



JUL 3 1 2018

Mr. Mike Kandris Pacific Ethanol Stockton, LLC 3028 Navy Dr Stockton, CA 95206

Re: Notice of Preliminary Decision - Title V Permit Renewal

Facility Number: N-7365 Project Number: N-1171174

Dear Mr. Kandris:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Pacific Ethanol Stockton, LLC at 3028 Navy Dr. Stockton, California.

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

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

ector of Permit Services

Enclosures

CC: Tung Le, CARB (w/enclosure) via email

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

> Samir Sheikh Executive Director/Air Pollution Control Officer

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

### Proposed Title V Permit Renewal Evaluation Pacific Ethanol Stockton, LLC N-7365

# **TABLE OF CONTENTS**

1.	PROPOSAL	2
II.	FACILITY LOCATION	2
111.	EQUIPMENT LISTING	3
IV.	GENERAL PERMIT TEMPLATE USAGE	
V.	SCOPE OF EPA AND PUBLIC REVIEW	
VI.	FEDERALLY ENFORCEABLE REQUIREMENTS	
VII.	REQUIREMENTS NOT FEDERALLY ENFORCEABLE	
VIII.	PERMIT REQUIREMENTS	6
IX.	PERMIT SHIELD	
Χ.	CALIFORNIA ENVIRONMENTAL QUALITY ACT	
XI.	PERMIT CONDITIONS	9
ATTA	ACHMENTS	9
A. B. C.	DRAFT RENEWED TITLE V OPERATING PERMIT PREVIOUS TITLE V OPERATING PERMIT DETAILED SUMMARY LIST OF FACILITY PERMITS	

### TITLE V PERMIT RENEWAL EVALUATION

#### **Ethanol Manufacturing Facility**

Engineer: Richard Edgehill

**Date:** July 27, 2018

Facility Number: N-7365

Facility Name: Pacific Ethanol Stockton, LLC

Mailing Address: 3028 Navy Drive

Stockton, CA 95206

Contact Name: Michael Kandris and Jordan Bottorff

**Phone:** (209) 851-4077 (JB, office); (510) 904-7314 (JB, cell)

Responsible Official: Michael Kandris

Title:

Project #: N1171174

Deemed Complete: March 28, 2017

#### I. PROPOSAL

Pacific Ethanol Stockton, LLC (PES) was issued a Title V permit on <u>December 12</u>, <u>2012</u>. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

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

#### II. FACILITY LOCATION

Pacific Ethanol Stockton LLC is located at 3028 Navy Drive, in San Joaquin County, CA.

#### III. EQUIPMENT LISTING

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

#### IV. GENERAL PERMIT TEMPLATE USAGE

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

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

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

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

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

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

The following permit conditions, including their underlying applicable requirements, originate form model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the requirements for permit unit N-7365-0-2.

# VI. FEDERALLY ENFORCEABLE REQUIREMENTS

#### A. Rules Updated

- District Rule 2020, <u>Exemptions</u>
   (amended December 20, 2007 ⇒ amended December 18, 2014)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended December 18, 2008 ⇒ amended February 18, 2016)

- 40 CFR 60 Subpart IIII, New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines
- 40 CFR Part 64, Compliance Assurance Monitoring

#### **B.** Rules Removed

There are no applicable rules that were removed since the Title V permit was issued.

#### C. Rules Added

There are no applicable rules that were added since the Title V permit was issued.

#### D. Rules Not Updated

- District Rule 1080, <u>Stack Monitoring</u> (amended December 17, 1992)
- District Rule 1081, <u>Source Sampling</u> (amended December 17, 1992)
- District Rule 1100, Equipment Breakdown (amended December 17,1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- Rule 2410, <u>Prevention of Significant Deterioration</u> (Adopted June 16, 2011)
- District Rule 4101, <u>Visible Emissions</u> (amended February 17, 2005)
- District Rule 4201, <u>Particulate Matter Concentration</u> (Amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (Amended December 17, 1992)

- District Rule 4306, <u>Boilers, Steam Generators, And Process Heaters Phase 3</u> (Amended October 16, 2008)
- District Rule 4320, <u>Advanced Emission Reduction Options for Boilers</u>, <u>Steam Generators</u>, and <u>Process Heaters Greater than 5.0 MMBtu/hr</u> (Adopted October 16, 2008)
- District Rule 4455, <u>Components At Petroleum Refineries</u>, <u>Gas Liquids</u>
   <u>Processing Facilities</u>, <u>And Chemical Plants</u> (Adopted April 20, 2005)
- District Rule 4623, <u>Storage Of Organic Liquids</u> (Amended May 19, 2005)
- District Rule 4702, <u>Internal Combustion Engines Phase 2</u> (adopted August 18, 2011)
- District Rule 4801, <u>Sulfur Compounds</u> (Amended December 17, 1992)
- District Rule 4601, Architectural Coatings (amended December 17, 2009)
- District Rule 8011, <u>Fugitive Dust General Requirements</u> (Amended August 19, 2004)
- District Rule 8021, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Construction, Demolition, Excavation, and Extraction Activities</u> (Amended August 19, 2004)
- District Rule 8031, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Handling and Storage of Bulk Materials</u> (Amended August 19, 2004)
- District Rule 8041, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Carryout and Trackout</u> (Amended August 19, 2004)
- District Rule 8051, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Open Area</u> (Amended August 19, 2004)
- District Rule 8061, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Paved and Unpaved Roads</u> (Amended August 19, 2004)
- District Rule 8071, <u>Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Unpaved Vehicle/Equipment Areas</u> (Amended September 16, 2004)
- 40 CFR 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units\*

- 40 CFR 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\*
- 40 CFR 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 January 5, 1981, and on or Before November 7, 2006
- 40 CFR 63 Subpart Q, National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)
- 40 CFR Part 61, Subpart M, <u>National Emission Standard for Asbestos</u> (Amended July 20, 2004)

#### VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

#### A. Rules Added/Updated

None

#### **B.** Rules Not Updated

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

#### VIII. PERMIT REQUIREMENTS

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

<sup>\*</sup>eCFR search indicated no updates after 2012

#### A. District Rule 2020 - Exemptions

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

# B. District Rule 2201 - New and Modified Stationary Source Review Rule (NSR)

District Rule 2201 has been amended since this facility's last Title V permit was renewed. However, the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit.

### C. District Rule 2410 - Prevention of Significant Deterioration (PSD)

District Rule 2410 has not been newly adopted since this Title V permit was issued. Therefore no further discussion is necessary.

#### D. District Rule 2520 - Federally Mandated Operating Permits

No changes to this Rule have occurred since issuance of the previous TV permit; however, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

#### Greenhouse Gas Discussion

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

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

The requirements of the subpart were addressed in previous Initial Title V Permit, Project N-7375, 1112157 (finalized December 12, 2012). No new requirements need to be added to the permits.

#### E. 40 CFR Part 64 - Compliance Assurance Monitoring(CAM)

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

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

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

CAM was addressed in previous Initial Title V Permit Project N-7375, 1112157 (finalized December 12, 2012). No new permit units have been added to facility N-7365 since December 12, 2012 which are subject to CAM.

#### IX. PERMIT SHIELD

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

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

1. Model General Permit Template SJV-UM-0-3

By submitting Model General Permit Template SJV-UM-0-3 qualification form, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shields as granted in Model General Permit Template is included as conditions 39 and 40 of the facility-wide requirements (N-7365-0-2).

#### X. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements.

Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, a Title V permit renewal, is subject to a ministerial action that is exempt from CEQA.

#### XI. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

#### **ATTACHMENTS**

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Summary List of Facility Permits

# ATTACHMENT A

Draft Renewed Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

FACILITY: N-7365-0-2 EXPIRATION DATE: 09/30/2017

# **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, 9.8.1 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

FACILITY-WIDE REQUIRENTS CONTINUE ON NEXT PAGE

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2 Jul 27 2018 3:13PM -- EDGEHILR

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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7395-0-2 - Jul 27 2018 3:13PM - EDGERHUR

- 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 Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- 30. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
- 31. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
- 32. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
- 33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE onditions are part of the Facility-wide Permit to Operate.

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2 · Jul 27 2018 3 13PM - EDGEHILR

- 34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] 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. 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
- 43. 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

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

Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2: Juli 27 2018 3:13PM -- EDGEHILR

Facility Name: PACIFIC ETHANOL STOCKTON LLC

- 44. 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
- 45. 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 and 40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit
- 46. 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 reinspected 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 & 5.2.2; 40 CFR 60.482-2(a), (b) and (c); 40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit
- 47. The operator shall inspect all components at least once every calendar quarter. 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, 5.25, 5.26 & 5.27; 40 CFR 60.482-2(a), (b) and (g); 40 CFR 60.482-7(a), (b), (g) and (h)] Federally Enforceable Through Title V Permit
- 48. 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; 40 CFR 60.482-7] Federally Enforceable Through Title V Permit
- 49. 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 the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of this rule 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 (5) 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
- 50. 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 and 40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit
- 51. 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
- 52. 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 reinspected using EPA Method 21; and is found to be in compliance with the requirements of this rule. [District Rule 4455, 5.3.1 & 5.3.2; 40 CFR 60.486(b)] Federally Enforceable Through Title V Permit
- 53. 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 conditions are part of the Facility-wide Permit to Operate. These terms and

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

N-7365-0-2 : Jul 27 2018 3:13PM -- EDGEHILR

- 54. All component leaks shall be immediately minimized to the extent possible, but not later than one (1) 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.] Federally Enforceable Through Title V Permit
- 55. 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
- 56. 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 after the date of detection either: 1) replace or retrofit the component with the control technology specified in Table 4 of the rule, 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 the rule, 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 (2) 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
- 57. 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
- 58. The operator shall comply with the process PRD release notification and record keeping requirements specified in Section 6.3 of the rule. 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
- 59. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and record keeping 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
- 60. 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] Federally Enforceable Through Title V Permit
- 61. Operator shall maintain an inspection log containing the information set forth in Sections 6.2.1.1 through 6.2.1.10 of the rule. [District Rule 4455, 6.2.1; 40 CFR 60.486(c)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2 Jul 27 2018 3 13PM - EDGEHILR

- 62. 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 (30) calendar days of following notification of process PRD release subject to 6.3.1 of the rule. The written report shall include all of the information set forth in Sections 6.3.2.1 through 6.3.2.5 of the rule. [District Rule 4455, 6.3] Federally Enforceable Through Title V Permit
- 63. 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 the rule. [District Rule 4455, 6.4; 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
- 64. Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 60.482-1 through 60.482-10 or 40 CFR 60.480(e) for all equipment within 180 days of initial startup. [40 CFR 60.482-1(a)] Federally Enforceable Through Title V Permit
- 65. Compliance with 40 CFR 60.482-1 to 60.482-10 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 60.485. [40 CFR 60.482-1(b)] Federally Enforceable Through Title V Permit
- 66. An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, and 60.482-10 as provided in 40 CFR 60.484. [40 CFR 60.482-1(c)] Federally Enforceable Through Title V Permit
- 67. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, or 60.482-10, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1(c)] Federally Enforceable Through Title V Permit
- 68. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
- 69. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(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 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit
- 70. 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 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit
- 71. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit
- 72. Any PLLS that is designated, as described in 40 CFR 60.486(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 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit
- 73. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)]

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2: Jul 27 2018 3:13PM - EDGEHILR

- 74. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(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 60.482-2(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 60.482-2(c) if a leak is detected. [District Rule 40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit
- 75. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)] Federally Enforceable Through Title V Permit
- 76. Unless exempt under 40 CFR 60.482-3, 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 60.482-3(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3(b)(1), (2), or (3). [40 CFR 60.482-3(a), (b), and (c)] Federally Enforceable Through Title V Permit
- 77. 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 60.482-3(d), (e), and (f)] Federally Enforceable Through Title V Permit
- 78. 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 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3(g)] Federally Enforceable Through Title V Permit
- 79. Any compressor that is designated, as described in 40 CFR 60.486(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 60.482-3(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3(i)(1) and (2). [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit
- 80. 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(a), (b), (c), (d), (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 60.482-3(a), (b), (c), (d), (e), and (h). [40 CFR 60.482-3(j)] Federally Enforceable Through Title V Permit
- 81. 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 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit
- 82. 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 60.482-9. 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 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit
- 83. 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 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2 Jul 27 2016 3 13PM - EDGEHILR

