALPER, ONE SURGE BIN, AND ASSOCIATED CONVEYING EQUIPMENT. THE STORAGE AND SURGE BINS ARE SERVED BY BIN VENT FILTERS. THE ELEVATORS, BIN-WEIGH SYSTEM, AND SCALPER ARE SERVED BY A DONALDSON TORIT MODEL 81MBT8 BAGHOUSE.

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Visible emissions from the exhaust of the baghouse serving this operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The differential pressure, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 5.0 inches of water column when grain receiving and handling process is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The amount of material received shall not exceed 7,200 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The amount of material received shall not exceed 700,000 tons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. PM10 emissions shall not exceed 0.000368 pounds per ton of material received. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of the amount of material received, in tons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. The permittee shall maintain records of the amount of material received, in tons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The baghouse bags shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Records of all maintenance of the baghouse system, including all change outs of bags or filter media, shall be maintained. These records shall include identification of the equipment, date of inspection, any corrective action taken, and identification of the personnel performing the inspection. [District Rules 2201 and 2520 9.4.2] Federally Enforceable Through Title V Permit
18. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-2-2

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #1 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-3 AND N-7488-4.

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Visible emissions from the exhaust of the baghouse serving this operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The differential pressure, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 5.0 inches of water column when grain grinding process is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
9. PM10 emissions shall not exceed 0.0011 pounds per ton of material processed. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The amount of material processed by this hammermill shall not exceed 2,400 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 2,400 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 700,000 tons in any 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. The permittee shall maintain records of the material processed by this hammermill. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The baghouse bags shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Records of all maintenance of the baghouse system, including all change outs of bags or filter media, shall be maintained. These records shall include identification of the equipment, date of inspection, any corrective action taken, and identification of the personnel performing the inspection. [District Rules 2201 and 2520 9.4.2] 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-3-2

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #2 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-2 AND N-7488-4.

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Visible emissions from the exhaust of the baghouse serving this operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The differential pressure, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 5.0 inches of water column when grain grinding process is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
9. PM10 emissions shall not exceed 0.0011 pounds per ton of material processed. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The amount of material processed by this hammermill shall not exceed 2,400 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 2,400 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 700,000 tons in any 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. The permittee shall maintain records of the material processed by this hammermill. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The baghouse bags shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Records of all maintenance of the baghouse system, including all change outs of bags or filter media, shall be maintained. These records shall include identification of the equipment, date of inspection, any corrective action taken, and identification of the personnel performing the inspection. [District Rules 2201 and 2520 9.4.2] 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-4-2

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

GRAIN GRINDING OPERATION #3 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-2 AND N-7488-3.

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Visible emissions from the exhaust of the baghouse serving this operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The differential pressure, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 5.0 inches of water column when grain grinding process is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
9. PM10 emissions shall not exceed 0.0011 pounds per ton of material processed. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The amount of material processed by this hammermill shall not exceed 2,400 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 2,400 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 700,000 tons in any 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. The permittee shall maintain records of the material processed by this hammermill. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The baghouse bags shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Records of all maintenance of the baghouse system, including all change outs of bags or filter media, shall be maintained. These records shall include identification of the equipment, date of inspection, any corrective action taken, and identification of the personnel performing the inspection. [District Rules 2201 and 2520 9.4.2] 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

EXPIRATION DATE: 11/30/2013

PERMIT UNIT: N-7488-5-3

## EQUIPMENT DESCRIPTION:

LIQUEFACTION PROCESS CONSISTING OF ONE 9,050 GALLON COOK WATER TANK, ONE 64,374 GALLON SLURRY MIXING TANK, ONE 7,700 GALLON COOK TUBE, ONE 3,000 GALLON COOK FLASH TANK, ONE 64,370 GALLON INITIAL LIQUEFACTION TANK, ONE 64,374 GALLON FINAL LIQUEFACTION TANK, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-7 AND -8) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

## PERMIT UNIT REQUIREMENTS

1. The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
4. VOC content in the fluid handled by the final liquefaction tank shall be less than or equal to 10% by weight. The permittee shall hire a third party contractor to take and conduct a sample analysis, within 60 days of recommencing the operation, to demonstrate compliance with this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
5. There shall be no VOC emissions from the pumps, valves, flanges or other piping components under this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500 degrees Fahrenheit before incinerating the vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201] Federally Enforceable Through Title V Permit
13. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NO<sub>x</sub>/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM<sub>10</sub>/MMBtu; or 0.00285 lb-SO<sub>x</sub>/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months from the latest source test. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081] Federally Enforceable Through Title V Permit
17. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
18. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit
19. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201] Federally Enforceable Through Title V Permit
20. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The permittee shall maintain records of the date, name of the person and company name collecting the fluid sample, and a copy of the results of the fluid sample analysis. [District Rules 2201 and 4455, 40 CFR 60.486a(i)(3)] Federally Enforceable Through Title V Permit
25. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201] Federally Enforceable Through Title V Permit
26. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623] 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.

27. 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
28. The permittee shall comply with the applicable requirements of Section 6.1 and 7.3 of Rule 4455 (4/20/05). [District Rule 4455, 4.2] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-6-3

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

FERMENTATION PROCESS CONSISTING OF ONE 80,766 GALLON FIXED ROOF PRE-FERMENTOR TANK, THREE 1,152,647 GALLON FIXED-ROOF FERMENTATION TANKS, ONE 1,485,745 GALLON FIXED ROOF BEER WELL TANK, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 1,548 GALLON WATER RECIRCULATION TANK SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

## PERMIT UNIT REQUIREMENTS

1. The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
4. Fugitive VOC emissions from component leaks shall not exceed 9.6 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from component leaks shall be calculated using the SOCOMI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201] Federally Enforceable Through Title V Permit
6. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500 degrees Fahrenheit before incinerating the vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
10. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201] Federally Enforceable Through Title V Permit
13. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NO<sub>x</sub>/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM<sub>10</sub>/MMBtu; or 0.00285 lb-SO<sub>x</sub>/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months from the latest source test. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081] Federally Enforceable Through Title V Permit
17. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
18. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit
19. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201] Federally Enforceable Through Title V Permit
20. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit
26. 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
27. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] 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.

28. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

Facility Name: AEMETIS ADVANCED FUELS KEYES INC  
Location: 4209 JESSUP ROAD, CERES, CA

N-7488-6-3 : Nov 20 2012 11:32AM - KAHLOHJ

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-7-3

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

DISTILLATION PROCESS CONSISTING OF ONE MASH STRIPPER COLUMN, ONE RECTIFIER COLUMN, ONE SIDE-STRIPPER, ONE TWO STAGE MOLECULAR SIEVE, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-5 AND -8) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

## PERMIT UNIT REQUIREMENTS

1. The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
4. Fugitive VOC emissions from component leaks shall not exceed 9.8 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from component leaks shall be calculated using the SOCOMI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201] Federally Enforceable Through Title V Permit
6. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500 degrees Fahrenheit before incinerating the vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
10. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201] Federally Enforceable Through Title V Permit
13. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NOx/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months from the latest source test. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081] Federally Enforceable Through Title V Permit
17. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
18. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit
19. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201] Federally Enforceable Through Title V Permit
20. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit
26. 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
27. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] Federally Enforceable Through Title V Permit
28. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-8-3

EXPIRATION DATE: 7/30/2013

## EQUIPMENT DESCRIPTION:

DECANTATION PROCESS CONSISTING OF FIVE 130 HP ALFA LAVAL MODEL CHNX 944 DE-CANTER CENTRIFUGES (OR EQUAL), ONE WHOLE STILLAGE HOLDING TANK, ONE FIXED-ROOF THIN STILLAGE HOLDING TANK, ONE CENTRATE TANK, THE EVAPORATION SYSTEM WITH ONE THIN STILLAGE FEED TANK, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-5 AND -7) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

## PERMIT UNIT REQUIREMENTS

1. The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
4. Fugitive VOC emissions from component leaks shall not exceed 2.9 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from component leaks shall be calculated using the SOCFI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201] Federally Enforceable Through Title V Permit
6. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500 degrees Fahrenheit before incinerating the vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
10. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201] Federally Enforceable Through Title V Permit
13. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NOx/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months from the latest source test. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081] Federally Enforceable Through Title V Permit
17. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
18. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit
19. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201] Federally Enforceable Through Title V Permit
20. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit
26. 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
27. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] 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.

28. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-9-3

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

210,000 GALLON FIXED-ROOF (200 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM. THE TANK VAPOR RECOVERY SYSTEM IS VENTED TO THE BOILERS (PERMIT UNITS N-7488-16, -17, AND -18) OR THE STANDBY FLARE (PERMIT UNIT N-7488-19).

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from component leaks shall not exceed 8.7 pounds per day. These emissions are from the components associated with the storage tank, and the tank vapor recovery system including piping and pumping system shared by permits N-7488-9, N-7488-10, N-7488-11, and N-7488-12. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Fugitive VOC emissions from component leaks shall be calculated using the SOCM I Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit
12. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)] Federally Enforceable Through Title V Permit
13. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)] Federally Enforceable Through Title V Permit
14. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
15. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
16. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
17. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit
18. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
19. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] Federally Enforceable Through Title V Permit
20. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-10-3

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF (200 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from component leaks shall not exceed 0.5 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Fugitive VOC emissions from component leaks shall be calculated using the SOCFI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)] Federally Enforceable Through Title V Permit
13. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)] Federally Enforceable Through Title V Permit
14. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
15. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
16. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
17. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]
18. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
19. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] Federally Enforceable Through Title V Permit
20. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-11-3

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

63,000 GALLON FIXED-ROOF (190 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from component leaks shall not exceed 0.7 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Fugitive VOC emissions from component leaks shall be calculated using the SOCOMI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)] Federally Enforceable Through Title V Permit
13. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)] Federally Enforceable Through Title V Permit
14. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
15. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
16. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
17. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit
18. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
19. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] Federally Enforceable Through Title V Permit
20. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-12-3

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

1,050,000 GALLON FIXED-ROOF DENATURED ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Fugitive VOC emissions from component leaks shall not exceed 0.5 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Fugitive VOC emissions from component leaks shall be calculated using the SOCFI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116(a), District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)] Federally Enforceable Through Title V Permit
13. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)] Federally Enforceable Through Title V Permit
14. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
15. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
16. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
17. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit
18. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
19. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] Federally Enforceable Through Title V Permit
20. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-13-3