- 84. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, 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 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit
- 85. 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 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit
- 86. 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 60.482-1(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 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit
- 87. 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 60.482-6(b)] Federally Enforceable Through Title V Permit
- 88. 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 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit
- 89. 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 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit
- 90. 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 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 100 ppmv or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit
- 91. 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 60.482-7(c)] Federally Enforceable Through Title V Permit
- 92. 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 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit
- 93. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(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 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit
- 94. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(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 60.482-7(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 60.482-7(g)] Federally Entorceable Through Title V Permit FACILITY WHOSE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2 . Jul 27 2018 3.13PM ~ EDGEHILR

- 95. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(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 60.482-7(h)] Federally Enforceable Through Title V Permit
- 96. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, 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 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(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 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit
- 97. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, 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 60.482-9. 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 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit
- 98. For closed vent systems and control devices, vapor recovery systems 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 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit
- 99. 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 parts per million by volume, 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 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit
- 100. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)] Federally Enforceable Through Title V Permit
- 101. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(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 60.482-10(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 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit
- 102. 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 60.482-10(h)] Federally Enforceable Through Title V Permit
- 103. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2: Jul 27 2018 3:13PM - EDGEHILR

- 104. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(1)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit
- 105. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(1)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit
- 106. 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 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(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 60.482-10(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 60.482-10(l)] Federally Enforceable Through Title V Permit
- 107. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit
- 108. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.483-1 and 60.483-2] Federally Enforceable Through Title V Permit
- 109. 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 VV. [40 CFR 60.484(a)] Federally Enforceable Through Title V Permit
- 110. 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 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit
- 111. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppmv of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 100 ppmv methane or n-hexane for valves and connectors and 500 ppmv methane or n-hexane for pumps and compressor seals. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
- 112. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(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 60.485(c)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-2: Jul 27 2018 3:13PM - EDGEHILR

- 113. 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 E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) 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 60.485(d)] Federally Enforceable Through Title V Permit
- 114. 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 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) 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 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit
- 115. Samples used in conjunction with 40 CFR 60.485(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 60.485(f)] Federally Enforceable Through Title V Permit
- 116. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)] Federally Enforceable Through Title V Permit
- 117. An owner or operator of more than one affected facility subject to the provisions Subpart VV may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit
- 118. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, 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 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit
- 119. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, 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; 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) "Above 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals; 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 shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC

ocation: 3028 NAVY DRIVE, STOCKTON, CA 95206

- 120. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 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 60.482-10(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 60.482-2, 60.482-3, 60.482-4, and 60.482-5 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 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit
- 121. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 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 GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with \( \begin{aligned} \ 60.482-4; 4\) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit
- 122. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; 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 60.486(f)] Federally Enforceable Through Title V Permit
- 123. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit
- 124. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit
- 125. 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 60.480(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 60.486(i)] Federally Enforceable Through Title V Permit
- 126. 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 60.486(j)] Federally Enforceable Through Title V Permit
- 127. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart VV. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

Location: 3028 NAVY DR N-7365-0-2: Jul 27 2018 3:13PM -- EDGEHILR

- 128. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 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 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) 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 the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit
- 129. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit
- 130. 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 VV 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 60.487(e)] Federally Enforceable Through Title V Permit
- 131. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the 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 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit
- 132. On December 31, 2012, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7305-0-2: Jul 27 2018 3:13PM - EDGEHIRR

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7365-1-4

EXPIRATION DAT

#### **EQUIPMENT DESCRIPTION:**

TRUCK AND RAILCAR GRAIN RECEIVING AND STORAGE OPERATION INCLUDING A RECEIVING SHED, RAILCAR AND TRUCK RECEIVING HOPPERS, A RECEIVING DRAG CONVEYOR, A RECEIVING LEG (ÉLEVATOR), ALL SERVED BY A 25,000 CFM MAC EQUIPMENT MODEL 120MCF255 STYLE III BAGHOUSE; AND TWO (2) 500,000 BUSHEL CAPACITY STORAGE SILOS, TWO 5,000 BUSHEL CAPACITY INTERSTICE BINS AND ENCLOSED MECHANICAL CONVEYORS ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-2 AND '-3)

## PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize 1. emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Visible emissions from the exhaust of the baghouse serving the grain receiving pit 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
- Visible emissions from the exhaust of baghouse serving the storage silos, day bins and associated conveying equipment 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
- Each baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- Each baghouse 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 each baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Replacement bags numbering at least 10% of the total number of bags in each baghouse shall be maintained on the 7. premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- Each 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
- Each 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] Federally Enforceable Through Title V Permit
- 10. The exhaust stack of the baghouse serving the grain receiving pit shall have the following parameters: stack height from ground level - 75 feet; stack diameter - 35 inches; and gas exit flowrate - 25,000 dscfm. [District Rule 4102]
- 11. The exhaust stack of the baghouse serving the grain handling and transfer operations shall have the following parameters: stack height from ground level - 110 feet; stack diameter - 10 inches; and gas exit flowrate - 3.500 dscfm. [District Rule 4102]

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-1-4. Jul 27 2018 3:13PM - EDGEHILR

- 12. The grain receiving baghouse shall not operate for more than 3,500 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The maximum amount of grain received and transferred to storage shall not exceed either of the following limits: 13,330 tons/day or 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. PM10 emissions from the grain receiving baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 15. PM10 emissions from the grain handling/transfer baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 16. Visible emissions from the baghouse serving the grain receiving operation shall be evaluated using EPA Method 22 for a period of at least 6 minutes at least once during each day that the permit unit is operated. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 17. Visible emissions from the baghouse serving the grain receiving pit shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 18. The baghouse serving the grain receiving pit 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 19. The baghouse serving the grain receiving pit 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. Differential operating pressure shall be monitored and recorded on each day that the baghouse serving the grain receiving pit operates. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. During each day of operation, the permittee shall record the pressure drop of the baghouse serving the grain receiving pit, and compare the readings with the acceptable range. Upon detecting any excursion from the acceptable range pressure readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 22. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain daily and annual records of the amount of grain received and transferred to storage, in tons, and annual records of the amount of time the grain receiving baghouse operates, in hours. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Differential operating pressure shall be monitored and recorded on each day that each baghouse operates. [District Rule2201] Federally Enforceable Through Title V Permit
- 25. Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 10 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-1-4 : Jul 27 2018 3-13PM - EDGEHILR

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7365-2-3

EXPIRATION DAITE: 09/301/2017

#### **EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #1 CONSISTING OF FULLY ENCLOSED MECHANICAL CONVEYORS, ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-1 AND '-3); AND ONE HAMMERMILL SERVED BY A 7,200 CFM MAC EQUIPMENT MODEL 96LVS81 STYLE II BAGHOUSE (BAGHOUSE EXHAUST SHARED WITH BAGHOUSE EXHAUST UNDER PERMIT N-7365-3)

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Visible emissions from the baghouse(s) serving the hammermill and associated conveying equipment 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. Each baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Each baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Material removed from each 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 each baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Each 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. Each 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] Federally Enforceable Through Title V Permit
- 9. The exhaust stack of the baghouse serving the grain handling and transfer operations shall have the following parameters: stack height from ground level 110 feet; stack diameter 10 inches; and gas exit flowrate 3,500 dscfm. [District Rule 4102]
- 10. The combined exhaust stack of the baghouses serving each of the hammermills operating under permits N-7365-2 and N-7365-3 shall have the following parameters: stack height from ground level 110 feet; stack diameter 21 inches; and gas exit flowrate 14,400 dscfm. [District Rule 4102]
- 11. The maximum amount of grain processed through the hammermill shall not exceed either of the following limits: 2,000 tons/day or 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. PM10 emissions from the grain handling/transfer baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] 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: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7395-2-3 Jul 27 2018 3:13PM - EDGEHILR

- 13. PM10 emissions from the grain grinding baghouse shall not exceed 0.004 gr/dscf. [District Rule 2201 and 4201] Federally Enforceable Through Title V Permit
- 14. The combined maximum amount of grain processed through the hammermills operating under permits N-7365-2 and N-7365-3 shall not exceed 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Visible emissions from the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 shall be evaluated using EPA Method 22 for a period of at least 6 minutes at least once during each day that the permit unit is operated. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 16. Visible emissions from the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 17. The baghouse serving the grain receiving pit 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 18. The baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 19. Differential operating pressure shall be monitored and recorded on each day that the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 operates. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. During each day of operation, the permittee shall record the pressure drop of the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3, and compare the readings with the acceptable range. Upon detecting any excursion from the acceptable range pressure readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain daily and annual records of the amount of grain processed through the hammermill, in tons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Differential operating pressure shall be monitored and recorded on each day that each baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-2-3 Jul 27 2016 3 13PM - EDGEHILR

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7365-3-3

EXPIRATION DAT

#### **EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #2 CONSISTING OF FULLY ENCLOSED MECHANICAL CONVEYORS, ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-1 AND '-2); AND ONE HAMMERMILL SERVED BY A 7,200 CFM MAC EQUIPMENT MODEL 96LVS81 STYLE II BAGHOUSE (BAGHOUSE EXHAUST SHARED WITH BAGHOUSE EXHAUST UNDER PERMIT N-7365-2)

## PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Visible emissions from the baghouse(s) serving the hammermill and associated conveying equipment 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. Each baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- Each baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Material removed from each baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Replacement bags numbering at least 10% of the total number of bags in each baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- Each 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
- Each 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] Federally Enforceable Through Title V Permit
- The exhaust stack of the baghouse serving the grain handling and transfer operations shall have the following parameters: stack height from ground level - 110 feet; stack diameter - 10 inches; and gas exit flowrate - 3,500 dscfm. [District Rule 4102]
- 10. The combined exhaust stack of the baghouses serving each of the hammermills operating under permits N-7365-2 and N-7365-3 shall have the following parameters: stack height from ground level - 110 feet; stack diameter - 21 inches; and gas exit flowrate - 14,400 dscfm. [District Rule 4102]
- 11. The maximum amount of grain processed through the hammermill shall not exceed either of the following limits: 2,000 tons/day or 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. PM10 emissions from the grain handling/transfer baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] 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: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-3-3: Jul 27 2018 3:14PM - EDGEHILR

- 13. PM10 emissions from the grain grinding baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 14. The combined maximum amount of grain processed through the hammermills operating under permits N-7365-2 and N-7365-3 shall not exceed 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Visible emissions from the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 shall be evaluated using EPA Method 22 for a period of at least 6 minutes at least once during each day that the permit unit is operated. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 16. Visible emissions from the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 17. The baghouse serving the grain receiving pit 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 18. The baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 5 inches water column. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 19. Differential operating pressure shall be monitored and recorded on each day that the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 operates. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. During each day of operation, the permittee shall record the pressure drop of the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3, and compare the readings with the acceptable range. Upon detecting any excursion from the acceptable range pressure readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain daily and annual records of the amount of grain processed through the hammermill, in tons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Differential operating pressure shall be monitored and recorded on each day that each baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-3-3 Jul 27 2018 3:14PM -- EDGEHILR

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7365-4-8

EXPIRATION DAILE 09/30/201

#### **EQUIPMENT DESCRIPTION:**

ONE 18,500 GALLON SLURRY TANK AND ONE 78,050 GALLON SLURRY MIX TANK SERVED BY ROTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-5, '-6, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-5, '-6, '-7, '-8, '-9, -10 AND '-11)

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. All vapors from the slurry tank shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Controlled VOC emissions rate from the slurry tank served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The VOC content of the vapor in the slurry tank and slurry mix tank shall not exceed 10% by weight. [District Rules 2201 and 4455]
- 11. Operator shall conduct initial sampling from the slurry mix tank to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. [District Rule 2201]
- 12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Ryle 2201]

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC 2028 NAVY DRIVE,STOCKTON, CA 95206

N-7365-4-8 : Jul 27 2018 3:14PM -- EDGEHILR

- 13. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted within 120 days after initial start-up and at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 22. During source testing, permittee shall maintain record of ethanol production rate measured in gal-ethanol/hour. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 23. 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
- 24. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 25. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-4-8 - Jul 27 2018 314PM - EDGEHILR

- 28. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-48-Jul 27 2018 3:14PM -- EDGEHILR

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-7365-5-7

EXPIRATION DAITE: 09/30/201

#### **EQUIPMENT DESCRIPTION:**

29,653 GALLON YEAST TANK SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER\SHARED WITH PERMITS N-7365-4, '-6, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-6, '-7, '-8, '-9, -10 AND '-11)

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. All vapors from the slurry tank shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the slurry tank served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions from equipment leaks associated with this tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [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: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7385-5-7: Jul 27 2018 3:14PM - EDGEHILR

- 13. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted within 60 days after recommencing the operation and at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted within 60 days after recommencing the operation and at least once every 12 months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 22. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. 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
- 24. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 25. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201and and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-5-7 Jul 27 2018 3:14PM - EDGEHILR

- 28. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 35. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 36. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 37. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 38. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 39. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 40. 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 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 41. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7385-5-7: Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT:** N-7365-6-6

EXPIRATION DAT

#### **EQUIPMENT DESCRIPTION:**

ONE 177,748 GALLON LIQUEFACTION TANK SERVED BY A KOTCH GLICH VENT GAS SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-7, '-8, '-9, -10 AND '-11)

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- All vapors from the liquefaction tank shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the slurry tank served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions from equipment leaks associated with the liquefaction tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [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: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-6-6 : Jul 27 2018 3:14PM - EDGEHILR

- 13. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 22. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. 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
- 24. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 25. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7305-6-6- Jul 27 2018 3:14PM - EDGEHILR

- 28. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7 [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 35. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 36. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 37. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 38. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 39. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 40. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 41. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and gondlibhs and ba √of the Facility-wide Permit to Operate.

Facility Name: PACIFIC ETHANOL STOCKTON LLC

Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-6-6; Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT:** N-7365-7-7

EXPIRATION DA

### **EQUIPMENT DESCRIPTION:**

FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS. A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-8) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER. AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-8). THE EXHAUST FROM THE PROCESS TANKS IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

## PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- All vapors from the fermentation tanks shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from each fermentation tank served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the entire fermentation process served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

Location: N-7365-7-7 : Jul 27 2018 3:14PM -- EDGEHILR

- 11. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 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
- 12. Fugitive VOC emissions from equipment leaks associated with the fermentation process shall not exceed 3.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. VOC content in the fluid handled through the chiller system (shared with permit N-7365-8) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO2 scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)] Federally Enforceable Through Title V Permit
- 15. The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)] Federally Enforceable Through Title V Permit
- 16. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455] Federally Enforceable Through Title V Permit
- 17. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455] Federally Enforceable Through Title V Permit
- 18. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alterative test methods approved by the District prior to their use. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 19. Tanks shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 23. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206
N-7365-7-7 - Jul 27 2010 3:14PM - EDGEHILR

- 26. 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
- 27. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 28. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 30. The CO2 scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The water flow rate through the CO2 scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall monitor and record the water flow rate through the CO2 scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. If the water flow rate through the CO2 scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO2 scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO2 scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable, [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 39. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 40. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

PERMITURIT REQUIREMENTS CONTINUE ON NEXT PAGE onditions are part of the Facility-wide Permit to Operate. These terms and

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

N-7365-7-7 : Jul 27 2018 3:14PM - EDGEHILR

- 41. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 42. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 43. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 44. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 45. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 46. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 47. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 48. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-7-7-Jul 27 2018 314PM - EOGEHILR

**PERMIT UNIT:** N-7365-8-8

EXPIRATION DAILE 09/30/201

### **EQUIPMENT DESCRIPTION:**

ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-7) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-7). THE EXHAUST FROM THE PROCESS TANK IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. All vapors from the beerwell process tank shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the beerwell process tank served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions from equipment leaks associated with the beerwell process tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Kermit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-8-8: Jul 27 2018 3:14PM - EDGEHILR

- 12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. VOC content in the fluid handled through the chiller system (shared with permit N-7365-7) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO2 scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)] Federally Enforceable Through Title V Permit
- 14. The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)] Federally Enforceable Through Title V Permit
- 15. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455] Federally Enforceable Through Title V Permit
- 16. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455] Federally Enforceable Through Title V Permit
- 17. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alterative test methods approved by the District prior to their use. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 18. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 22. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet] RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. 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
- 26. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit PERMITUNI REQUIREMENTS CONTINUE ON NEXT PAGE

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-8-6 Jul 27 2018 3:14PM - EDGEHILR

- 27. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 29. The CO2 scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The water flow rate through the CO2 scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The permittee shall monitor and record the water flow rate through the CO2 scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. If the water flow rate through the CO2 scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO2 scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO2 scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64]
- 39. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 40. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 41. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

PERMITURIT REDUIREMENTS CONTINUE ON NEXT PAGE onditions are part of the Facility-wide Permit to Operate. These terms and

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

Location: 3028 NAVY DR N-7365-8-8 : Jul 27 2018 3:14PM - EDGEHILR

- 42. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 43. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 44. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 45. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 46. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 47. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-8-8 Jul 27 2018 3 14PM - EDGEHILR

**PERMIT UNIT:** N-7365-9-5

EXPIRATION DATE: 09/30/201

### **EQUIPMENT DESCRIPTION:**

DISTILLATION PROCESS CONSISTING OF ONE DE-GAS VESSEL, ONE BEER STRIPPER, ONE JOBE STRIPPER, ONE RECTIFIER, TWO MOLECULAR SIEVES AND ONE 200 PROOF ETHANOL CONDENSER, ALL SERVED BY KOCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-10 AND '-11)

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. All vapors from the distillation process shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Controlled VOC emissions rate from the distillation process served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOX/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOX/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Fugitive VOC emissions from equipment leaks associated with the distillation process shall not exceed 3.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Vitle V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7965-9-5 Jul 27 2018 3:14PM - EDGEHILR

- 12. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 13. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 18. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. 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
- 20. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 22. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 23. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64]
- 25. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the compliance assurante monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Fitle V Permit

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

- 29. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 31. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 32. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 33. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 34. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 35. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 36. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-9-5: Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT:** N-7365-10-6

#### **EQUIPMENT DESCRIPTION:**

ONE 190,400 GALLON PROCESS CONDENSATE TANK, COLLECTING WATER FROM THE COLAND VENT GAS SCRUBBERS, SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4. '-5, '-6, '-9 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-11)

## PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- All vapors from the process condensate tank shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the distillation process served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions from equipment leaks associated with this process condensate tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-10-6: Jul 27 2018 3:14PM - EDGEHILR

- 12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 14. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. 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 4623] Federally Enforceable Through Title V Permit
- 16. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) - RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 22. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. 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
- 24. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 25. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMITURIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and itions are part of the Facility-wide Permit to Operate.

Facility Name: PACIFIC ETHANOL STOCKTON LLC

Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7385-10-6: Jul 27 2018 3:14PM - EDGEHILR

- 27. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40] CFR Part 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64]
- 29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 35. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 36. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 37. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 38. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 39. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 40. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

N-7365-10-6 ; Jul 27 2018 3:14PM – EDGEHILR

- 41. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-10-6: Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT:** N-7365-11-10

EXPIRATION DAITE 09/30/2017

### **EQUIPMENT DESCRIPTION:**

WET CAKE PROCESS CONSISTING OF ONE 194,400 GALLON WHOLE STILLAGE TANK, ONE CENTRIFUGE SYSTEM WITH FIVE CENTRIFUGES, ONE 127,000 GALLON THIN STILLAGE TANK, THREE EVAPORATORS, ONE 129,600 GALLON SYRUP TANK, CORN OIL EXTRACTION SYSTEM CONSISTING OF ONE 36,000 GALLON HEAT SOAK TANK, THREE CENTRIFUGES, ONE 800 GALLON BUFFER TANK, ONE 1,285 GALLON FINAL PRODUCT TANK, THREE 10,500 GALLON CORN OIL LOADOUT STORAGE TANKS ALL SERVED BY AN KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-10) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-10) AND A TRUCK LOADOUT SYSTEM

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Wet cake conveyors between each tank or each emissions unit at the wet cake process unit shall be fully enclosed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. All vapors from the wet cake process shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the distillation process served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [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: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-11-10: Jul 27 2018 3:14PM - EDGEHILR

- 11. Loading losses from the distiller's syrup loadout operation shall not exceed 0.526 lb-VOC/1,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Loading losses from the distiller's corn oil loadout operation shall not exceed 0.000175 lb-VOC/1,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The maximum throughput of distiller's syrup loaded shall not exceed any of the following: 67,371 gallons per day or 24,590,415 gallons per year. [District Rule 2201]
- 14. The maximum throughput of corn oil loaded shall not exceed any of the following: 26,000 gallons per day or 5,000,000 gallons per year. [District Rule 2201]
- 15. Fugitive VOC emissions from equipment leaks associated with the wet cake process shall not exceed 2.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Fugitive VOC emissions from equipment leaks associated with the corn oil operation shall not exceed 0.03 lb/day. [District Rule 2201]
- 17. Fugitive VOC emissions from equipment leaks associated with the distiller's syrup operation shall not exceed 2.9 lb/day. [District Rule 2201]
- 18. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Fugitive VOC emissions from equipment leaks associated with the corn oil operation shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-9, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Leak Rate/Screening Value Correlations Emission Factors. [District Rule 2201]
- 20. Fugitive VOC emissions from equipment leaks associated with the distiller's syrup operation shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-9, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Leak Rate/Screening Value Correlations Emission Factors. [District Rule 2201]
- 21. The permittee shall maintain daily and annual records, in gallons, of the quantity of distiller's syrup and corn oil loaded at this facility. [District Rule 2201]
- 22. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain accurate component count and shall update such records when new components are approved and installed. [District Rule 2201]
- 24. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7395-11-10 - Jul 27 2019 3-14PM - EDGEHILR

- 28. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 29. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 31. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 39. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 41. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 42. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-11-10: Jul 27 2018 3 14PM -- EDGEHILR

- 43. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 44. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 45. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 46. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 47. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 48. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 49. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-11-10: Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT: N-7365-12-4** 

#### **EQUIPMENT DESCRIPTION:**

WET CAKE STORAGE AND TRUCK LOADOUT OPERATION WITH MECHANICAL CONVEYOR'S STRUCTURE WITH EXHAUST VENTILATION SYSTEM (REVISED 4/20/09)

# PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The wet cake storage and truck loadout area shall be equipped with a permanent structure and ventilation system that is capable of capturing a minimum of 70% of the VOC emissions generated by this operation. [District Rule 4102]
- The exhaust stack of the structure covering the wet cake storage and truck loadout area shall have the following parameters: stack height from ground level - 48 feet feet; stack diameter - 24 inches; and gas exit flowrate - 12,368 acfm. [District Rule 4102]
- The maximum amount of wet cake processed shall not exceed either of the following limits: 1,600 ton-wet cake/day or 508,080 ton-wet cake/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emissions rate from the wet cake storage and truck loadout operation shall not exceed 0.0087 lb-VOC/ton-wet cake processed. [District Rule 2201]
- 6. The permittee shall maintain daily and annual records, in tons, of the quantity of wet cake processed through this storage and truck loadout operation. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-12-4 Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT:** N-7365-13-4

EXPIRATION DATE: 09/30/2017

### **EQUIPMENT DESCRIPTION:**

190,357 GALLON INTERNAL FLOATING ROOF 190-PROOF ETHANOL STORAGE TANK WITH A VILTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of 190-proof ethanol processed through this storage tank shall not exceed either of the following limits: 206,000 gallons/day or 25,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. VOC emissions from this 190-proof ethanol storage tank shall not exceed 2.4 lb/day or 384 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emissions from equipment leaks associated with this 190-proof ethanol storage tank shall not exceed 0.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The permittee shall maintain daily and annual records, in gallons, of the quantity of 190-proof ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- 8. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 9. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 10. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 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.