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

30,000 GALLON GASOLINE STORAGE TANK WITH TWO UNLOADING RACKS (SHARED WITH PERMIT N-7488-14) SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM. THE STORAGE TANK IS VENTED TO THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
5. Vapor return hose(s) shall be attached whenever the unloading equipment operates. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The number of gasoline hose disconnects performed at the gasoline truck unloading operation for both permit units N-7488-13 and N-7488-14 shall not exceed 18 disconnects per day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The number of gasoline hose disconnects performed at the gasoline truck unloading operation for both permit units N-7488-13 and N-7488-14 shall not exceed 904 disconnects in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The organic liquid spillage rate shall not exceed 0.017 pounds per disconnection, equivalent to 10 mL per disconnection. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: AEMETIS ADVANCED FUELS KEYES INC

Location: 4209 JESSUP ROAD, CERES, CA

N-7488-13-3 : Nov 20 2012 11:32AM - KAHLOJ

11. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of the number of disconnections made at the gasoline unloading operation for both permit units N-7488-13 and N-7488-14 on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The permittee shall maintain records of the number of disconnections made at the gasoline unloading operation for both permit units N-7488-13 and N-7488-14 in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit
16. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)] Federally Enforceable Through Title V Permit
17. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)] Federally Enforceable Through Title V Permit
18. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
19. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
20. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
21. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit
23. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
24. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] Federally Enforceable Through Title V Permit
25. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-14-3

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

30,000 GALLON GASOLINE STORAGE TANK WITH TWO UNLOADING RACKS (SHARED WITH PERMIT N-7488-13) SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM. THE STORAGE TANK IS VENTED TO THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Vapor return hose(s) shall be attached whenever the unloading equipment operates. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The number of gasoline hose disconnects performed at the gasoline truck unloading operation for both permit units N-7488-13 and N-7488-14 shall not exceed 18 disconnects per day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The number of gasoline hose disconnects performed at the gasoline truck unloading operation for both permit units N-7488-13 and N-7488-14 shall not exceed 904 disconnects in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The organic liquid spillage rate shall not exceed 0.017 pounds per disconnection, equivalent to 10 mL per disconnection. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of the number of disconnections made at the gasoline unloading operation for both permit units N-7488-13 and N-7488-14 on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The permittee shall maintain records of the number of disconnections made at the gasoline unloading operation for both permit units N-7488-13 and N-7488-14 in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit
16. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)] Federally Enforceable Through Title V Permit
17. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)] Federally Enforceable Through Title V Permit
18. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
19. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)] Federally Enforceable Through Title V Permit
20. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
21. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit
23. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
24. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] Federally Enforceable Through Title V Permit
25. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-15-3

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

TWO ETHANOL LOADING RACKS SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM

## PERMIT UNIT REQUIREMENTS

1. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vapor return hose(s) shall be attached whenever loading equipment operates. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All trucks loaded shall be inspected and determined to be vapor-tight such that all vapors are displaced into vapor return hoses during loading. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All vapors displaced from trucks during load-out shall be returned to the vapor recovery system covered under permit N-7488-9. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All trucks shall be bottom loaded (or submerge loaded) using dry breaker couplers. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The number of denatured ethanol hose disconnects shall not exceed 160 disconnects per day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The number of denatured ethanol hose disconnects shall not exceed 32,500 disconnects in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The amount of denatured ethanol loaded into trucks shall not exceed 328,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The amount of denatured ethanol loaded into trucks shall not exceed 75,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The organic liquid spillage rate shall not exceed 0.017 pounds per disconnection, equivalent to 10 mL per disconnection. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The permittee shall maintain records of the number of disconnection made on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of the number of disconnection made in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. The permittee shall maintain records of the amount of denatured ethanol loaded, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of the amount of denatured ethanol loaded, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
18. A leak is defined as the dripping of VOC containing liquid at a rate of more than 3 drops per minute; or detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane. [District Rule 4624] Federally Enforceable Through Title V Permit
19. The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter. The leak inspections shall be performed during product transfer using a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Method 21. The instrument shall be calibrated with methane in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4624] Federally Enforceable Through Title V Permit
20. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be re-inspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
21. An operator may apply for a written approval from the District to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency would revert back to quarterly and the operator shall contact the District in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
22. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded shall not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
23. The operator shall keep records of leak inspections including the date, name of component and its location and measured ppmv value, name of the operator and the company conducting the leak inspection. [District Rule 4624] Federally Enforceable Through Title V Permit
24. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4624] Federally Enforceable Through Title V Permit
25. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482] Federally Enforceable Through Title V Permit
26. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-16-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only two of the three boilers under permit units N-7488-16, 17, and 18 shall be fired simultaneously. [District Rule 2201] Federally Enforceable Through Title V Permit
3. 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. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
4. The unit shall be primarily fired on PUC-regulated natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. The unit shall be used to incinerate vapors from the tank vapor recovery system covered under permit N-7488-9. [District Rule 2201] Federally Enforceable Through Title V Permit
6. NOx (as NO2) emissions shall not exceed 7 ppmvd @ 3% O2. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. CO emissions shall not exceed 15 ppmvd @ 3%O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. VOC emissions shall not exceed 0.004 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. PM10 emissions shall not exceed 0.0044 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
12. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every 12 months from the latest source test. After demonstrating compliance on two consecutive annual source tests, 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 12 months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. NO<sub>x</sub> emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. 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
18. Stack gas oxygen (O<sub>2</sub>) 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
19. Fuel sulfur content shall be determined using EPA Method 11 or EPA Method 15 or District, CARB and EPA approved alternative methods. [District Rule 4320] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
23. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15-consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District 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.

26. The permittee shall maintain records of: (1) the date and time of backup fuel NOx measurements, (2) the measured backup fuel NOx concentration (in ppmv or lb/MMBtu) corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
28. The permittee shall maintain daily records of the type and quantity of fuel combusted by the boiler. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
29. 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 conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-17-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only two of the three boilers under permit units N-7488-16, 17, and 18 shall be fired simultaneously. [District Rule 2201] Federally Enforceable Through Title V Permit
3. 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. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
4. The unit shall be primarily fired on PUC-regulated natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. The unit shall be used to incinerate vapors from the tank vapor recovery system covered under permit N-7488-9. [District Rule 2201] Federally Enforceable Through Title V Permit
6. NOx (as NO2) emissions shall not exceed 7 ppmvd @ 3% O2. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. CO emissions shall not exceed 15 ppmvd @ 3%O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. VOC emissions shall not exceed 0.004 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. PM10 emissions shall not exceed 0.0044 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
12. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every 12 months from the latest source test. After demonstrating compliance on two consecutive annual source tests, 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 12 months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: AEMETIS ADVANCED FUELS KEYES INC

Location: 4209 JESSUP ROAD, CERES, CA

N-7488-17-4 : Nov 20 2012 11:32AM - KAHLOJ

14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. NO<sub>x</sub> emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. 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
18. Stack gas oxygen (O<sub>2</sub>) 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
19. Fuel sulfur content shall be determined using EPA Method 11 or EPA Method 15 or District, CARB and EPA approved alternative methods. [District Rule 4320] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
23. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15-consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District 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.

26. The permittee shall maintain records of: (1) the date and time of backup fuel NOx measurements, (2) the measured backup fuel NOx concentration (in ppmv or lb/MMBtu) corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
28. The permittee shall maintain daily records of the type and quantity of fuel combusted by the boiler. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
29. 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 conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-18-3

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only two of the three boilers under permit units N-7488-16, 17, and 18 shall be fired simultaneously. [District Rule 2201] Federally Enforceable Through Title V Permit
3. 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. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
4. The unit shall be primarily fired on PUC-regulated natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. The unit shall be used to incinerate vapors from the tank vapor recovery system covered under permit N-7488-9. [District Rule 2201] Federally Enforceable Through Title V Permit
6. NOx (as NO2) emissions shall not exceed 7 ppmvd @ 3% O2. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. CO emissions shall not exceed 15 ppmvd @ 3%O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. VOC emissions shall not exceed 0.004 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. PM10 emissions shall not exceed 0.0044 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
12. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every 12 months from the latest source test. After demonstrating compliance on two consecutive annual source tests, 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 12 months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. 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
18. 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
19. Fuel sulfur content shall be determined using EPA Method 11 or EPA Method 15 or District, CARB and EPA approved alternative methods. [District Rule 4320] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
23. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15-consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

26. The permittee shall maintain records of: (1) the date and time of backup fuel NO<sub>x</sub> measurements, (2) the measured backup fuel NO<sub>x</sub> concentration (in ppmv or lb/MMBtu) corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
28. The permittee shall maintain daily records of the type and quantity of fuel combusted by the boiler. [40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
29. 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 conditions are part of the Facility-wide Permit to Operate.

DRAFT

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-19-3

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

280,000 SCF/DAY MRW AIR-ASSISTED STANDBY FLARE. THE STANDBY FLARE INCINERATES VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM WHEN THE BOILERS (PERMIT UNITS N-7488-16, -17, AND -18) ARE NOT OPERATING.

## PERMIT UNIT REQUIREMENTS

1. The standby flare shall be operated only when the boilers are non-operational. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Only PUC-regulated natural gas shall be used as the pilot fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Visible emissions from the standby flare shall not exceed 1/4 Ringelmann or 5% opacity except for three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The standby flare shall incinerate collected vapors from the Tank Vapor Control (TVR) system operated at this facility. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The standby flare shall be equipped with a total gas volume flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This permit does not authorize the utilization of any engine or other device requiring a separate permit to provide air assist to the standby flare. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The maximum quantity of gas combusted shall not exceed 280,000 scf/day . [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum quantity of gas combusted shall not exceed 6,709,333 scf/yr. (Gas combusted = [(280,000 scf/day)(500 hr/yr)(day/24 hr)] + [(2,400 scf/day)(365 day/yr)]. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from the standby flare shall not exceed any of the following (based upon total gas combusted): NO<sub>x</sub> (as NO<sub>2</sub>): 0.068 lb/MMBtu; SO<sub>x</sub> (as SO<sub>2</sub>): 0.00285 lb/MMBtu; PM<sub>10</sub>: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall maintain accurate records of the daily and annual quantity of gas combusted and the dates and times of operation. The records shall be retained for a period of at least five years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AEMETIS ADVANCED FUELS KEYES INC  
Location: 4209 JESSUP ROAD, CERES, CA  
N-7488-19-3: Nov 20 2012 11:32AM -- KAH:LONJ

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-20-2

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

25,000 GPM COMPOSITE COOLING SOLUTIONS MODEL 4242-150-P6 SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
3. The drift rate shall not exceed 0.0015%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. PM10 emissions shall not exceed 19.1 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. PM10 emissions shall not exceed 6,971 pounds in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Compliance with the PM10 emission limit (lb/day) shall be demonstrated by using the following equation: Water Recirculation Rate (gal/day) x 8.34 lb/gal x Total Dissolved Solids Concentration in the blowdown water (ppm x 10E-06) x Design Drift Rate (%). [District Rule 2201] Federally Enforceable Through Title V Permit
7. Sampling facilities for testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
8. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory within 60 days of recommencing the operation and quarterly thereafter. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
9. The permittee shall keep records of daily PM10 emissions in pounds. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall keep records of PM10 emissions in pounds, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-21-3

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

WET DISTILLERS GRAIN (WDG) STORAGE AND TRUCK LOAD-OUT OPERATION WITH MECHANICAL CONVEYORS. WDG IS STORED IN A PARTIALLY ENCLOSED BUILDING. THE COVERED BUILDING IS OPEN ON ONE SIDE FOR TRUCK LOADING. TRUCK LOADING IS ACCOMPLISHED WITH A FRONT-END LOADER.

## PERMIT UNIT REQUIREMENTS

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1. The storage of wet distillers grain (WDG) on-site shall not exceed 48 hours. [District Rule 4102]
2. The amount of WDG processed shall not exceed 1,600 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The amount of WDG processed shall not exceed 550,000 tons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emissions rate from the WDG storage and truck loadout operation shall not exceed 0.0088 lb-VOC/ton-WDG processed. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The permittee shall maintain records of the amount of WDG processed through this storage and truck loadout operation, in tons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The permittee shall maintain records of the amount of WDG processed through this storage and truck loadout operation, in tons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All records shall be retained on site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: AEMETIS ADVANCED FUELS KEYES INC  
Location: 4209 JESSUP ROAD, CERES, CA  
N-7488-21-3 : Nov 20 2012 11:32AM - KAHLONJ

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-22-2

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

400 BHP CUMMINS MODEL CFP11E-F10 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE WATER PUMP

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR 60.4207(b)] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions from this IC engine shall not exceed any of the following limits: 3.68 g-NOx/bhp-hr, 0.746 g-CO/bhp-hr, or 0.16 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR 60.4205(c)] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.091 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
6. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
7. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
8. This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 60.4211(f)]
9. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. 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 Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-23-1

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

11,221 GALLON CAPACITY HYDRATED LIME RECEIVING AND STORAGE SILO VENTED TO A ZMP PORTEC MODEL DF-48 BIN VENT FILTER WITH AN INTEGRAL 750 GALLON LIME SLURRY MIXING TANK.

## PERMIT UNIT REQUIREMENTS

1. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. Visible emissions from the dust collector serving the hydrated lime receiving and storage operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The dust collector shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the dust collector shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The dust collector cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Material removed from the dust collector shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Hydrated lime shall not be received or stored without the displaced air being vented through the dust collector. [District Rule 2201] Federally Enforceable Through Title V Permit
8. PM10 emissions shall not exceed 0.000305 pounds per ton of lime received. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The amount of hydrated lime received and stored shall not exceed 32 tons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall maintain daily records of the quantity of hydrated lime received and stored. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The dust collector system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. The dust collector bags shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Records of all maintenance of the baghouse system, including all change outs of bags or filter media, shall be maintained. These records shall include identification of the equipment, date of inspection, any corrective action taken, and identification of the personnel performing the inspection. [District Rules 2201 and 2520 9.4.2] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

**Attachment B**  
**Detailed Facility List**

**Detailed Facility Report**  
For Facility=7488  
Sorted by Facility Name and Permit Number

<b>AEMETIS ADVANCED FUELS KEYES INC</b> <b>4209 JESSUP ROAD</b> <b>CERES, CA</b>	<b>FAC #</b> <b>STATUS:</b> <b>TELEPHONE:</b>	<b>N 7488</b> <b>A</b> <b>2096324511</b>	<b>TYPE:</b> <b>TOXIC ID:</b>	<b>TitleV</b> <b>AREA:</b>	<b>EXPIRE ON:</b> <b>INSP. DATE:</b>	<b>11/30/2013</b> <b>8/11/12</b>
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-7488-1-1	103.25 hp	3020-01 D	1	314.00	314.00	A	GRAIN RECEIVING AND HANDLING OPERATION CONSISTING OF TWO ENCLOSED CORN BELT CONVEYORS, TWO TRANSFER ELEVATORS, ONE STORAGE BIN, ONE BIN-WEIGH SYSTEM, ONE SCALPER, ONE SURGE BIN, AND ASSOCIATED CONVEYING EQUIPMENT. THE STORAGE AND SURGE BINS ARE SERVED BY BIN VENT FILTERS. THE ELEVATORS, BIN-WEIGH SYSTEM, AND SCALPER ARE SERVED BY A DONALDSON TORIT MODEL 81MBT8 BAGHOUSE.
N-7488-2-1	321 hp	3020-01 E	1	412.00	412.00	A	GRAIN GRINDING OPERATION #1 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-3 AND N-7488-4.
N-7488-3-1	321 hp	3020-01 E	1	412.00	412.00	A	GRAIN GRINDING OPERATION #2 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-2 AND N-7488-4.
N-7488-4-1	321 hp	3020-01 E	1	412.00	412.00	A	GRAIN GRINDING OPERATION #3 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-2 AND N-7488-3.
N-7488-5-2	462.5 hp	3020-01 F	1	607.00	607.00	A	LIQUEFACTION PROCESS CONSISTING OF ONE 9,050 GALLON COOK WATER TANK, ONE 64,374 GALLON SLURRY MIXING TANK, ONE 7,700 GALLON COOK TUBE, ONE 3,000 GALLON COOK FLASH TANK, ONE 64,370 GALLON INITIAL LIQUEFACTION TANK, ONE 64,374 GALLON FINAL LIQUEFACTION TANK, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-7 AND -8) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.
N-7488-6-2	1,343 hp	3020-01 H	1	1,030.00	1,030.00	A	FERMENTATION PROCESS CONSISTING OF ONE 80,766 GALLON FIXED ROOF PRE-FERMENTOR TANK, THREE 1,152,647 GALLON FIXED-ROOF FERMENTATION TANKS, ONE 1,485,745 GALLON FIXED ROOF BEER WELL TANK, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 1,548 GALLON WATER RECIRCULATION TANK SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

**Detailed Facility Report**  
For Facility=7488  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-7488-7-2	317.5 hp	3020-01 E	1	412.00	412.00	A	DISTILLATION PROCESS CONSISTING OF ONE MASH STRIPPER COLUMN, ONE RECTIFIER COLUMN, ONE SIDE-STRIPPER, ONE TWO STAGE MOLECULAR SIEVE, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-5 AND -8) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.
N-7488-8-2	3,742.5 hp	3020-01 H	1	1,030.00	1,030.00	A	DECANTATION PROCESS CONSISTING OF FIVE 130 HP ALFA LAVAL MODEL CHNX 944 DECANTER CENTRIFUGES (OR EQUAL), ONE WHOLE STILLAGE HOLDING TANK, ONE FIXED-ROOF THIN STILLAGE HOLDING TANK, ONE CENTRATE TANK, THE EVAPORATION SYSTEM WITH ONE THIN STILLAGE FEED TANK, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-5 AND -7) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.
N-7488-9-2	210,000 gallons	3020-05 E	1	246.00	246.00	A	210,000 GALLON FIXED-ROOF (200 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM. THE TANK VAPOR RECOVERY SYSTEM IS VENTED TO THE BOILERS (PERMIT UNITS N-7488-16, -17, AND -18) OR THE STANDBY FLARE (PERMIT UNIT N-7488-19).
N-7488-10-2	210,000 gallons	3020-05 E	1	246.00	246.00	A	210,000 GALLON FIXED-ROOF (200 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9
N-7488-11-2	63,000 gallons	3020-05 D	1	185.00	185.00	A	63,000 GALLON FIXED-ROOF (190 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9
N-7488-12-2	1,050,000 gallon	3020-05 G	1	382.00	382.00	A	1,050,000 GALLON FIXED-ROOF DENATURED ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9
N-7488-13-2	30,000 gallons	3020-05 C	1	135.00	135.00	A	30,000 GALLON GASOLINE STORAGE TANK WITH TWO UNLOADING RACKS (SHARED WITH PERMIT N-7488-14) SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM. THE STORAGE TANK IS VENTED TO THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.
N-7488-14-2	30,000 gallons	3020-05 C	1	135.00	135.00	A	30,000 GALLON GASOLINE STORAGE TANK WITH TWO UNLOADING RACKS (SHARED WITH PERMIT N-7488-13) SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM. THE STORAGE TANK IS VENTED TO THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.
N-7488-15-2	30 hp	3020-01 B	1	117.00	117.00	A	TWO ETHANOL LOADING RACKS SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM

**Detailed Facility Report**

For Facility=7488

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-7488-16-3	99 MMBtu/hr boiler	3020-02 H	1	1,030.00	1,030.00	A	99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9
N-7488-17-3	99 MMBtu/hr boiler	3020-02 H	1	1,030.00	1,030.00	A	99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9
N-7488-18-2	99 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.
N-7488-19-1	11,667 kBtu/hr	3020-02 G	1	815.00	815.00	A	280,000 SCF/DAY MRW AIR-ASSISTED STANDBY FLARE. THE STANDBY FLARE INCINERATES VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM WHEN THE BOILERS (PERMIT UNITS N-7488-16, -17, AND -18) ARE NOT OPERATING.
N-7488-20-1	2,446.5 hp	3020-01 H	1	1,030.00	1,030.00	A	25,000 GPM COMPOSITE COOLING SOLUTIONS MODEL 4242-150-P6 SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR
N-7488-21-2	7.5 hp	3020-01 A	1	87.00	87.00	A	WET DISTILLERS GRAIN (WDG) STORAGE AND TRUCK LOAD-OUT OPERATION WITH MECHANICAL CONVEYORS. WDG IS STORED IN A PARTIALLY ENCLOSED BUILDING. THE COVERED BUILDING IS OPEN ON ONE SIDE FOR TRUCK LOADING. TRUCK LOADING IS ACCOMPLISHED WITH A FRONT-END LOADER.
N-7488-22-1	400 bhp emergency IC engine	3020-10 D	1	479.00	479.00	A	400 BHP CUMMINS MODEL CFP11E-F10 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE WATER PUMP
N-7488-23-0	11,221 gallon storage silo	3020-05 B	1	93.00	93.00	A	11,221 GALLON CAPACITY HYDRATED LIME RECEIVING AND STORAGE SILO VENTED TO A ZMI PORTEC MODEL DF-48 BIN VENT FILTER WITH AN INTEGRAL 750 GALLON LIME SLURRY MIXING TANK.