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-13-4: Jul 27 2018 3.14PM - EDGEHILR

- 12. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 23. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 24. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 25. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit
- 26. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

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

- 27. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable, [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 30. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months, [District Rule 4623] Federally Enforceable Through Title V Permit
- 34. 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
- 35. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 36. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 37. 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
- 38. 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-13-4: Jul 27 2018 3:14PM - EDGEHILR

- 39. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 40. Operator shall determine the true vapor pressure of each VOL, 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
- 41. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 43. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 44. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 45. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7385-13-4 - Jul 27 2018 3-14PM - EDGEHILR

- 49. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 50. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-13-4: Jul 27 2018 3:14PM - EOGEHILR

**PERMIT UNIT:** N-7365-14-4

### **EQUIPMENT DESCRIPTION:**

190,357 GALLON INTERNAL FLOATING ROOF 200-PROOF ETHANOL STORAGE TANK #1 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of 200-proof ethanol processed through this storage tank shall not exceed either of the following limits: 342,000 gallons/day or 70,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined maximum amount of 200-proof ethanol processed through the storage tanks operating under permits N-7365-14 and N-7365-15 shall not exceed 70,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emissions from the 200-proof ethanol storage tank shall not exceed 3.7 lb/day or 479 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions from equipment leaks associated with this 200-proof ethanol storage tank shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- The permittee shall maintain daily and annual records, in gallons, of the quantity of 200-proof ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 10. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 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.

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-14-4 : Jul 27 2018 3:14PM -- EDGEHILR

Location:

- 12. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 25. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 26. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title Weemit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-14-4: Jul 27 2019 3:14PM - EDGEHILR

- 27. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 30. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 32. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 34. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 35. 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
- 36. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 37. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 38. 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7385-14-4 : Jul 27 2018 3:14PM - EDGEHILR

- 39. 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
- 40. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 41. Operator shall determine the true vapor pressure of each VOL, 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
- 42. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number, 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 45. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

LOCATION: 3020 NAV L DN: N-7365-14-4: Jul 27 2018 3:14PM – EDGEHILR

- 49. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 50. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 51. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE,STOCKTON, CA 95206 N-7365-14-4 Jul 27 2018 3.14PM - EDGEHILR

**PERMIT UNIT:** N-7365-15-4

**EQUIPMENT DESCRIPTION:** 

190,357 GALLON INTERNAL FLOATING ROOF 200-PROOF ETHANOL STORAGE TANK #2 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

## PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- The maximum amount of 200-proof ethanol processed through this storage tank shall not exceed either of the following limits: 342,000 gallons/day or 70,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined maximum amount of 200-proof ethanol processed through the storage tanks operating under permits N-7365-14 and N-7365-15 shall not exceed 70,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emissions from the 200-proof ethanol storage tank shall not exceed 3.7 lb/day or 479 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions from equipment leaks associated with this 200-proof ethanol storage tank shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- The permittee shall maintain daily and annual records, in gallons, of the quantity of 200-proof ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 10. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC

ation: 3028 NAVY DRIVE, STOCKTON, CA 95206 5-15-4: Jul 27 2018 3:14PM – EDGEHILR Location:

- 12. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 25. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 26. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title Weemit

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

- 27. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 30. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 32. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 34. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 35. 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
- 36. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 37. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 38. 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

Location: 3028 NAVY DRI'N-7365-15-4: Jul 27 2018: 3:14PM - EDGEHILR

- 39. 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
- 40. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 41. Operator shall determine the true vapor pressure of each VOL, 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
- 42. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 45. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-15-4: Jul 27 2018 3:14PM - EDGEHILR

- 49. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 50. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 51. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions and ha the Facility-wide Permit to Operate.

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-15-4: Jul 27 2018 3:14PM -- EDGEHILR

**PERMIT UNIT:** N-7365-16-4

#### **EQUIPMENT DESCRIPTION:**

582,750 GALLON INTERNAL FLOATING ROOF DENATURED ETHANOL STORAGE TANK #1 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- The maximum amount of denatured ethanol processed through this storage tank shall not exceed either of the following limits: 1,000,000 gallons/day or 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emissions from the denatured ethanol storage tank shall not exceed 5.2 lb/day or 992 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions from equipment leaks associated with this denatured ethanol storage tank shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined maximum amount of denatured ethanol processed through the storage tanks operating under permits N-7365-16 and N-7365-17 shall not exceed 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The permittee shall maintain daily and annual records, in gallons, of the quantity of denatured ethanol processed through this storage tank, [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 10. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

11. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 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.

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

Location: 3028 NAVY DRI N-7365-16-4: Jul 27 2018 3:14PM - EDGEHILR

- 12. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 25. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 26. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Titte Wermit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7395-16-4: Jul 27 2018 3 14PM – EDGEHILR

- 27. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 30. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 32. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 34. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 35. 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
- 36. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 37. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 38. 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7385-16-4 Jul 27 2018 3.14PM - EDGEHILR

- 39. 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
- 40. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 41. Operator shall determine the true vapor pressure of each VOL, 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
- 42. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 45. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

PERMITUNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7855-16-4: Jul 27 2018 3:14PM - EDGEHILR

- 49. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 50. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 51. 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] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-16-4 : Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT:** N-7365-17-4

#### **EQUIPMENT DESCRIPTION:**

582,750 GALLON INTERNAL FLOATING ROOF DENATURED ETHANOL STORAGE TANK #2 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- The maximum amount of denatured ethanol processed through this storage tank shall not exceed either of the following limits: 1,000,000 gallons/day or 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emissions from the denatured ethanol storage tank shall not exceed 5.6 lb/day or 992 lb/yr, [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions from equipment leaks associated with this denatured ethanol storage tank shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined maximum amount of denatured ethanol processed through the storage tanks operating under permits N-7365-16 and N-7365-17 shall not exceed 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The permittee shall maintain daily and annual records, in gallons, of the quantity of denatured ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 10. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 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.

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-17-4: Jul 27 2018 3:14PM - EDGEHILR

- 12. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 25. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 26. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title Wermit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7395-17-4: Jul 27 2018 3.14PM - EDGEHILR

- 27. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 30. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 32. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 34. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 35. 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
- 36. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 37. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 38. 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-17-4 Jul 27 2018 3:14PM - EDGEHILR

- 39. 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
- 40. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 41. Operator shall determine the true vapor pressure of each VOL, 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
- 42. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 45. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District-Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

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

3028 NAVY DRIVE, STOCKTON, CA 95206 LOCATION - 3020 1974 F DIX N-7365-17-4 : Jul 27 2018 3:14PM - EDGEHILR

Facility Name: PACIFIC ETHANOL STOCKTON LLC

- 49. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 50. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 51. 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] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STÖCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-17-4: Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT:** N-7365-19-7

#### **EQUIPMENT DESCRIPTION:**

DENATURED ETHANOL BOTTOM TRUCK LOADING RACK WITH DRY BREAK COUPLERS SERVED BY A JOHN ZINK MODEL S3-AAD-1-70-90-6 HYDROCARBON VAPOR RECOVERY UNIT (VRU)

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Vapor return hose(s) shall be attached whenever loading equipment operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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
- All vapors displaced from trucks during load-out operations shall be routed through the hydrocarbon vapor recovery unit (VRU). [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The hydrocarbon vapor recovery unit shall maintain a minimum control efficiency of 99% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- The VRU shall consist of two adsorption columns filled with activated carbon for VOC emission control and a dry vacuum pump and packed absorption column for activated carbon regeneration. One activated carbon column shall be on-stream receiving vapors in the adsorption mode while the other activated carbon column is off-stream in the regeneration mode. Each activated carbon column shall be regenerated at a frequency recommended by the manufacturer (typically ranging between 10 - 20 minutes). [District Rule 2201] Federally Enforceable Through Title V
- The maximum amount of denatured ethanol loaded into trucks or railcars shall not exceed either of the following limits: 1,000,000 gallons/day or 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- Combined VOC emissions rate from existing and new loading racks shall not exceed 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Controlled VOC emissions rate from the vapor recovery system serving the denatured ethanol loading rack shall not exceed 0.0188 lb/1,000 gal-denatured ethanol loaded (equivalent to 10 milligrams of VOC / liter of ethanol loaded). This VOC emission rate is based on a six hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum number of gasoline hose disconnects performed by each ethanol truck loading operation shall not exceed 210 disconnects/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The maximum liquid spillage/leaks from each hose disconnect shall not exceed 10 milliliters. [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: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-19-7 : Jul 27 2018 3:14PM - EDGEHILR

Location:

- 13. VOC emissions from the denatured ethanol truck loading operation shall not exceed 18.8 lb/day or 5,640 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. VOC emissions from disconnects from the denatured ethanol truck loading operation shall not exceed 7.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Fugitive VOC emissions from equipment leaks associated with the denatured ethanol truck loading operation shall not exceed 4.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Ongoing compliance with VOC emission rate from the exhaust vent of the VRU shall be demonstrated at least once per day by sampling the effluent gas stream with an FID, PID, or other District-approved VOC detection device. The VOC detection device shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations. [District Rule 2201 and 40 CFR Part 64]
- 18. The permittee shall maintain daily and annual records, in gallons, of the quantity of denatured ethanol processed through the loading rack. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain daily and annual records of the quantity of ethanol hose disconnects at the ethanol truck loading operation. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 20. The permittee shall maintain records of: (1) the daily compliance demonstrations taken with a FID, PID, or other District-approved VOC detection device, (2) make and model of the VOC detection device, and (3) calibration records of the VOC detection device. [District Rules 1070 and 2201, 40 CFR Part 64]
- 21. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the VRU shall be conducted at least once every 12 months, with equipment in operational condition. Source testing shall be conducted while denatured ethanol is being processed through the loading rack. [District Rule 2201]
- 22. 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
- 23. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. If applicable, source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 24. 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
- 25. During source testing, permittee shall maintain records of the amount of the ethanol loaded, measured in galethanol/hour. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 26. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 27. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 28. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7385-19-7: Jul 27 2018 3:14PM - EDGEHILR

- 29. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 30. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 31. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 32. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-19-7: Jul 27 2018 3:14PM - EDGEHILR

**PERMIT UNIT:** N-7365-20-6

EXPIRATION DATE 09/30/201

#### **EQUIPMENT DESCRIPTION:**

75.6 MMBTU/HR SUPERIOR BOILER WORKS NATURAL GAS-FIRED BOILER WITH A JOHN ZINK MODEL RMBU 32-G-2500 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #1)

### PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The exhaust stack of this boiler shall have the following parameters: stack height from ground level 50 feet; stack diameter 32 inches; and gas exit flowrate 13,000 cfm. [District Rule 4102]
- 4. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 5. Emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.0013 lb-VOC/MMBtu (equivalent to 3 ppmvd VOC @ 3% O2); 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 6. The combined maximum amount of fuel burned by the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22 shall not exceed 1,392.84 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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
- 8. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 9. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 10. 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
- 11. 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

12. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206

N-7365-20-6 ; Jul 27 2018 3:14PM – EDGEHILR

- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 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. 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
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The permittee shall 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
- 19. 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
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. 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
- 22. The permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain annual records, in standard cubic feet, of the combined quantity of natural gas burned in the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7995-20-9: Jul 27 2019 3:14PM - EDGERILR

24. 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 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE,STOCKTON, CA 95206 N-7365-20-6 Jul 27 2018 3:14PM – EDGEHILR

**PERMIT UNIT:** N-7365-21-6

EXPIRATION DAITE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

75.6 MMBTU/HR SUPERIOR BOILER WORKS NATURAL GAS-FIRED BOILER WITH A JOHN ZINK MODEL RMBU 32-G-2500 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #2).

### PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr [District Rules 4201 and 4301]
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The exhaust stack of this boiler shall have the following parameters: stack height from ground level 50 feet; stack diameter 32 inches; and gas exit flowrate 13,000 cfm. [District Rule 4102]
- 4. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 5. Emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.0013 lb-VOC/MMBtu (equivalent to 3 ppmvd VOC @ 3% O2); 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 6. The combined maximum amount of fuel burned by the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22 shall not exceed 1,392.84 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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
- 8. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 9. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 10. 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
- 11. 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

12. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-21-6: Jul 27 2018 3:14PM - EDGEHILR

- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 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. 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
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The permittee shall 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
- 19. 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
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V
- 21. 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
- 22. The permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain annual records, in standard cubic feet, of the combined quantity of natural gas burned in the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-21-6: Jul 27 2016 3:14PM -- EDGEHILR

Facility Name: PACIFIC ETHANOL STOCKTON LLC

24. 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 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-21-6: Jul 27 2018 3:14PM – EDGEHILR

**PERMIT UNIT:** N-7365-22-6

EXPIRATION DATE: 09/30/201

#### **EQUIPMENT DESCRIPTION:**

75.6 MMBTU/HR SUPERIOR BOILER WORKS NATURAL GAS-FIRED BOILER WITH A JOHN ZINK MODEL RMBU 32-G-2500 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #3)

## PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The exhaust stack of this boiler shall have the following parameters: stack height from ground level 50 feet; stack diameter 32 inches; and gas exit flowrate 13,000 cfm. [District Rule 4102]
- 4. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 5. Emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.0013 lb-VOC/MMBtu (equivalent to 3 ppmvd VOC @ 3% O2); 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 6. The combined maximum amount of fuel burned by the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22 shall not exceed 1,392.84 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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
- 8. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 9. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 10. 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
- 11. 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

12. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-22-6: Jul 27 2018 314PM - EDGEHILR

- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 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. 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
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The permittee shall 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
- 19. 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
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. 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
- 22. The permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain annual records, in standard cubic feet, of the combined quantity of natural gas burned in the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206
N-7905-22-6: Jul 27 2018 314PM - EDGEHILR

24. 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 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-22-6: Jul 27 2018 3:14PM – EDGEHILR

**PERMIT UNIT:** N-7365-23-3

EXPIRATION DAITE, 09/30/2017

**EQUIPMENT DESCRIPTION:** 

21,300 GPM INDUCED DRAFT COOLING TOWER SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
- 4. The exhaust stack of this cooling tower shall have the following parameters: stack height from ground level 40 feet; stack diameter 96 inches; and gas exit flowrate 159,000 acfm. [District Rule 4102]
- 5. Drift eliminator drift rate shall not exceed 0.001%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. PM10 emission rate from the cooling tower shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Compliance with the PM10 daily emission limit shall demonstrated as follows: PM10 lb/day = circulating water recirculation rate x total dissolved solids concentration in the water x design drift rate. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Compliance with the PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory within 120 days of initial operation and quarterly thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-23-3: Jul 27 2018 3:15PM - EDGEHILR

**PERMIT UNIT:** N-7365-29-2

EXPIRATION DAITE P9/30/2017

#### **EQUIPMENT DESCRIPTION:**

373 BHP CUMMINS MODEL CFP11E-F10 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER 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. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 4. 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, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 5. Emissions from this IC engine shall not exceed any of the following limits: 3.81 g-NOx/bhp-hr, 0.597 g-CO/bhp-hr, or 0.185 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 6. Emissions from this IC engine shall not exceed 0.072 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 7. This engine shall be operated only for testing and maintenance of the engine, 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". 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 Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-29-2. Jul 27 2018 3:15PM - EDGEHILR

- 11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 12. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-29-2: Jul 27 2018 3:15PM - EDGENILR

**PERMIT UNIT:** N-7365-30-2

**EQUIPMENT DESCRIPTION:** 

288 BHP CUMMINS MODEL CFP83-F40 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

### PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- The 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]
- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 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, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 3.47 g-NOx/bhp-hr, 0.447 g-CO/bhp-hr, or 0.31 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed 0.059 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 7. This engine shall be operated only for testing and maintenance of the engine, 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". 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 Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206

Location: -30-2 : Jul 27 2018 3:15PM -- EDGEHILR

- 11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 12. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-30-2: Jul 27 2018 3:15PM - EDGEHILR

**PERMIT UNIT:** N-7365-31-2

EXPIRATION DAILE 09/30/201

#### **EQUIPMENT DESCRIPTION:**

60,000 GALLON TOTALLY ENCLOSED NATURAL GASOLINE STORAGE TANK (PRESSURE VESSEL) WITH A BOTTOM TRUCK UNLOADING RACK

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of natural gasoline removed from this storage tank and mixed with ethanol shall not exceed either of the following limits: 35,000 gallons/day or 6,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. There shall be no VOC emissions from this natural gasoline storage tank. [District Rules 2201 and 4623 and 40 CFR 60.110(d)(2)] Federally Enforceable Through Title V Permit
- 4. The maximum number of natural gasoline hose disconnects performed by the natural gasoline truck unloading operation shall not exceed either of the following limits: 12 disconnects/day or 1,200 disconnects/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The maximum liquid spillage/leaks from each hose disconnect shall not exceed 10 milliliters. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. VOC emissions from the natural gasoline truck unloading operation shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Fugitive VOC emissions from equipment leaks associated with this natural gasoline storage tank shall not exceed 0.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The permittee shall maintain daily and annual records, in gallons, of the quantity of natural gasoline removed from this storage tank and mixed with ethanol. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain daily and annual records of the quantity of natural gasoline hose disconnects at the natural gasoline truck unloading operation. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 11. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 12. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title W Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-31-2: Jul 27 2018 3:15PM - EDGEHILR

- 13. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 14. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 15. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 16. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 17. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-31-2 - Jul 27 2018 3-15PM - EDGEHILR

**PERMIT UNIT:** N-7365-33-3

EXPIRATION DATE: 09/30/2017

### **EQUIPMENT DESCRIPTION:**

DENATURED-ETHANOL TRANSFER OPERATION FROM RAIL CAR TANKS TO THE TANKS WINDER PERMITS N-7365-16 AND '-17 CONSITING OF TWO PUMPS AND ASSOCIATED PIPING SYSTEM

## PERMIT UNIT REQUIREMENTS

- 1. The operator shall design, install, maintain and operate the equipment under this permit such that there are no leaks and no excess organic liquid drainage at disconnection. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 2. The operator shall install a pressure-vacuum relief device on the top of each rail car tank prior to off loading denatured ethanol. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. 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
- 4. Excess organic liquid drainage is defined as more than 10 mL liquid drainage. Such liquid drainage for disconnect operations shall be determined by computing the average drainage from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit
- 5. The amount of denatured ethanol loaded from rail cars into the storage tanks (N-7365-16 and '-17) using this operation shall be counted toward the daily and annual throughput of permit units N-7365-16 and '-17, and in no case shall exceed the limits in permits N-7365-16 and '-17. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. VOC emissions from disconnects from the denatured ethanol loading operation from rail cars to tanks shall not exceed 1.7 lb/day or 606 lb/yr in any 12 consecutive month rolling period [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Fugitive VOC emissions from equipment leaks associated with the denatured ethanol loading operation from rail cars to tanks shall not exceed 3.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Denatured ethanol shall be loaded into the storage vessels using bottom loading method. [District Rule 4624] Federally Enforceable Through Title V Permit
- 9. The operator shall determine an average organic liquid drainage (mL) for three consecutive disconnects to demonstrate compliance with the 10 mL (excess organic liquid drainage, equivalent to 0.017 pounds per disconnect). The drainage shall be determined within 60 days of initial startup under this permit and at least once a quarter thereafter at the time a leak inspection is performed. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 10. The operator shall inspect the components (e.g. valves, flanges, connectors etc.) for leaks within 60 days of initial startup under this permit and at least once every calendar quarter thereafter. 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 Rules 2201 and 4624] 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: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-33-3: Jul 27 2018 3:15PM - EDGEHILR

- 11. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag with the date and time of leak detection, the date and time of leak measurement, and for gas leaks, the leak concentration in ppmv. The tag shall remain affixed to the component until the component is repaired or replaced. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. 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 Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 13. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 14. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 15. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 16. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 17. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 18. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 19. The operator shall keep records of daily liquid unloaded from the rail car tanks in gallons. [District Rule 4624] Federally Enforceable Through Title V Permit
- 20. The operator shall keep daily records of the date, number of disconnections per day, hours of equipment in-use, and VOC emissions (lb/day). Daily emissions shall be estimated as follows: VOC (lb/day) = 0.017 lb-VOC/disconnect x number of disconnections per day + 0.081 lb-VOC/hr x hours per day of equipment in-use. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. The operator shall keep monthly records of the month, year, number of disconnections, hours of equipment in-use, and VOC emissions (lb/month). Monthly emissions shall be estimated as follows: VOC (lb/month) = 0.017 lb-VOC/disconnect x number of disconnections per month + 0.081 lb-VOC/hr x hours per month of equipment in-use. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The operator shall keep record of total VOC emissions for each 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The operator shall keep records of the date, name of component and its location and measured ppmv value, name of the operator and the company conducting the leak inspection. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-33-3: Jul 27 2018 3:15PM - EDGEHILR

- 24. The operator shall keep daily, monthly, and annual records of the amount of denatured ethanol loaded in each storage tanks N-7365-16 and '-17 using the equipment under this permit, and amount of denatured ethanol loaded from plant production. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained for a minimum of five years and shall be made available to the APCO, ARB, or EPA during normal business hours and submitted upon request. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-33-3: Jul 27 2018 3:15PM - EDGEHILR

**PERMIT UNIT:** N-7365-34-2

**EQUIPMENT DESCRIPTION:** 

PILOT SCALE ANAEROBIC DIGESTER SYSTEM



## PERMIT UNIT REQUIREMENTS

- 1. The pilot scale anaerobic digester system includes two mixing tanks, a digester tank, a gas bag, carbon canisters and associated pipes, valves, flanges, connectors and pumps. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The biogas shall be disposed in the 2.4 MMBtu/hr A.H. Lundberg Associates Inc, regenerative thermal oxidizer shared with permit units N-7365-4, '-5, '-6, '-7, '-8, '-9, -10 and '-11. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 4. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of biogas combusted in the RTO shall be utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. No more than 2,112 cubic feet of biogas shall be incinerated in the RTO during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Hydrogen sulfide (H2S) concentration in the biogas prior to the combustion shall not exceed 600 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Emissions rates from the combustion of natural gas and biogas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.007 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. At least once every 120 days thereafter, the hydrogen sulfide concentration of the biogas shall be determined by an independent, certified laboratory using one of the following test methods: EPA Method 11, EPA Method 15, ASTM Method D1072, D3031, D4084, D3246, or D5504. Once three consecutive 120-day laboratory tests show compliance with the permitted hydrogen sulfide concentration limit, the laboratory testing frequency may be reduced to annually. If a subsequent annual laboratory test shows a violation of the permitted hydrogen sulfide concentration limit then 120-day laboratory testing shall resume and continue until three consecutive 120-day laboratory tests show compliance. Once compliance is shown on three consecutive 120-day laboratory tests, the laboratory testing frequency may return to annually. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- At least once every other week, the facility shall test the biogas to demonstrate compliance with the permitted hydrogen sulfide concentration limit using Draeger tubes or a District approved equivalent method. Once 12 consecutive biweekly tests show compliance, the testing frequency may be reduced to monthly. If a subsequent test shows a violation of the permitted hydrogen sulfide concentration limit then biweekly testing shall resume and continue until 12 consecutive tests show compliance. Once compliance is shown on 12 consecutive biweekly tests, the testing frequency may return to monthly. It is not necessary for the facility to perform Draeger tube or District approved equivalent method testing during the week in which either the 120-day or annual laboratory testing is performed. [District Rules 1081 and 2201] Federally Enforcement 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: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-34-2: Jul 27 2016 3:15PM -- EDGEHILR

- 10. Biogas sampling shall be conducted using the methods and procedures approved by the District. The District shall be notified each time the biogas sampling frequency changes. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The permittee shall maintain records of: (1) the name of the sampler, and the date and time of biogas sampling for H2S, (2) the name of the tester, and the date and time of biogas testing for H2S, (3) test results showing the biogas concentration (in ppmv) of H2S. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. The anaerobic digester system and its associated piping shall be inspected for leaks at least monthly. Any leak detected on the basis of sight, smell, or sound, shall be recorded and a corrective action shall be taken to eliminate the leak. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Records of leak inspections shall contain at least an identification of a person performing an inspection, date and time of the inspection, leak location, and corrective action taken to eliminate leaks. The records shall be maintained, kept, and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. All records shall be retained for a minimum of 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.