Number of Facilities Reported: 1

**Attachment C**  
**Exempt Equipment**

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

COMPANY NAME: AE Advanced Fuels Keyes, Incorporated

FACILITY ID: N-7488

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

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

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

**Attachment D**  
**Permits to Operate**



# Permit to Operate

**FACILITY:** N-7488

**EXPIRATION DATE:** 11/30/2013

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

AEMETIS ADVANCED FUELS KEYES INC  
P O BOX 879  
KEYES, CA 95328-0879

**FACILITY LOCATION:**

4209 JESSUP ROAD  
CERES, CA

**FACILITY DESCRIPTION:**

ETHANOL PRODUCTION FACILITY

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

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

**Seyed Sadredin**  
Executive Director / APCO

**David Warner**  
Director of Permit Services

# San Joaquin Valley Air Pollution Control District

FACILITY: N-7488-0-0

EXPIRATION DATE: 11/30/2013

## FACILITY-WIDE REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Each owner or operator subject to the provisions of 40 CFR Part 60 Subpart VVa shall demonstrate compliance with the requirements of 40 CFR 60.482-1a through 60.482-10a or 40 CFR 60.480a(e) for all equipment within 180 days of initial startup. [40 CFR 60.482-1a(a)]
3. Compliance with 40 CFR 60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. [40 CFR 60.482-1a(b)]
4. An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a as provided in 40 CFR 60.484a. [40 CFR 60.482-1a(c)]
5. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, or 60.482-10a, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1a(c)]
6. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2a to 40 CFR 60.482-10a if it is identified as required in 40 CFR 60.486a(e)(5). [40 CFR 60.482-1a(d)]
7. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b), except as provided in 40 CFR 60.482-1a(c) and 40 CFR 60.482-2a(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 500 ppmv or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2a(a) and (b) and District Rule 2201]
8. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2a(c)]
9. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2a(a) provided the requirements specified in 40 CFR 60.482-2a(d)(1) through (6) are met. [40 CFR 60.482a(d)]
10. Any PLLS that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-2a(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2a(e)(1), (2), and (3). [40 CFR 60.482-2a(e) and District Rule 2201]
11. If any PLLS is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10a, it is exempt from the requirements of 40 CFR 60.482-2a(a) through (e). [40 CFR 60.482-2a(f)]

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: AEMETIS ADVANCED FUELS KEYES INC

Location: 4209 JESSUP ROAD, CERES, CA

N-7488-0-0 : Nov 20 2012 11:30AM -- KAHLOJ

12. Any pump in PLLS that is designated as an unsafe-to-monitor pump, as described in 40 CFR 60.486a(f)(1), is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2a(a) and 40 CFR 60.482-2a(d)(4) through (6) if:  
1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2a(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2a(c) if a leak is detected. [40 CFR 60.482-2a(g)]
13. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2a(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2a(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2a(h)]
14. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3a(c), (h) and (i). Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3a(b)(1), or (2), or (3). [40 CFR 60.482-3a(a), (b), and (c)]
15. If a barrier fluid system is used for a compressor, the barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system or both. Each sensor shall be checked daily or shall be equipped with an audible alarm. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier system, or both based on the established criterion, a leak is detected. [40 CFR 60.482-3a(d), (e), and (f)]
16. If a barrier fluid system is used for a compressor, detected leaks shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3a(g)]
17. Any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-3a(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3a(i)(1) and (2). [40 CFR 60.482-3a(i) and District Rule 2201]
18. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3a(a) through (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3a(a) through (e), and (h). [40 CFR 60.482-3(j)]
19. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, as determined by the methods specified in 40 CFR 60.485a(c). [40 CFR 60.482-4a(a) and District Rule 2201]
20. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9a. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, by the methods specified in 40 CFR 60.485a(c). [40 CFR 60.482-4a(b) and District Rule 2201]
21. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10a is exempted from the requirements of 40 CFR 60.482-4a(a) and (b). [40 CFR 60.482-4(c)]
22. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4a(a) and (b), provided a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9a. [40 CFR 60.482-4a(d)]

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1a(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5a(b)(1) through (4). [40 CFR 60.482-5a(a), (b) and (c)]
24. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1a(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6a(a) and (c)]
25. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6a(b)]
26. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6a(a), (b) and (c). [40 CFR 60.482-6a(d)]
27. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6a(a) through (c) are exempt from the requirements of 40 CFR 60.482-6a(a) through (c). [40 CFR 60.482-6a(e)]
28. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b) and shall comply with 40 CFR 60.482-7a(b) through (e), except as provided in 40 CFR 60.482-7a(f), (g), and (h), 40 CFR 60.483-1a, 40 CFR 60.483-2a, and 40 CFR 60.482-1a(c). A leak is detected if an instrument reading of 100 ppmv or greater is measured. [40 CFR 60.482-7a(a) and (b) and District Rule 2201]
29. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7a(c)]
30. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7a(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7a(d) and (e)]
31. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 100 ppmv above background, is exempt from the requirements of 40 CFR 60.482-7a(a) if the valve meets the requirements specified in 40 CFR 60.482-7a(f)(1), (2), and (3). [40 CFR 60.482-7a(f) and District Rule 2201]
32. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7a(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7a(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7a(g)]
33. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7a(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7a(h)]

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34. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps, valves and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485a(b) and shall comply with the requirements of 40 CFR 60.482-8a(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 100 ppmv or greater for valves and connectors and 500 ppmv or greater for pumps and compressor seals is measured. [40 CFR 60.482-8a(a) and (b), and District Rule 2201]
35. When a leak is detected in pumps, valves and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7a(c)(2) and 60.482-7a(e). [40 CFR 60.482-8a(c) and (d)]
36. For closed vent systems and control devices, vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 ppmv, whichever is less stringent. [40 CFR 60.482-10a(b)]
37. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C. [40 CFR 60.482-10a(c)]
38. Flare used to comply with subpart VVa shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10a(d)]
39. Owners or operators of control devices used to comply with the provisions of Subpart VVa shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10a(e)]
40. Except as provided in 40 CFR 60.482-10a(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in 60.482-10a(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10a(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10a(f) and (g), and District Rule 2201]
41. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10a(h)]
42. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2). [40 CFR 60.482-10a(i)]
43. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10a(j)(1) and (j)(2). [40 CFR 60.482-10a(j)]
44. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10a(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10a(k)(1) through (k)(3). [40 CFR 60.482-10a(k)]

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45. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486a(c); 4) For each inspection conducted in accordance with 40 CFR 60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10a(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10a(l)]
46. Closed vent systems and control devices used to comply with provisions Subpart VVa shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10a(m)]
47. The owner or operator shall initially monitor all connectors in the process unit for leaks by the later of either 12 months after the compliance date or 12 months after the initial startup under this permit. [40 CFR 60.482-11a]
48. Except as allowed in 40 CFR 60.482-1a(c), 40 CFR 60.482-10a, or as specified in 40 CFR 60.482-11a(e), the owner or operator shall monitor all connectors in gas and vapor and light liquid service as specified 40 CFR Part 60.482-11a(a) and (b)(3). The connectors shall be monitored to detect leaks by the method specified in 40 CFR 60.485a(b) and, as applicable, 40 CFR 60.485a(c). A leak is detected if an instrument reading of 100 ppmv or greater is measured. [40 CFR 60.482-11a(b)(1) and (2) and District Rule 2201]
49. The owner or operator shall perform monitoring, subsequent to the initial monitoring of all connectors in the process unit, as specified in 40 CFR 60.482-11a(b)(3)(i) through (iii), and shall comply with the requirements of 40 CFR 60.482-11a(b)(3)(iv) and (v). The required period in which monitoring must be conducted shall be determined from 40 CFR 60.482-11a(b)(3)(i) through (iii) using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in 40 CFR 60.482-11a(c). [40 CFR 60.482-11a(b)(3) and 40 CFR 60.482-11a(c)]
50. When a leak is detected for any connector in gas/vapor service and in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-11a(d)]
51. Any connector in gas/vapor service and in light liquid service that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor connector is exempt from the requirements of 40 CFR 60.482-11a(a) and (b) if: 1) The owner or operator of the connector demonstrates that the connector is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-11a(a) and (b); and 2) The owner or operator of the connector has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair the equipment according to the procedures in 40 CFR 60.482-11a(d) if a leak is detected. [40 CFR 60.482-11a(e)]

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52. For any inaccessible, ceramic, or ceramic-lined connectors, any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of 40 CFR 60.682-11a(a) and (b), from the leak repair requirements of 40 CFR 60.682-11a(d), and from the recordkeeping and reporting requirements. An inaccessible connector is one that meets any of the following provisions, as applicable: (i) Buried; (ii) Insulated in a manner that prevents access to the connector by a monitor probe; (iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe; (iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground; (v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; or (vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. If any inaccessible, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical. [40 CFR 60.682-11a(f)]
53. Except for instrumentation systems and inaccessible, ceramic, or ceramic-lined connectors meeting the provisions of 40 CFR 60.482-11a(f), the owner or operator shall identify the connectors subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. [40 CFR 60.482-11a(g)]
54. The owner or operator may elect to comply with alternative standards for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1a and 60.483-2a. The owner or operator must notify the Administrator in writing before implementing alternative standards. [40 CFR 60.483-1a and 60.483-2a]
55. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart VVa. [40 CFR 60.484a(a)]
56. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485a, except as provided in 40 CFR 60.8(b). [40 CFR 60.485a(a)]
57. The owner or operator shall determine compliance with the standards in 40 CFR 60.482-1a through 60.482-11a, 60.483a, and 60.484a using Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 of Appendix A-7. [40 CFR 60.485a(b) and District Rule 2201]
58. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows: 1) The requirements of 40 CFR 60.485a(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 100 ppmv methane for valves and connectors and 500 ppmv methane for pumps and compressor seals for determining compliance. [40 CFR 60.485a(c) and District Rule 2201]
59. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260, E168, E169 shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485a(d)]

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60. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H<sub>2</sub>O at 68 degrees F). Standard reference texts or ASTM D2879 shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H<sub>2</sub>O at 68 degrees F) is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485a(e)]
61. Samples used in conjunction with 40 CFR 60.485a(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485a(f)]
62. An owner or operator of more than one affected facility subject to the provisions Subpart VVa may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486a(a)(2)]
63. The owner or operator shall record the following information for each monitoring event required by 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a: (i) Monitoring instrument identification, (ii) Operator identification, (iii) Equipment identification, (iv) Date of monitoring, and (v) Instrument reading. [40 CFR 60.486a(3)]
64. When each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7a(c) and no leak has been detected during those 2 months; 3) The identification on a connector may be removed after it has been monitored as specified in 60.482-11a(b)(3)(iv) and no leak has been detected during that monitoring; 4) The identification on equipment, except on a valve or connector, may be removed after it has been repaired. [40 CFR 60.486a(b)]
65. When each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number, except when indication of liquids dripping from a pump are designated as a leak ; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) Maximum instrument reading measured by Method 21 of appendix A-7 of 40 CFR Part 60 at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping; 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdowns that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486a(c) and District Rule 2201]
66. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10a shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a. [40 CFR 60.486a(d)]

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67. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1a to 60.482-11a shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart VVa; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e), 60.482-3a(i) and 60.482-7a(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2a(e), 60.482-3a(i), or 60.482-7a(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4a; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2a(e), 60.482-3a(i), 40 CFR 60.482-4a, and 40 CFR 60.482-7a(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; 5) A list of identification numbers for equipment in vacuum service; 6) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service; 7) Records of the information for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of 40 CFR 60 and 40 CFR 60.485a(b). These records shall include: (i) Date of calibration and initials of operator performing the calibration; (ii) Calibration gas cylinder identification, certification date, and certified concentration; (iii) Instrument scale(s) used; (iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of 40 CFR 60; (v) Results of each calibration drift assessment required by 40 CFR 60.485a(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value); and (vi) If an owner or operator makes their own calibration gas, a description of the procedure used; 8) The connector monitoring schedule for each process unit as specified in 40 CFR 60.482-11a(b)(3)(v); and 9) Records of each release from a pressure relief device subject to 40 CFR 60.482-4a. [40 CFR 60.486a(e)]
68. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7a(g) and (h), all pumps subject to the requirements of 40 CFR 60.482-2a(g), and all connectors subject to the requirements of 40 CFR 60.482-11a(e) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486a(f)]
69. The following information shall be recorded for valves complying with 40 CFR 60.483-2a: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486a(g)]
70. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486a(h)]
71. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480a(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486a(i)]
72. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486a(j)]
73. The provisions of 40 CFR 60.7(b) and (d) do not apply to affected facilities subject to Subpart VVa. [40 CFR 60.486a(k)]
74. The owner or operator subject to the provisions of 40 CFR Part 60 Subpart VVa shall submit semiannual reports to the Administrator beginning 6 months after the initial startup date. [40 CFR 60.487a(a)]

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75. The initial semiannual report to the Administrator shall include the following information: 1) Process unit identification; 2) Number of valves subject to the requirements of <sup>±</sup> 60.482-7a, excluding those valves designated for no detectable emissions under the provisions of 40 CFR 60.482-7a(f); 3) Number of pumps subject to the requirements of 40 CFR 60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e) and those pumps complying with 40 CFR 60.482-2a(f); 4) Number of compressors subject to the requirements of 40 CFR 60.482-3a, excluding those compressors designated for no detectable emissions under the provisions of 40 CFR 60.482-3a(i) and those compressors complying with 40 CFR 60.482-3a(h); and 5) Number of connectors subject to the requirements of 40 CFR 60.482-11a. [40 CFR 60.487a(b)]
76. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486a: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7a(b) or 40 CFR 60.483-2a, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7a(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2a(c)(1) and (d)(6), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3a(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3a(g)(1), (vii) Number of connectors for which leaks were detected as described in 40 CFR 40 CFR 60.482-11a(b), (viii) Number of connectors for which leaks were not repaired as required in 40 CFR 60.482-11a(d), and (ix) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487a(a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487a(c)]
77. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1a and 60.483-2a shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487a(d)]
78. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart VVa except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487a(e)]
79. The semiannual reporting requirements of 40 CFR 60.487a(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487a(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487a(f)]
80. The operator shall meet operating, inspection and re-inspection, maintenance, process pressure relief device (PRD) and component identification requirements of District Rule 4455 (4/20/05) for all components containing or contacting VOC, except for those components specifically exempted in Sections 4.1 and 4.2. [District Rule 4455, 5.0]
81. The operator shall not use any component that leaks in excess of the allowable leak standards, except as follows. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the Rule. [District Rule 4455, 5.1.1]
82. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2]
83. A component shall be considered leaking if one of more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of the Rule exist at the facility. [District Rule 4455, 5.1.4]

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

84. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and PRD in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be re-inspected within 24 hours using EPA Method 21. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3 of the Rule. [District Rule 4455, 5.2.1 and 5.2.2]
85. The operator shall inspect all components at least once every calendar quarter. All new, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5 through 5.2.7. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6, and 5.2.7]
86. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3 of the rule. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs, which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8]
87. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of Rule 4455 exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 and 5.2.10]
88. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11]
89. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12]
90. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 and 5.3.2]
91. The tag shall include date and time of leak detection, date and time of leak measurement, indicate the leak concentration in ppmv (gas leaks), indicate whether it is a major or a minor leak (liquid leaks) and whether the leaking component is an essential component, unsafe-to-monitor component or critical component. [District Rule 4455, 5.3.3]
92. All component leaks shall be immediately minimized to the extent possible, but not later than one hour after detection of leaks, in order to stop or reduce leakage to the atmosphere. As soon as practicable but not later than the time period specified in Table 3 of the Rule, components that have been identified as leaking and have had emissions minimized to the extent possible but do not meet the applicable leak standards of the Rule shall either be: 1) repaired or replaced, or 2) vented to a closed vent system, or 3) removed from operation. [District Rule 4455, 5.3.4 and 5.3.5]
93. For any leaking component that is an essential or critical component, and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized but still exceeds any of the applicable leak standards of this Rule, the operator shall repair or replace the component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455, 5.3.6]

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

94. For any component that has incurred five repair actions for major gas leaks or major liquid leaks (any combination) within a continuous 12-month period, the operator shall as soon as practicable but not later than 12 months after the date of detection either: 1) replace or retrofit the component with the control technology specified in Table 4 of Rule 4455, or 2) replace the component with Best Available Control Technology (BACT) equipment, as approved by the APCO, or 3) vent the component to an APCO approved closed vent system as defined in Section 3.0 of Rule 4455, or 4) remove the component from operation. Inaccessible components, unsafe-to-monitor components, essential components, or critical components shall satisfy the above-listed requirement as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes earlier. The APCO shall be notified in writing prior to the replacement or retrofitting of any component. [District Rule 4455, 5.3.7]
95. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1]
96. The operator shall comply with the process PRD release notification and recordkeeping requirements specified in Section 6.3 of Rule 4455. After a release from process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. [District Rule 4455, 5.4.3 and 5.4.4]
97. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other APCO-approved system that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4455, 5.5]
98. Prior to recommencing operation of the ethanol production facility, the operator must submit, and receive APCO approval of, a District Rule 4455 Operator Management Plan (OMP) for the equipment under N-7488-6, N-7488-7, N-7488-8, N-7488-9, N-7488-10, N-7488-11, N-7488-12, N-7488-13, N-7488-14, and N-7488-15. The OMP shall conform to the requirements of Section 6.1.3 of the Rule. [District Rule 4455, 6.1.1]
99. The operator shall keep a copy of the OMP at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing approved Operator Management Plan. [District Rule 4455, 6.1.2 and 6.1.4]
100. Operator shall maintain an inspection log containing the information set forth in Sections 6.2.1.1 through 6.2.1.10 of Rule 4455. [District Rule 4455, 6.2.1]
101. The operator shall notify the APCO, by telephone or other APCO-approved methods, of any process PRD release in excess of 500 pounds of VOC in a continuous 24-hour period, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. The operator shall submit a written report to the APCO within thirty calendar days of following notification of process PRD release subject to 6.3.1 of Rule 4455. The written report shall include all of the information set forth in Sections 6.3.2.1 through 6.3.2.5 of Rule 4455. [District Rule 4455, 6.3]
102. Measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument, calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. Operator shall keep a record of each instrument calibration in accordance with requirements as set forth Section 6.2.3 of Rule 4455. [District Rule 4455, 6.4]
103. 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 or Rule 8011. [District Rules 8011 and 8021]

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

104. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021]
105. 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 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021]
106. 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 or Rule 8011. [District Rules 8011 and 8051]
107. 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 or Rule 8011. [District Rules 8011 and 8061]
108. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071]
109. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rule 8011 and 8071]
110. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071]
111. Whenever any portion of the site becomes inactive, Permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]
112. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-1-1

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

GRAIN RECEIVING AND HANDLING OPERATION CONSISTING OF TWO ENCLOSED CORN BELT CONVEYORS, TWO TRANSFER ELEVATORS, ONE STORAGE BIN, ONE BIN-WEIGH SYSTEM, ONE SCALPER, ONE SURGE BIN, AND ASSOCIATED CONVEYING EQUIPMENT. THE STORAGE AND SURGE BINS ARE SERVED BY BIN VENT FILTERS. THE ELEVATORS, BIN-WEIGH SYSTEM, AND SCALPER ARE SERVED BY A DONALDSON TORIT MODEL 81MBT8 BAGHOUSE.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. Visible emissions from the exhaust of the baghouse serving this operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
4. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]
5. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
6. The material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
7. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201]
8. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
9. The baghouse shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 5 inches water column. [District Rule 2201]
10. The amount of material received shall not exceed 7,200 tons in any one day. [District Rule 2201]
11. The amount of material received shall not exceed 700,000 tons in any 12 consecutive month rolling period. [District Rule 2201]
12. PM10 emissions shall not exceed 0.000368 pounds per ton of material received. [District Rule 2201]
13. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]
14. The permittee shall maintain records of the amount of material received, in tons, on daily basis. [District Rule 2201]
15. The permittee shall maintain records of the amount of material received, in tons, in the latest 12 consecutive month period. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. Records of all baghouse and bin filter maintenance, including all change outs of filter media, shall be maintained. [District Rule 2201]
17. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-2-1

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #1 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-3 AND N-7488-4.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. Visible emissions from the exhaust of the baghouse serving this operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
4. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]
5. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
6. The material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
7. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201]
8. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
9. The baghouse shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 5 inches water column. [District Rule 2201]
10. PM10 emissions shall not exceed 0.0011 pounds per ton of material processed. [District Rule 2201]
11. The amount of material processed by this hammermill shall not exceed 2,400 tons in any one day. [District Rule 2201]
12. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 2,400 tons in any one day. [District Rule 2201]
13. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 700,000 tons in any 12 consecutive month period. [District Rule 2201]
14. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]
15. The permittee shall maintain records of the material processed by this hammermill. [District Rule 2201]
16. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 on daily basis. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

17. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 in the latest 12 consecutive month period. [District Rule 2201]
18. Records of all baghouse and bin filter maintenance, including all change outs of filter media, shall be maintained. [District Rule 2201]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-3-1

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #2 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-2 AND N-7488-4.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. Visible emissions from the exhaust of the baghouse serving this operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
4. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]
5. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
6. The material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
7. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201]
8. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
9. The baghouse shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 5 inches water column. [District Rule 2201]
10. PM10 emissions shall not exceed 0.0011 pounds per ton of material processed. [District Rule 2201]
11. The amount of material processed by this hammermill shall not exceed 2,400 tons in any one day. [District Rule 2201]
12. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 2,400 tons in any one day. [District Rule 2201]
13. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 700,000 tons in any 12 consecutive month period. [District Rule 2201]
14. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]
15. The permittee shall maintain records of the material processed by this hammermill. [District Rule 2201]
16. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 on daily basis. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

17. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 in the latest 12 consecutive month period. [District Rule 2201]
18. Records of all baghouse and bin filter maintenance, including all change outs of filter media, shall be maintained. [District Rule 2201]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-4-1

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #3 CONSISTING OF ONE JACOBSON MODEL MZH HAMMERMILL (OR EQUAL) AND ASSOCIATED CONVEYING EQUIPMENT SERVED BY A SHARED DONALDSON TORIT MODEL 162MBT10 BAGHOUSE. THE BAGHOUSE IS SHARED WITH UNITS N-7488-2 AND N-7488-3.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. Visible emissions from the exhaust of the baghouse serving this operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
4. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]
5. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
6. The material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
7. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201]
8. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
9. The baghouse shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 5 inches water column. [District Rule 2201]
10. PM10 emissions shall not exceed 0.0011 pounds per ton of material processed. [District Rule 2201]
11. The amount of material processed by this hammermill shall not exceed 2,400 tons in any one day. [District Rule 2201]
12. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 2,400 tons in any one day. [District Rule 2201]
13. The combined amount of material processed by the units under permits N-7488-2, N-7488-3 and N-7488-4 shall not exceed 700,000 tons in any 12 consecutive month period. [District Rule 2201]
14. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]
15. The permittee shall maintain records of the material processed by this hammermill. [District Rule 2201]
16. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 on daily basis. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

17. The permittee shall maintain records of the combined amount of material processed, in tons, by the units under permits N-7488-2, N-7488-3 and N-7488-4 in the latest 12 consecutive month period. [District Rule 2201]
18. Records of all baghouse and bin filter maintenance, including all change outs of filter media, shall be maintained. [District Rule 2201]
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-5-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

LIQUEFACTION PROCESS CONSISTING OF ONE 9,050 GALLON COOK WATER TANK, ONE 64,374 GALLON SLURRY MIXING TANK, ONE 7,700 GALLON COOK TUBE, ONE 3,000 GALLON COOK FLASH TANK, ONE 64,370 GALLON INITIAL LIQUEFACTION TANK, ONE 64,374 GALLON FINAL LIQUEFACTION TANK, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-7 AND -8) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623]
5. VOC content in the fluid handled by the final liquefaction tank shall be less than or equal to 10% by weight. The permittee shall hire a third party contractor to take and conduct a sample analysis, within 60 days of recommencing the operation, to demonstrate compliance with this condition. [District Rule 2201]
6. There shall be no VOC emissions from the pumps, valves, flanges or other piping components under this permit. [District Rule 2201]
7. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201]
8. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500°F before incinerating the vapors. [District Rule 2201]
9. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201]
10. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623]
11. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
12. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201]
14. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NO<sub>x</sub>/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM<sub>10</sub>/MMBtu; or 0.00285 lb-SO<sub>x</sub>/MMBtu. [District Rule 2201]
15. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months. [District Rule 2201]
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
17. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081]
18. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
19. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201]
20. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201]
21. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623]
22. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201]
23. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
24. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
25. The permittee shall maintain records of the date, name of the person and company name collecting the fluid sample, and a copy of the results of the fluid sample analysis. [District Rules 2201 and 4455, 40 CFR 60.486a(i)(3)]
26. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201]
27. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623]
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
29. The permittee shall comply with the applicable requirements of Section 6.1 and 7.3 of Rule 4455 (4/20/05). [District Rule 4455, 4.2]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-6-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

FERMENTATION PROCESS CONSISTING OF ONE 80,766 GALLON FIXED ROOF PRE-FERMENTOR TANK, THREE 1,152,647 GALLON FIXED-ROOF FERMENTATION TANKS, ONE 1,485,745 GALLON FIXED ROOF BEER WELL TANK, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 1,548 GALLON WATER RECIRCULATION TANK SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623]
5. Fugitive VOC emissions from component leaks shall not exceed 9.6 pounds per day. [District Rule 2201]
6. Fugitive VOC emissions from component leaks shall be calculated using the SOCFI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201]
7. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201]
8. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500°F before incinerating the vapors. [District Rule 2201]
9. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201]
10. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623]
11. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
12. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201]
14. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NO<sub>x</sub>/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM<sub>10</sub>/MMBtu; or 0.00285 lb-SO<sub>x</sub>/MMBtu. [District Rule 2201]
15. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months. [District Rule 2201]
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
17. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081]
18. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
19. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201]
20. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201]
21. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623]
22. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201]
23. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
24. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
25. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201]
26. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623]
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
28. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
29. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-7-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

DISTILLATION PROCESS CONSISTING OF ONE MASH STRIPPER COLUMN, ONE RECTIFIER COLUMN, ONE SIDE-STRIPPER, ONE TWO STAGE MOLECULAR SIEVE, RELATED PUMPS, VALVES, HEAT EXCHANGERS, AND PIPING, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-5 AND -8) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623]
5. Fugitive VOC emissions from component leaks shall not exceed 9.8 pounds per day. [District Rule 2201]
6. Fugitive VOC emissions from component leaks shall be calculated using the SOCFI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201]
7. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201]
8. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500°F before incinerating the vapors. [District Rule 2201]
9. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201]
10. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623]
11. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
12. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
13. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NO<sub>x</sub>/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM<sub>10</sub>/MMBtu; or 0.00285 lb-SO<sub>x</sub>/MMBtu. [District Rule 2201]
15. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months. [District Rule 2201]
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
17. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081]
18. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
19. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201]
20. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201]
21. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623]
22. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201]
23. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
24. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
25. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201]
26. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623]
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
28. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
29. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-8-4

**EXPIRATION DATE:** 11/30/2013

## **EQUIPMENT DESCRIPTION:**

DECANTATION PROCESS CONSISTING OF FIVE 130 HP ALFA LAVAL MODEL CHNX 944 DECANTER CENTRIFUGES (OR EQUAL), ONE WHOLE STILLAGE HOLDING TANK, ONE FIXED-ROOF THIN STILLAGE HOLDING TANK, ONE CENTRATE TANK, THE EVAPORATION SYSTEM WITH ONE THIN STILLAGE FEED TANK, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-5 AND -7) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.

## **PERMIT UNIT REQUIREMENTS**

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623]
5. Fugitive VOC emissions from component leaks shall not exceed 2.9 pounds per day. [District Rule 2201]
6. Fugitive VOC emissions from component leaks shall be calculated using the SOCFI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201]
7. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201]
8. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500°F before incinerating the vapors. [District Rule 2201]
9. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201]
10. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623]
11. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
12. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201]
14. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NO<sub>x</sub>/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM<sub>10</sub>/MMBtu; or 0.00285 lb-SO<sub>x</sub>/MMBtu. [District Rule 2201]
15. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months. [District Rule 2201]
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
17. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081]
18. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
19. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201]
20. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201]
21. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623]
22. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201]
23. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
24. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
25. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201]
26. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623]
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
28. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
29. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-9-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF (200 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM. THE TANK VAPOR RECOVERY SYSTEM IS VENTED TO THE BOILERS (PERMIT UNITS N-7488-16, -17, AND -18) OR THE STANDBY FLARE (PERMIT UNIT N-7488-19).

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623]
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
6. Fugitive VOC emissions from component leaks shall not exceed 8.7 pounds per day. These emissions are from the components associated with the storage tank, and the tank vapor recovery system including piping and pumping system shared by permits N-7488-9, N-7488-10, N-7488-11, and N-7488-12. [District Rule 2201]
7. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
8. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
9. Fugitive VOC emissions from component leaks shall be calculated using the SOCFI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201]
10. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
11. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
12. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)]
14. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)]
15. The owner or operator seeking permission for "Alternative means of emission limitation" shall submit to the administrator (in this case EPA) a written application in accordance with 40 CFR 60.114b. [40 CFR 60.114b]
16. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)]
17. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)]
18. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)]
19. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]
20. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)]
21. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
22. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-10-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF (200 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623]
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
6. Fugitive VOC emissions from component leaks shall not exceed 0.5 pounds per day. [District Rule 2201]
7. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
8. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
9. Fugitive VOC emissions from component leaks shall be calculated using the SOCFMI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201]
10. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
11. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
12. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: AEMETIS ADVANCED FUELS KEYES INC

Location: 4209 JESSUP ROAD, CERES, CA

N-7488-10-4: Nov 20 2012 11:31AM - KAHLOJ

13. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)]
14. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)]
15. The owner or operator seeking permission for "Alternative means of emission limitation" shall submit to the administrator (in this case EPA) a written application in accordance with 40 CFR 60.114b. [40 CFR 60.114b]
16. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)]
17. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)]
18. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)]
19. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]
20. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)]
21. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
22. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-11-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

63,000 GALLON FIXED-ROOF (190 PROOF) ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623]
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
6. Fugitive VOC emissions from component leaks shall not exceed 0.7 pounds per day. [District Rule 2201]
7. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
8. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
9. Fugitive VOC emissions from component leaks shall be calculated using the SOCFI Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201]
10. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
11. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
12. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)]
14. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)]
15. The owner or operator seeking permission for "Alternative means of emission limitation" shall submit to the administrator (in this case EPA) a written application in accordance with 40 CFR 60.114b. [40 CFR 60.114b]
16. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)]
17. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)]
18. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)]
19. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]
20. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)]
21. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
22. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-12-4

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

1,050,000 GALLON FIXED-ROOF DENATURED ETHANOL STORAGE TANK SERVED BY THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623]
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
6. Fugitive VOC emissions from component leaks shall not exceed 0.5 pounds per day. [District Rule 2201]
7. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
8. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
9. Fugitive VOC emissions from component leaks shall be calculated using the SOCMi Leak Rate/Screening Value Correlations in Table 2-9 of USEPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). [District Rule 2201]
10. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
11. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
12. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)]
14. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)]
15. The owner or operator seeking permission for "Alternative means of emission limitation" shall submit to the administrator (in this case EPA) a written application in accordance with 40 CFR 60.114b. [40 CFR 60.114b]
16. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)]
17. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)]
18. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)]
19. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]
20. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)]
21. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
22. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-13-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