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-34-2; Jul 27 2018 3 15PM - EDGEHILR

## **ATTACHMENT B**

Previous Title V Operating Permit

**FACILITY:** N-7365-0-1 **EXPIRATION DATE:** 09/30/2017

### **FACILITY-WIDE REQUIREMENTS**

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

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

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

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

- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. 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
- 43. 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
- 44. 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
- 45. 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 and 40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit
- 46. 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 reinspected 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 & 5.2.2; 40 CFR 60.482-2(a), (b) and (c); 40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-04 - Jul 27 2018 3:15PM - EDGEHILR

- 47. The operator shall inspect all components at least once every calendar quarter. 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, 5.25, 5.26 & 5.27; 40 CFR 60.482-2(a), (b) and (g); 40 CFR 60.482-7(a), (b), (g) and (h)] Federally Enforceable Through Title V Permit
- 48. 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; 40 CFR 60.482-7] Federally Enforceable Through Title V Permit
- 49. 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 the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of this rule 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 (5) 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
- 50. 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 and 40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit
- 51. 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
- 52. 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 reinspected using EPA Method 21; and is found to be in compliance with the requirements of this rule. [District Rule 4455, 5.3.1 & 5.3.2; 40 CFR 60.486(b)] Federally Enforceable Through Title V Permit
- 53. 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
- 54. All component leaks shall be immediately minimized to the extent possible, but not later than one (1) 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.] Federally Enforceable Through Title V Permit
- 55. 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

- 56. 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 after the date of detection either: 1) replace or retrofit the component with the control technology specified in Table 4 of the rule, 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 the rule, 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 (2) 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
- 57. 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
- 58. The operator shall comply with the process PRD release notification and record keeping requirements specified in Section 6.3 of the rule. 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
- 59. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and record keeping 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
- 60. 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] Federally Enforceable Through Title V Permit
- 61. Operator shall maintain an inspection log containing the information set forth in Sections 6.2.1.1 through 6.2.1.10 of the rule. [District Rule 4455, 6.2.1; 40 CFR 60.486(c)] Federally Enforceable Through Title V Permit
- 62. 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 (30) calendar days of following notification of process PRD release subject to 6.3.1 of the rule. The written report shall include all of the information set forth in Sections 6.3.2.1 through 6.3.2.5 of the rule. [District Rule 4455, 6.3] Federally Enforceable Through Title V Permit
- 63. 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 the rule. [District Rule 4455, 6.4; 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
- 64. Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 60.482-1 through 60.482-10 or 40 CFR 60.480(e) for all equipment within 180 days of initial startup. [40 CFR 60.482-1(a)] Federally Enforceable Through Title V Permit

- 65. Compliance with 40 CFR 60.482-1 to 60.482-10 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 60.485. [40 CFR 60.482-1(b)] Federally Enforceable Through Title V Permit
- 66. An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, and 60.482-10 as provided in 40 CFR 60.484. [40 CFR 60.482-1(c)] Federally Enforceable Through Title V Permit
- 67. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, or 60.482-10, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1(c)] Federally Enforceable Through Title V Permit
- 68. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
- 69. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(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 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit
- 70. 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 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit
- 71. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit
- 72. Any PLLS that is designated, as described in 40 CFR 60.486(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 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit
- 73. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)]
- 74. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(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 60.482-2(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 60.482-2(c) if a leak is detected. [District Rule 40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit
- 75. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)] Federally Enforceable Through Title V Permit
- 76. Unless exempt under 40 CFR 60.482-3, 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 60.482-3(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3(b)(1), (2), or (3). [40 CFR 60.482-3(a), (b), and (c)] Federally Enforceable Through Title V Permit

- 77. 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 60.482-3(d), (e), and (f)] Federally Enforceable Through Title V Permit
- 78. 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 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3(g)] Federally Enforceable Through Title V Permit
- 79. Any compressor that is designated, as described in 40 CFR 60.486(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 60.482-3(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3(i)(1) and (2). [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit
- 80. 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(a), (b), (c), (d), (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 60.482-3(a), (b), (c), (d), (e), and (h). [40 CFR 60.482-3(j)] Federally Enforceable Through Title V Permit
- 81. 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 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit
- 82. 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 60.482-9. 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 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit
- 83. 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 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit
- 84. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, 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 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit
- 85. 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 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit
- 86. 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 60.482-1(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 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

- 87. 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 60.482-6(b)] Federally Enforceable Through Title V Permit
- 88. 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 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit
- 89. 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 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit
- 90. 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 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 100 ppmv or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit
- 91. 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 60.482-7(c)] Federally Enforceable Through Title V Permit
- 92. 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 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit
- 93. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(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 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit
- 94. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(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 60.482-7(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 60.482-7(g)] Federally Enforceable Through Title V Permit
- 95. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(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 60.482-7(h)] Federally Enforceable Through Title V Permit

- 96. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, 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 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(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 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit
- 97. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, 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 60.482-9. 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 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit
- 98. For closed vent systems and control devices, vapor recovery systems 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 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit
- 99. 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 parts per million by volume, 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 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit
- 100. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)] Federally Enforceable Through Title V Permit
- 101. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(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 60.482-10(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 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit
- 102. 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 60.482-10(h)] Federally Enforceable Through Title V Permit
- 103. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
- 104. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit
- 105. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(1)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

- 106. 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 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(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, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit
- 107. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit
- 108. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.483-1 and 60.483-2] Federally Enforceable Through Title V Permit
- 109. 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 VV. [40 CFR 60.484(a)] Federally Enforceable Through Title V Permit
- 110. 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 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit
- 111. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppmv of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 100 ppmv methane or n-hexane for valves and connectors and 500 ppmv methane or n-hexane for pumps and compressor seals. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
- 112. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(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 60.485(c)] Federally Enforceable Through Title V Permit
- 113. 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 E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) 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 60.485(d)] Federally Enforceable Through Title V Permit

- 114. 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 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) 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 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit
- 115. Samples used in conjunction with 40 CFR 60.485(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 60.485(f)] Federally Enforceable Through Title V Permit
- 116. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)] Federally Enforceable Through Title V Permit
- 117. An owner or operator of more than one affected facility subject to the provisions Subpart VV may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit
- 118. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, 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 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit
- 119. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, 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; 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) "Above 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor seals; 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 shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c)] Federally Enforceable Through Title V Permit
- 120. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 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 60.482-10(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 60.482-2, 60.482-3, 60.482-4, and 60.482-5 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 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

- 121. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 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 GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 0 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 0 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit
- 122. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; 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 60.486(f)] Federally Enforceable Through Title V Permit
- 123. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit
- 124. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit
- 125. 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 60.480(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 60.486(i)] Federally Enforceable Through Title V Permit
- 126. 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 60.486(j)] Federally Enforceable Through Title V Permit
- 127. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart VV. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit
- 128. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 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 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) 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 the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit
- 129. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-0-1; Jul 27 2018 3:15PM - EDGEHILR

- 130. 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 VV 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 60.487(e)] Federally Enforceable Through Title V Permit
- 131. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the 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 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit
- 132. On December 31, 2012, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-1-3

**EXPIRATION DATE:** 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

TRUCK AND RAILCAR GRAIN RECEIVING AND STORAGE OPERATION INCLUDING A RECEIVING SHED, RAILCAR AND TRUCK RECEIVING HOPPERS, A RECEIVING DRAG CONVEYOR, A RECEIVING LEG (ELEVATOR), ALL SERVED BY A 25,000 CFM MAC EQUIPMENT MODEL 120MCF255 STYLE III BAGHOUSE; AND TWO (2) 500,000 BUSHEL CAPACITY STORAGE SILOS, TWO 5,000 BUSHEL CAPACITY INTERSTICE BINS AND ENCLOSED MECHANICAL CONVEYORS ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-2 AND '-3)

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Visible emissions from the exhaust of the baghouse serving the grain receiving pit 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. Visible emissions from the exhaust of baghouse serving the storage silos, day bins and associated conveying equipment 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
- 4. Each baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Each baghouse 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 each baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Replacement bags numbering at least 10% of the total number of bags in each baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Each 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
- 9. Each 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] Federally Enforceable Through Title V Permit
- 10. The exhaust stack of the baghouse serving the grain receiving pit shall have the following parameters: stack height from ground level 75 feet; stack diameter 35 inches; and gas exit flowrate 25,000 dscfm. [District Rule 4102]
- 11. The exhaust stack of the baghouse serving the grain handling and transfer operations shall have the following parameters: stack height from ground level 110 feet; stack diameter 10 inches; and gas exit flowrate 3,500 dscfm. [District Rule 4102]

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-1-3: Jul 27 2018 3:16PM - EDGEHILR

- 12. The grain receiving baghouse shall not operate for more than 3,500 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The maximum amount of grain received and transferred to storage shall not exceed either of the following limits: 13,330 tons/day or 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. PM10 emissions from the grain receiving baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 15. PM10 emissions from the grain handling/transfer baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 16. Visible emissions from the baghouse serving the grain receiving operation shall be evaluated using EPA Method 22 for a period of at least 6 minutes at least once during each day that the permit unit is operated. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 17. Visible emissions from the baghouse serving the grain receiving pit shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 18. The baghouse serving the grain receiving pit 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 19. The baghouse serving the grain receiving pit 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. Differential operating pressure shall be monitored and recorded on each day that the baghouse serving the grain receiving pit operates. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. During each day of operation, the permittee shall record the pressure drop of the baghouse serving the grain receiving pit, and compare the readings with the acceptable range. Upon detecting any excursion from the acceptable range pressure readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 22. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain daily and annual records of the amount of grain received and transferred to storage, in tons, and annual records of the amount of time the grain receiving baghouse operates, in hours. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Differential operating pressure shall be monitored and recorded on each day that each baghouse operates. [District Rule2201] Federally Enforceable Through Title V Permit
- 25. Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 10 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-2-2

**EXPIRATION DATE:** 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #1 CONSISTING OF FULLY ENCLOSED MECHANICAL CONVEYORS, ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-1 AND '-3); AND ONE HAMMERMILL SERVED BY A 7,200 CFM MAC EQUIPMENT MODEL 96LVS81 STYLE II BAGHOUSE (BAGHOUSE EXHAUST SHARED WITH BAGHOUSE EXHAUST UNDER PERMIT N-7365-3)