30,000 GALLON GASOLINE STORAGE TANK WITH TWO UNLOADING RACKS (SHARED WITH PERMIT N-7488-14) SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM. THE STORAGE TANK IS VENTED TO THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623]
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
6. Vapor return hose(s) shall be attached whenever the unloading equipment operates. [District Rule 2201]
7. The number of gasoline hose disconnects performed at the gasoline truck unloading operation for both permit units N-7488-13 and N-7488-14 shall not exceed 18 disconnects per day. [District Rule 2201]
8. The number of gasoline hose disconnects performed at the gasoline truck unloading operation for both permit units N-7488-13 and N-7488-14 shall not exceed 904 disconnects in any 12 consecutive month rolling period. [District Rule 2201]
9. The organic liquid spillage rate shall not exceed 0.017 pounds per disconnection, equivalent to 10 mL per disconnection. [District Rule 2201]
10. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
11. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
12. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
13. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. The permittee shall maintain records of the number of disconnections made at the gasoline unloading operation for both permit units N-7488-13 and N-7488-14 on a daily basis. [District Rule 2201]
15. The permittee shall maintain records of the number of disconnections made at the gasoline unloading operation for both permit units N-7488-13 and N-7488-14 in the latest 12 consecutive month period. [District Rule 2201]
16. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623]
17. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)]
18. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)]
19. The owner or operator seeking permission for "Alternative means of emission limitation" shall submit to the administrator (in this case EPA) a written application in accordance with 40 CFR 60.114b. [40 CFR 60.114b]
20. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)]
21. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)]
22. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)]
23. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]
24. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)]
26. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
27. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-14-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

30,000 GALLON GASOLINE STORAGE TANK WITH TWO UNLOADING RACKS (SHARED WITH PERMIT N-7488-13) SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM. THE STORAGE TANK IS VENTED TO THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all the VOCs from the storage tank. The vapor recovery system shall be maintained in a leak-free condition. Collected vapors shall be directed to approved control devices with a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
3. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [40 CFR 60.112b(a)(3), District Rules 2201 and 4623]
4. Any tank gauging or sampling device on a tank vented to the tank vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623]
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
6. Vapor return hose(s) shall be attached whenever the unloading equipment operates. [District Rule 2201]
7. The number of gasoline hose disconnects performed at the gasoline truck unloading operation for both permit units N-7488-13 and N-7488-14 shall not exceed 18 disconnects per day. [District Rule 2201]
8. The number of gasoline hose disconnects performed at the gasoline truck unloading operation for both permit units N-7488-13 and N-7488-14 shall not exceed 904 disconnects in any 12 consecutive month rolling period. [District Rule 2201]
9. The organic liquid spillage rate shall not exceed 0.017 pounds per disconnection, equivalent to 10 mL per disconnection. [District Rule 2201]
10. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
11. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
12. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
13. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. The permittee shall maintain records of the number of disconnections made at the gasoline unloading operation for both permit units N-7488-13 and N-7488-14 on a daily basis. [District Rule 2201]
15. The permittee shall maintain records of the number of disconnections made at the gasoline unloading operation for both permit units N-7488-13 and N-7488-14 in the latest 12 consecutive month period. [District Rule 2201]
16. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [40 CFR 60.116b(a), District Rules 1070, 2201, 4455, and 4623]
17. The owner or operator shall submit an operating plan, within 30 days of recommencing the operation, for approval by the District, which includes: a) Documentation demonstrating that the control device will achieve the required 95% control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph; b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); c.) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)]
18. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f). [40 CFR 60.113b(d)]
19. The owner or operator seeking permission for "Alternative means of emission limitation" shall submit to the administrator (in this case EPA) a written application in accordance with 40 CFR 60.114b. [40 CFR 60.114b]
20. The owner or operator shall keep the following records for the closed vent system and control device: 1) A copy of the operating plan; and 2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)]
21. The owner or operator shall keep the following records for the closed vent system and the flare: 1) A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be submitted to the District as required by 40 CFR 60.8 of the General Provisions. The report shall be submitted within 6 months of the initial start-up date; 2) Records shall be kept of all periods of operation during which the flare pilot flame is absent; 3) semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the District. [40 CFR 60.115b(c)]
22. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)]
23. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]
24. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Operator shall determine the true vapor pressure of each volatile organic liquid, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)]
26. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
27. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-15-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

TWO ETHANOL LOADING RACKS SERVED BY A BALANCE-TYPE VAPOR RECOVERY SYSTEM

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201]
3. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
4. Vapor return hose(s) shall be attached whenever loading equipment operates. [District Rule 2201]
5. All trucks loaded shall be inspected and determined to be vapor-tight such that all vapors are displaced into vapor return hoses during loading. [District Rule 2201]
6. All vapors displaced from trucks during load-out shall be returned to the vapor recovery system covered under permit N-7488-9. [District Rule 2201]
7. All trucks shall be bottom loaded (or submerge loaded) using dry breaker couplers. [District Rule 2201]
8. The number of denatured ethanol hose disconnects shall not exceed 160 disconnects per day. [District Rule 2201]
9. The number of denatured ethanol hose disconnects shall not exceed 32,500 disconnects in any 12 consecutive month rolling period. [District Rule 2201]
10. The amount of denatured ethanol loaded into trucks shall not exceed 328,000 gallons in any one day. [District Rule 2201]
11. The amount of denatured ethanol loaded into trucks shall not exceed 75,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201]
12. The organic liquid spillage rate shall not exceed 0.017 pounds per disconnection, equivalent to 10 mL per disconnection. [District Rule 2201]
13. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201]
14. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201]
15. The permittee shall maintain records of the number of disconnection made on daily basis. [District Rule 2201]
16. The permittee shall maintain records of the number of disconnection made in the latest 12 consecutive month period. [District Rule 2201]
17. The permittee shall maintain records of the amount of denatured ethanol loaded, in gallons, on daily basis. [District Rule 2201]
18. The permittee shall maintain records of the amount of denatured ethanol loaded, in gallons, in the latest 12 consecutive month period. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

19. A leak is defined as the dripping of VOC containing liquid at a rate of more than 3 drops per minute; or detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane. [District Rule 4624]
20. The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter. The leak inspections shall be performed during product transfer using a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Method 21. The instrument shall be calibrated with methane in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4624]
21. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be re-inspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]
22. An operator may apply for a written approval from the District to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency would revert back to quarterly and the operator shall contact the District in writing within 14 days. [District Rule 4624]
23. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded shall not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624]
24. The operator shall keep records of leak inspections including the date, name of component and its location and measured ppmv value, name of the operator and the company conducting the leak inspection. [District Rule 4624]
25. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4624]
26. This operation shall comply with the requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, as specified on facility-wide permit N-7488-0. [40 CFR 60.480, 60.482]
27. This operation shall comply with the requirements of District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, as specified on facility-wide permit N-7488-0. [District Rule 4455]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-16-3

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. Only two of the three boilers under permit units N-7488-16, 17, and 18 shall be fired simultaneously. [District Rule 2201]
4. 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. [40 CFR 60.48(c)(g)]
5. The unit shall be primarily fired on PUC-regulated natural gas. [District Rule 2201]
6. The unit shall be used to incinerate vapors from the tank vapor recovery system covered under permit N-7488-9. [District Rule 2201]
7. NO<sub>x</sub> (as NO<sub>2</sub>) emissions shall not exceed 7 ppmvd @ 3% O<sub>2</sub>. [District Rules 4305, 4306 and 4320]
8. CO emissions shall not exceed 15.0 ppmvd @ 3%O<sub>2</sub>. [District Rules 2201, 4305, 4306 and 4320]
9. VOC emissions shall not exceed 0.004 lb/MMBtu. [District Rule 2201]
10. PM<sub>10</sub> emissions shall not exceed 0.0044 lb/MMBtu. [District Rule 2201]
11. SO<sub>x</sub> emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
12. Source testing to measure NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every 12 months from the latest source test. After demonstrating compliance on two consecutive annual source tests, 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 12 months. [District Rules 4305, 4306 and 4320]
13. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201]
14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rules 4305, 4306 and 4320]
17. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]
19. 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]
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
21. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320]
22. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]
23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15-consecutive-minute period. [District Rules 4305, 4306 and 4320]
24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320]
25. The permittee shall maintain records of: (1) the date and time of backup fuel NOx measurements, (2) the measured backup fuel NOx concentration (in ppmv or lb/MMBtu) corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320]
26. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]
27. The permittee shall maintain daily records of the type and quantity of fuel combusted by the boiler. [40 CFR 60.48(c)(g)]
28. 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]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7488-17-3

EXPIRATION DATE: 11/30/2013

## EQUIPMENT DESCRIPTION:

99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. Only two of the three boilers under permit units N-7488-16, 17, and 18 shall be fired simultaneously. [District Rule 2201]
4. 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. [40 CFR 60.48(c)(g)]
5. The unit shall be primarily fired on PUC-regulated natural gas. [District Rule 2201]
6. The unit shall be used to incinerate vapors from the tank vapor recovery system covered under permit N-7488-9. [District Rule 2201]
7. NO<sub>x</sub> (as NO<sub>2</sub>) emissions shall not exceed 7 ppmvd @ 3% O<sub>2</sub>. [District Rules 4305, 4306 and 4320]
8. CO emissions shall not exceed 15.0 ppmvd @ 3%O<sub>2</sub>. [District Rules 2201, 4305, 4306 and 4320]
9. VOC emissions shall not exceed 0.004 lb/MMBtu. [District Rule 2201]
10. PM<sub>10</sub> emissions shall not exceed 0.0076 lb/MMBtu. [District Rule 2201]
11. SO<sub>x</sub> emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
12. Source testing to measure NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every 12 months from the latest source test. After demonstrating compliance on two consecutive annual source tests, 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 12 months. [District Rules 4305, 4306 and 4320]
13. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201]
14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rules 4305, 4306 and 4320]
17. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]
19. 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]
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
21. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320]
22. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]
23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15-consecutive-minute period. [District Rules 4305, 4306 and 4320]
24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320]
25. The permittee shall maintain records of: (1) the date and time of backup fuel NOx measurements, (2) the measured backup fuel NOx concentration (in ppmv or lb/MMBtu) corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320]
26. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]
27. The permittee shall maintain daily records of the type and quantity of fuel combusted by the boiler. [40 CFR 60.48(c)(g)]
28. 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]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-18-2

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

99 MMBTU/HR VICTORY ENERGY VOYAGER BOILER WITH A TODD RMB ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM. THE BOILER PROVIDES PROCESS STEAM AND ALSO SERVES AS A CONTROL DEVICE TO INCINERATE ANY NON-CONDENSABLE VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT N-7488-9.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. Only two of the three boilers under permit units N-7488-16, 17, and 18 shall be fired simultaneously. [District Rule 2201]
4. 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. [40 CFR 60.48(c)(g)]
5. The unit shall be primarily fired on PUC-regulated natural gas. [District Rule 2201]
6. The unit shall be used to incinerate vapors from the tank vapor recovery system covered under permit N-7488-9. [District Rule 2201]
7. NO<sub>x</sub> (as NO<sub>2</sub>) emissions shall not exceed 7 ppmvd @ 3% O<sub>2</sub>. [District Rules 4305, 4306 and 4320]
8. CO emissions shall not exceed 15.0 ppmvd @ 3%O<sub>2</sub>. [District Rules 2201, 4305, 4306 and 4320]
9. VOC emissions shall not exceed 0.004 lb/MMBtu. [District Rule 2201]
10. PM<sub>10</sub> emissions shall not exceed 0.0044 lb/MMBtu. [District Rule 2201]
11. SO<sub>x</sub> emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
12. Source testing to measure NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every 12 months from the latest source test. After demonstrating compliance on two consecutive annual source tests, 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 12 months. [District Rules 4305, 4306 and 4320]
13. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201]
14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rules 4305, 4306 and 4320]
17. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]
19. 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]
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
21. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320]
22. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]
23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15-consecutive-minute period. [District Rules 4305, 4306 and 4320]
24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320]
25. The permittee shall maintain records of: (1) the date and time of backup fuel NOx measurements, (2) the measured backup fuel NOx concentration (in ppmv or lb/MMBtu) corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320]
26. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]
27. The permittee shall maintain daily records of the type and quantity of fuel combusted by the boiler. [40 CFR 60.48(c)(g)]
28. 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]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-19-1

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

280,000 SCF/DAY MRW AIR-ASSISTED STANDBY FLARE. THE STANDBY FLARE INCINERATES VAPORS FROM THE TANK VAPOR RECOVERY SYSTEM WHEN THE BOILERS (PERMIT UNITS N-7488-16, -17, AND -18) ARE NOT OPERATING.