## **PERMIT UNIT REQUIREMENTS**

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Visible emissions from the baghouse(s) serving the hammermill and associated conveying equipment 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. Each baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Each baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Material removed from each 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 each baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Each 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. Each 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] Federally Enforceable Through Title V Permit
- 9. The exhaust stack of the baghouse serving the grain handling and transfer operations shall have the following parameters: stack height from ground level 110 feet; stack diameter 10 inches; and gas exit flowrate 3,500 dscfm. [District Rule 4102]
- 10. The combined exhaust stack of the baghouses serving each of the hammermills operating under permits N-7365-2 and N-7365-3 shall have the following parameters: stack height from ground level 110 feet; stack diameter 21 inches; and gas exit flowrate 14,400 dscfm. [District Rule 4102]
- 11. The maximum amount of grain processed through the hammermill shall not exceed either of the following limits: 2,000 tons/day or 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. PM10 emissions from the grain handling/transfer baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit

- 13. PM10 emissions from the grain grinding baghouse shall not exceed 0.004 gr/dscf. [District Rule 2201 and 4201] Federally Enforceable Through Title V Permit
- 14. The combined maximum amount of grain processed through the hammermills operating under permits N-7365-2 and N-7365-3 shall not exceed 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Visible emissions from the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 shall be evaluated using EPA Method 22 for a period of at least 6 minutes at least once during each day that the permit unit is operated. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 16. Visible emissions from the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 17. The baghouse serving the grain receiving pit 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 18. The baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 5 inches water column. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 19. Differential operating pressure shall be monitored and recorded on each day that the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 operates. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. During each day of operation, the permittee shall record the pressure drop of the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3, and compare the readings with the acceptable range. Upon detecting any excursion from the acceptable range pressure readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain daily and annual records of the amount of grain processed through the hammermill, in tons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Differential operating pressure shall be monitored and recorded on each day that each baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-3-2

EXPIRATION DATE: 09/30/2017

### **EQUIPMENT DESCRIPTION:**

GRAIN GRINDING OPERATION #2 CONSISTING OF FULLY ENCLOSED MECHANICAL CONVEYORS, ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-1 AND '-2); AND ONE HAMMERMILL SERVED BY A 7,200 CFM MAC EQUIPMENT MODEL 96LVS81 STYLE II BAGHOUSE (BAGHOUSE EXHAUST SHARED WITH BAGHOUSE EXHAUST UNDER PERMIT N-7365-2)

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Visible emissions from the baghouse(s) serving the hammermill and associated conveying equipment 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. Each baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Each baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Material removed from each 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 each baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Each 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
- Each 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] Federally Enforceable Through Title V
  Permit
- 9. The exhaust stack of the baghouse serving the grain handling and transfer operations shall have the following parameters: stack height from ground level 110 feet; stack diameter 10 inches; and gas exit flowrate 3,500 dscfm. [District Rule 4102]
- 10. The combined exhaust stack of the baghouses serving each of the hammermills operating under permits N-7365-2 and N-7365-3 shall have the following parameters: stack height from ground level 110 feet; stack diameter 21 inches; and gas exit flowrate 14,400 dscfm. [District Rule 4102]
- 11. The maximum amount of grain processed through the hammermill shall not exceed either of the following limits: 2,000 tons/day or 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. PM10 emissions from the grain handling/transfer baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit

- 13. PM10 emissions from the grain grinding baghouse shall not exceed 0.004 gr/dscf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- 14. The combined maximum amount of grain processed through the hammermills operating under permits N-7365-2 and N-7365-3 shall not exceed 646,800 tons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Visible emissions from the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 shall be evaluated using EPA Method 22 for a period of at least 6 minutes at least once during each day that the permit unit is operated. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 16. Visible emissions from the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 17. The baghouse serving the grain receiving pit 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 18. The baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 19. Differential operating pressure shall be monitored and recorded on each day that the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3 operates. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. During each day of operation, the permittee shall record the pressure drop of the baghouse serving the hammermills operating under permits N-7365-2 and N-7365-3, and compare the readings with the acceptable range. Upon detecting any excursion from the acceptable range pressure readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain daily and annual records of the amount of grain processed through the hammermill, in tons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Differential operating pressure shall be monitored and recorded on each day that each baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-4-5

**EXPIRATION DATE:** 09/30/2017

### **EQUIPMENT DESCRIPTION:**

ONE 18,500 GALLON SLURRY TANK AND ONE 78,050 GALLON SLURRY MIX TANK SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-5, '-6, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-5, '-6, '-7, '-8, '-9, -10 AND '-11)

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. All vapors from the slurry tank shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Controlled VOC emissions rate from the slurry tank served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The VOC content of the vapor in the slurry tank and slurry mix tank shall not exceed 10% by weight. [District Rules 2201 and 4455]
- 11. Operator shall conduct initial sampling from the slurry mix tank to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. [District Rule 2201]
- 12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201]

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-4-5: Jul 27 2018 3:16PM - EDGEHILR

- 13. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted within 120 days after initial start-up and at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 22. During source testing, permittee shall maintain record of ethanol production rate measured in gal-ethanol/hour. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 23. 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
- 24. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 25. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 28. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-5-5

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

29,653 GALLON YEAST TANK SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-6, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-6, '-7, '-8, '-9, -10 AND '-11)

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. All vapors from the slurry tank shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the slurry tank served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions from equipment leaks associated with this tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [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: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-5-5: Jul 27 2018 3;16PM - EDGEHILR

- 13. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted within 60 days after recommencing the operation and at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted within 60 days after recommencing the operation and at least once every 12 months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 22. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. 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
- 24. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 25. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201and and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 28. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 35. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 36. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 37. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 38. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 39. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 40. 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 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 41. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-6-4 EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

ONE 177.748 GALLON LIQUEFACTION TANK SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-7, '-8, '-9, -10 AND '-11)

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- All vapors from the liquefaction tank shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the slurry tank served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions from equipment leaks associated with the liquefaction tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [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: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206 Location:

N-7365-6-4 : Jul 27 2018 3:16PM - EDGEHILR

- 13. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months thereafter, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 22. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. 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
- 24. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 25. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 28. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7 [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 35. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 36. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 37. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 38. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 39. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 40. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 41. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-7-5

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED ROOF PROCESS TANKS, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-8) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-8). THE EXHAUST FROM THE PROCESS TANKS IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. All vapors from the fermentation tanks shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from each fermentation tank served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the entire fermentation process served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-7-5 Jul 27 2018 3:16PM - EDGEHILR

- 11. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 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
- 12. Fugitive VOC emissions from equipment leaks associated with the fermentation process shall not exceed 3.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. VOC content in the fluid handled through the chiller system (shared with permit N-7365-8) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO2 scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)] Federally Enforceable Through Title V Permit
- 15. The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)] Federally Enforceable Through Title V Permit
- 16. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455] Federally Enforceable Through Title V Permit
- 17. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455] Federally Enforceable Through Title V Permit
- 18. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alterative test methods approved by the District prior to their use. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 19. Tanks shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 23. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit

- 26. 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
- 27. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 28. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 30. The CO2 scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The water flow rate through the CO2 scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall monitor and record the water flow rate through the CO2 scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. If the water flow rate through the CO2 scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO2 scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO2 scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 39. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 40. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

- 41. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 42. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 43. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 44. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 45. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 46. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 47. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 48. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-8-6

**EXPIRATION DATE:** 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-7) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-7). THE EXHAUST FROM THE PROCESS TANK IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)

## **PERMIT UNIT REQUIREMENTS**

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. All vapors from the beerwell process tank shall be vented through the CO2 scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The overall control efficiency for the CO2 scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the beerwell process tank served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the fermentation process and beerwell process tank all served by the CO2 scrubber vented to the RTO shall not exceed 0.05365 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions from equipment leaks associated with the beerwell process tank shall not exceed 0.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

- 12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. VOC content in the fluid handled through the chiller system (shared with permit N-7365-7) shall be less than or equal to 10% by weight. Compliance with this condition shall be verified by sampling fluid from chilled water tank, as well as, the sump of the CO2 scrubber within 60 days of startup under this permit and whenever required by the District, ARB, or EPA. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)] Federally Enforceable Through Title V Permit
- 14. The owner or operator shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)] Federally Enforceable Through Title V Permit
- 15. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455] Federally Enforceable Through Title V Permit
- 16. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455] Federally Enforceable Through Title V Permit
- 17. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alterative test methods approved by the District prior to their use. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 18. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 22. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. 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
- 26. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

- 27. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 29. The CO2 scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The water flow rate through the CO2 scrubber shall not be less than 33 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The permittee shall monitor and record the water flow rate through the CO2 scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. If the water flow rate through the CO2 scrubber is less than 33 gal/minute, the permittee shall correct the water flow rate to exceed 33 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the CO2 scrubber continues to be less than 33 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of water flow rate measurements, (2) the water flow rate through the CO2 scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 33 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64]
- 39. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 40. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 41. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

- 42. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 43. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 44. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 45. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 46. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 47. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-9-3

**EXPIRATION DATE:** 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

DISTILLATION PROCESS CONSISTING OF ONE DE-GAS VESSEL, ONE BEER STRIPPER, ONE SIDE STRIPPER, ONE RECTIFIER, TWO MOLECULAR SIEVES AND ONE 200 PROOF ETHANOL CONDENSER, ALL SERVED BY KOCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-10 AND '-11)

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. All vapors from the distillation process shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Controlled VOC emissions rate from the distillation process served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOX/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOX/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Fugitive VOC emissions from equipment leaks associated with the distillation process shall not exceed 3.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

- 12. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 13. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet] RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 18. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. 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
- 20. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 22. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 23. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64]
- 25. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit

- 29. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 31. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 32. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 33. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 34. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 35. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 36. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-10-4 EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

ONE 190,400 GALLON PROCESS CONDENSATE TANK, COLLECTING WATER FROM THE CO2 AND VENT GAS SCRUBBERS, SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-11)

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 3. gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- All vapors from the process condensate tank shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the distillation process served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Fugitive VOC emissions from equipment leaks associated with this process condensate tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE, STOCKTON, CA 95206 Location:

N-7365-10-4 : Jul 27 2018 3:16PM - EDGEHILR

- 12. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 14. Tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. 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 4623] Federally Enforceable Through Title V Permit
- 16. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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
- 21. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 22. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. 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
- 24. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 25. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 27. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64]
- 29. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 35. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 36. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 37. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 38. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 39. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 40. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 41. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-11-7

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

WET CAKE PROCESS CONSISTING OF ONE 194,400 GALLON WHOLE STILLAGE TANK, ONE CENTRIFUGE SYSTEM WITH FIVE CENTRIFUGES, ONE 127,000 GALLON THIN STILLAGE TANK, THREE EVAPORATORS, ONE 129,600 GALLON SYRUP TANK, CORN OIL EXTRACTION SYSTEM CONSISTING OF ONE 36,000 GALLON HEAT SOAK TANK, THREE CENTRIFUGES, ONE 800 GALLON BUFFER TANK, ONE 1,285 GALLON FINAL PRODUCT TANK, THREE 10,500 GALLON CORN OIL LOADOUT STORAGE TANKS ALL SERVED BY AN KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-10) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-10) AND A TRUCK LOADOUT SYSTEM

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Wet cake conveyors between each tank or each emissions unit at the wet cake process unit shall be fully enclosed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The maximum amount of ethanol produced at this facility shall not exceed either of the following limits: 360,000 gallon/day or 70,000,000 gallon/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. All vapors from the wet cake process shall be vented through the vent gas scrubber and then through the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The RTO shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The overall control efficiency for the vent gas scrubber vented to the RTO shall be a minimum of 99.5% for VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Controlled VOC emissions rate from the distillation process served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb-VOC/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Controlled VOC emissions rate from the slurry tank, yeast tank, liquefaction tank, distillation process, process condensate tank and wet cake process all served by the vent gas scrubber vented to the RTO shall not exceed 0.00995 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Controlled VOC emissions rate from the exhaust of the RTO while serving the slurry tank, yeast tank, liquefaction tank, fermentation process, beerwell process tank, distillation process, process condensate tank and wet cake process shall not exceed 0.0636 lb/1,000 gal-ethanol produced at the facility. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Emissions rates from the combustion of natural gas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