## PERMIT UNIT REQUIREMENTS

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1. The standby flare shall be operated only when the boilers are non-operational. [District Rule 2201]
2. Only PUC-regulated natural gas shall be used as the pilot fuel. [District Rule 2201]
3. Visible emissions from the standby flare shall not exceed 1/4 Ringelmann or 5% opacity except for three minutes in any one hour. [District Rule 2201]
4. The standby flare shall incinerate collected vapors from the Tank Vapor Control (TVR) system operated at this facility. [District Rule 2201]
5. The standby flare shall be equipped with a total gas volume flow meter. [District Rule 2201]
6. This permit does not authorize the utilization of any engine or other device requiring a separate permit to provide air assist to the standby flare. [District Rule 2201]
7. The maximum quantity of gas combusted shall not exceed 280,000 scf/day . [District Rule 2201]
8. The maximum quantity of gas combusted shall not exceed 6,709,333 scf/yr. (Gas combusted = [(280,000 scf/day)(500 hr/yr)(day/24 hr)] + [(2,400 scf/day)(365 day/yr)]. [District Rule 2201]
9. Emissions from the standby flare shall not exceed any of the following (based upon total gas combusted): NO<sub>x</sub> (as NO<sub>2</sub>): 0.068 lb/MMBtu; SO<sub>x</sub> (as SO<sub>2</sub>): 0.00285 lb/MMBtu; PM<sub>10</sub>: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201]
10. The permittee shall maintain accurate records of the daily and annual quantity of gas combusted and the dates and times of operation. The records shall be retained for a period of at least five years and made readily available for District inspection upon request. [District Rule 2201]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-20-1

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

25,000 GPM COMPOSITE COOLING SOLUTIONS MODEL 4242-150-P6 SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
4. The drift rate shall not exceed 0.0015%. [District Rule 2201]
5. PM10 emissions shall not exceed 19.1 pounds per day. [District Rule 2201]
6. PM10 emissions shall not exceed 6,971 pounds in any 12 consecutive month rolling period. [District Rule 2201]
7. Compliance with the PM10 emission limit (lb/day) shall be demonstrated by using the following equation: Water Recirculation Rate (gal/day) x 8.34 lb/gal x Total Dissolved Solids Concentration in the blowdown water (ppm x 10E-06) x Design Drift Rate (%). [District Rule 2201]
8. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory within 60 days of recommencing the operation and quarterly thereafter. [District Rules 2201 and 1081]
9. The permittee shall keep records of daily PM10 emissions in pounds. [District Rule 2201]
10. The permittee shall keep records of PM10 emissions in pounds, in the latest 12 consecutive month period. [District Rule 2201]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-21-4

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

WET DISTILLERS GRAIN (WDG) STORAGE AND TRUCK LOAD-OUT OPERATION WITH MECHANICAL CONVEYORS. WDG IS STORED IN A PARTIALLY ENCLOSED BUILDING. THE COVERED BUILDING IS OPEN ON ONE SIDE FOR TRUCK LOADING. TRUCK LOADING IS ACCOMPLISHED WITH A FRONT-END LOADER.

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. The storage of wet distillers grain (WDG) on-site shall not exceed 48 hours. [District Rule 4102]
3. The amount of WDG processed shall not exceed 1,600 tons in any one day. [District Rule 2201]
4. The amount of WDG processed shall not exceed 550,000 tons in any 12 consecutive month rolling period. [District Rule 2201]
5. VOC emissions rate from the WDG storage and truck loadout operation shall not exceed 0.0088 lb-VOC/ton-WDG processed. [District Rule 2201]
6. The permittee shall maintain records of the amount of WDG processed through this storage and truck loadout operation, in tons, on daily basis. [District Rules 1070 and 2201]
7. The permittee shall maintain records of the amount of WDG processed through this storage and truck loadout operation, in tons, in the latest 12 consecutive month period. [District Rule]
8. All records shall be retained on site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 1070]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-22-1

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

400 BHP CUMMINS MODEL CFP11E-F10 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE WATER PUMP

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
5. Emissions from this IC engine shall not exceed any of the following limits: 3.68 g-NOx/bhp-hr, 0.746 g-CO/bhp-hr, or 0.16 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
6. Emissions from this IC engine shall not exceed 0.091 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
7. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
9. This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
10. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]
11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7488-23-2

**EXPIRATION DATE:** 11/30/2013

**EQUIPMENT DESCRIPTION:**

11,221 GALLON CAPACITY HYDRATED LIME RECEIVING AND STORAGE SILO VENTED TO A ZMI PORTEC MODEL DF-48 BIN VENT FILTER WITH AN INTEGRAL 750 GALLON LIME SLURRY MIXING TANK.

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
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. Visible emissions from the dust collector serving the hydrated lime receiving and storage operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
4. The dust collector shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
5. Replacement bags numbering at least 10% of the total number of bags in the dust collector shall be maintained on the premises. [District Rule 2201]
6. The dust collector cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District NSR Rule]
7. Material removed from the dust collector shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule]
8. Hydrated lime shall not be received or stored without the displaced air being vented through the dust collector. [District Rule 2201]
9. PM10 emissions shall not exceed 0.000305 pounds per ton of lime received. [District Rule 2201]
10. The amount of hydrated lime received and stored shall not exceed 32 tons per day. [District Rule 2201]
11. The permittee shall maintain records of all maintenance of the dust collector, including all change outs of filter media. [District Rule 2201]
12. The permittee shall maintain daily records of the quantity of hydrated lime received and stored. [District Rule 2201]
13. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201]

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

**Attachment E  
HAP Calculations**

Potential to Emit (HAP)

CAS #	Pollutant	Grain	Grain	Liquefaction	Fermentation	Distillation	Decantation	Wet Cake	Ethanol	Denatured	Gasoline	Denatured	280	Boilers <sup>1</sup>	Cooling	RTO	Diesel Flrs	Lime	Total	HAP	HAP
		Receiving	Grinding	Tank	Fugitive	Fugitive		Storage &	Storage	Ethanol	Storage	Storage	MSCF/Day		Tower		Pump	Receiving			
		1-1	2-1 to 4-1	5-2	6-2	7-2	8-2	21-1	9-2 to 16-2	12-2	13-2 & 14-2	15-2	19-2	18-2 to 18-3	29-1	5-1	22-1	23-0	lb/yr		lb/yr
71432	Benzene									4.88E-01	4.50E-02	6.91E-02		1.01E+01		1.18E-01	2.40E-01		10.99	Y	10.99
50000	Formaldehyde			3.74E+00	3.48E+00	6.84E+00	3.37E+00	5.39E+01						2.13E+01		2.50E-01	3.04E-01		93.20	Y	93.20
50328	PAH's													1.73E-01		1.47E-03	2.14E-02		0.20	Y	0.00
91203	Naphthalene													5.20E-01		4.42E-03	2.18E-02		0.55	Y	0.55
75070	Acetaldehyde			2.24E+01	2.09E+01	4.10E+01	2.58E+01	2.69E+01	7.24E-01	3.48E-02			1.05E-01	5.38E+00		6.33E-02	1.98E-01		143.70	Y	143.70
107028	Acrolein			9.34E+00	8.71E+00	1.71E+01	1.04E+01	4.04E+00						4.68E+00		3.97E-02	2.38E-02		54.30	Y	54.30
115071	Propylene													9.19E+02		1.08E+01	0.00E+00		930.03		0.00
108883	Toluene									4.58E-02	1.20E+00	1.38E-01		4.60E+01		5.39E-01	1.05E-01		47.99	Y	47.99
1210	Xylenes									4.58E-03	3.60E-01	1.38E-02		3.42E+01		4.00E-01	7.34E-02		35.02	Y	35.02
100414	Ethyl benzene									4.68E-04	7.50E-05	1.38E-03		1.20E+01		1.40E-01			12.11	Y	12.11
110543	Hexane									4.58E-01	7.50E-01	1.38E+00		7.98E+00		9.27E-02			10.66	Y	10.66
7440439	Cadmium	3.31E-05	2.77E-04																0.00	Y	0.00
7440508	Copper	3.33E-03	1.23E-02																0.02		0.00
7439921	Lead	2.10E-04	3.67E-04																0.00	Y	0.00
7439965	Manganese	1.13E-02	2.94E-02																0.04	Y	0.04
7440020	Nickel	1.64E-03	5.36E-03																0.01	Y	0.01
7440666	Zinc	1.23E-02	3.89E-02																0.05		0.00
67581	Methanol			2.04E+02	1.90E+02	2.74E+01	1.73E+01	3.37E+01	7.24E-01				1.05E-01						472.56	Y	472.56
75150	Carbon disulfide									1.83E-04	3.00E-04	5.53E-04							0.00	Y	0.00
98828	Cumene									9.15E-04	1.50E-03	2.77E-03							0.01	Y	0.01
106990	1,3-Butadiene																1.01E-02		0.01	Y	0.01
67663	Chloroform														1.28E+01				12.80	Y	12.80

Notes:

1. Flare is permitted to operate only if the boilers are not operating; HAP emissions from the flare are less than that of the boilers, and are not counted here.
2. Only two of the three boiler are permitted to operate. Therefore, HAP emissions are estimated from two boilers.
3. Lime is not a HAP.