- 11. Loading losses from the distiller's syrup loadout operation shall not exceed 0.526 lb-VOC/1,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Loading losses from the distiller's corn oil loadout operation shall not exceed 0.000175 lb-VOC/1,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The maximum throughput of distiller's syrup loaded shall not exceed any of the following: 67,371 gallons per day or 24,590,415 gallons per year. [District Rule 2201]
- 14. The maximum throughput of corn oil loaded shall not exceed any of the following: 26,000 gallons per day or 5,000,000 gallons per year. [District Rule 2201]
- 15. Fugitive VOC emissions from equipment leaks associated with the wet cake process shall not exceed 2.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Fugitive VOC emissions from equipment leaks associated with the corn oil operation shall not exceed 0.03 lb/day. [District Rule 2201]
- 17. Fugitive VOC emissions from equipment leaks associated with the distiller's syrup operation shall not exceed 2.9 lb/day. [District Rule 2201]
- 18. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Fugitive VOC emissions from equipment leaks associated with the corn oil operation shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-9, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Leak Rate/Screening Value Correlations Emission Factors. [District Rule 2201]
- 20. Fugitive VOC emissions from equipment leaks associated with the distiller's syrup operation shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-9, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Leak Rate/Screening Value Correlations Emission Factors. [District Rule 2201]
- 21. The permittee shall maintain daily and annual records, in gallons, of the quantity of distiller's syrup and corn oil loaded at this facility. [District Rule 2201]
- 22. The permittee shall maintain daily and annual records, in gallons, of the quantity of ethanol produced at this facility. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain accurate component count and shall update such records when new components are approved and installed. [District Rule 2201]
- 24. Source testing to demonstrate compliance with the 99.5% overall control efficiency of the CO2 scrubber vented to the RTO and the vent gas scrubber vented to the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the RTO shall be conducted at least once every twelve (12) months, with equipment in operational condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Compliance with the 99.5% overall VOC control efficiency shall be determined as follows: Overall VOC Control Efficiency (%) = {[(CO2 Scrubber Inlet + Vent Gas Scrubber Inlet) RTO Outlet] / [CO2 Scrubber Inlet + Vent Gas Scrubber Inlet]} x 100%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

- 28. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. Source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 29. During source testing, permittee shall maintain records of the amount of ethanol produced, in gal-ethanol/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 31. The vent gas scrubber shall be equipped with a water flow meter, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. The water flow rate through the vent gas scrubber shall not be less than 25 gal/minute. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. The permittee shall monitor and record the water flow rate through the vent gas scrubber at least once every day. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. If the water flow rate through the vent gas scrubber is less than 25 gal/minute, the permittee shall correct the water flow rate to exceed 25 gal/minute, as soon as possible, but no longer than 1 hour of operation after detection. If the water flow rate through the vent gas scrubber continues to be less than 25 gal/minute after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall maintain records of (1) the date of water flow rate measurements, (2) the water flow rate through the vent gas scrubber at the time of measure, and (3) a description of any corrective action taken to maintain the water flow rate above the 25 gal/minute limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. The RTO shall be operated at a temperature of no less than 1,400 øF. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. The RTO shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. Upon detecting any excursion from the acceptable temperature readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 39. The permittee shall comply with the compliance assurance monitoring and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain daily records of (1) the date of RTO temperature measurements, (2) the temperature of the RTO at the time of measure, and (3) a description of any corrective action taken to maintain the temperature above the 1,400 øF limit. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 41. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 42. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

- 43. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 44. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 45. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 46. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 47. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 48. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 49. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-12-2

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

WET CAKE STORAGE AND TRUCK LOADOUT OPERATION WITH MECHANICAL CONVEYORS AND A PERMANENT STRUCTURE WITH EXHAUST VENTILATION SYSTEM (REVISED 4/20/09)

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The wet cake storage and truck loadout area shall be equipped with a permanent structure and ventilation system that is capable of capturing a minimum of 70% of the VOC emissions generated by this operation. [District Rule 4102]
- 3. The exhaust stack of the structure covering the wet cake storage and truck loadout area shall have the following parameters: stack height from ground level 48 feet feet; stack diameter 24 inches; and gas exit flowrate 12,368 acfm. [District Rule 4102]
- 4. The maximum amount of wet cake processed shall not exceed either of the following limits: 1,600 ton-wet cake/day or 508,080 ton-wet cake/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. VOC emissions rate from the wet cake storage and truck loadout operation shall not exceed 0.0087 lb-VOC/ton-wet cake processed. [District Rule 2201]
- 6. The permittee shall maintain daily and annual records, in tons, of the quantity of wet cake processed through this storage and truck loadout operation. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 7. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-12-2: Jul 27 2018 3:18PM - EDGEHILR

**PERMIT UNIT:** N-7365-13-3

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

190,357 GALLON INTERNAL FLOATING ROOF 190-PROOF ETHANOL STORAGE TANK WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of 190-proof ethanol processed through this storage tank shall not exceed either of the following limits: 206,000 gallons/day or 25,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. VOC emissions from this 190-proof ethanol storage tank shall not exceed 2.4 lb/day or 384 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emissions from equipment leaks associated with this 190-proof ethanol storage tank shall not exceed 0.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The permittee shall maintain daily and annual records, in gallons, of the quantity of 190-proof ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- 8. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 9. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 10. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit

- 12. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 23. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 24. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 25. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit
- 26. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

- 27. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 30. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 34. 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
- 35. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 36. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 37. 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
- 38. 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

- 39. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 40. Operator shall determine the true vapor pressure of each VOL, 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
- 41. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 43. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 44. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 45. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit

- 49. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 50. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-14-3

**EXPIRATION DATE:** 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

190,357 GALLON INTERNAL FLOATING ROOF 200-PROOF ETHANOL STORAGE TANK #1 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of 200-proof ethanol processed through this storage tank shall not exceed either of the following limits: 342,000 gallons/day or 70,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The combined maximum amount of 200-proof ethanol processed through the storage tanks operating under permits N-7365-14 and N-7365-15 shall not exceed 70,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC emissions from the 200-proof ethanol storage tank shall not exceed 3.7 lb/day or 479 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Fugitive VOC emissions from equipment leaks associated with this 200-proof ethanol storage tank shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The permittee shall maintain daily and annual records, in gallons, of the quantity of 200-proof ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 8. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- 9. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 10. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-14-3: Jul 27 2018 3.16PM - EDGEHILR

- 12. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 25. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 26. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

- 27. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 30. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 32. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 34. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 35. 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
- 36. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 37. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 38. 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

- 39. 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
- 40. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 41. Operator shall determine the true vapor pressure of each VOL, 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
- 42. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 45. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

- 49. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 50. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 51. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT: N-7365-15-3 EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

190,357 GALLON INTERNAL FLOATING ROOF 200-PROOF ETHANOL STORAGE TANK #2 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of 200-proof ethanol processed through this storage tank shall not exceed either of the following limits: 342,000 gallons/day or 70,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The combined maximum amount of 200-proof ethanol processed through the storage tanks operating under permits N-7365-14 and N-7365-15 shall not exceed 70,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC emissions from the 200-proof ethanol storage tank shall not exceed 3.7 lb/day or 479 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Fugitive VOC emissions from equipment leaks associated with this 200-proof ethanol storage tank shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The permittee shall maintain daily and annual records, in gallons, of the quantity of 200-proof ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 8. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- 9. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 10. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-15-3: Jul 27 2018 3:16PM - EDGEHILR

- 12. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 25. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 26. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

- 27. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 30. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 32. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 34. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 35. 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
- 36. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 37. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 38. 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

- 39. 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
- 40. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 41. Operator shall determine the true vapor pressure of each VOL, 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
- 42. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 45. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

- 49. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 50. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 51. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-16-3

**EXPIRATION DATE:** 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

582,750 GALLON INTERNAL FLOATING ROOF DENATURED ETHANOL STORAGE TANK #1 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of denatured ethanol processed through this storage tank shall not exceed either of the following limits: 1,000,000 gallons/day or 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. VOC emissions from the denatured ethanol storage tank shall not exceed 5.2 lb/day or 992 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emissions from equipment leaks associated with this denatured ethanol storage tank shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The combined maximum amount of denatured ethanol processed through the storage tanks operating under permits N-7365-16 and N-7365-17 shall not exceed 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The permittee shall maintain daily and annual records, in gallons, of the quantity of denatured ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 8. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- 9. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 10. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE,STOCKTON, CA 95206 N-7985-16-3: Jul 27 2018 3\*16PM - EDGEHILR

- 12. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 25. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 26. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

- 27. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 30. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 32. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 34. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 35. 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
- 36. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 37. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 38. 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

- 39. 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
- 40. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 41. Operator shall determine the true vapor pressure of each VOL, 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
- 42. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 45. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

- 49. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 50. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 51. 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] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-17-3

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

582,750 GALLON INTERNAL FLOATING ROOF DENATURED ETHANOL STORAGE TANK #2 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of denatured ethanol processed through this storage tank shall not exceed either of the following limits: 1,000,000 gallons/day or 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. VOC emissions from the denatured ethanol storage tank shall not exceed 5.6 lb/day or 992 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emissions from equipment leaks associated with this denatured ethanol storage tank shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The combined maximum amount of denatured ethanol processed through the storage tanks operating under permits N-7365-16 and N-7365-17 shall not exceed 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The permittee shall maintain daily and annual records, in gallons, of the quantity of denatured ethanol processed through this storage tank. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 8. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [District Rule 4623 and 40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit
- 9. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit
- 10. This storage tank shall be equipped with an Ultraflote, model Dual Ultraseal, seal system. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit

- 12. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. The Ultraflote model Dual Ultraseal seal system shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. The geometry of the Ultraflote model Dual Ultraseal seal system shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors or 500 ppmv for pumps and compressor 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 or 500 ppmv for pumps and compressor seals above background is a violation of this permit and Rule 2201 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 24. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
- 25. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
- 26. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

- 27. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
- 28. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
- 29. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
- 30. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
- 31. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit
- 32. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
- 34. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 35. 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
- 36. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
- 37. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
- 38. 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

- 39. 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
- 40. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
- 41. Operator shall determine the true vapor pressure of each VOL, 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
- 42. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit
- 43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 45. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 46. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 47. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

- 49. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 50. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 51. 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] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-19-5

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

DENATURED ETHANOL BOTTOM TRUCK LOADING RACK WITH DRY BREAK COUPLERS SERVED BY A JOHN ZINK MODEL S3-AAD-1-70-90-6 HYDROCARBON VAPOR RECOVERY UNIT (VRU)

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Vapor return hose(s) shall be attached whenever loading equipment operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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
- All vapors displaced from trucks during load-out operations shall be routed through the hydrocarbon vapor recovery unit (VRU). [District Rule 2201] Federally Enforceable Through Title V Permit
- The hydrocarbon vapor recovery unit shall maintain a minimum control efficiency of 99% for VOC emissions. 6. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The VRU shall consist of two adsorption columns filled with activated carbon for VOC emission control and a dry vacuum pump and packed absorption column for activated carbon regeneration. One activated carbon column shall be on-stream receiving vapors in the adsorption mode while the other activated carbon column is off-stream in the regeneration mode. Each activated carbon column shall be regenerated at a frequency recommended by the manufacturer (typically ranging between 10 - 20 minutes). [District Rule 2201] Federally Enforceable Through Title V Permit
- The maximum amount of denatured ethanol loaded into trucks or railcars shall not exceed either of the following limits: 1,000,000 gallons/day or 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- Combined VOC emissions rate from existing and new loading racks shall not exceed 300,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Controlled VOC emissions rate from the vapor recovery system serving the denatured ethanol loading rack shall not exceed 0.0188 lb/1,000 gal-denatured ethanol loaded (equivalent to 10 milligrams of VOC / liter of ethanol loaded). This VOC emission rate is based on a six hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum number of gasoline hose disconnects performed by each ethanol truck loading operation shall not exceed 210 disconnects/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The maximum liquid spillage/leaks from each hose disconnect shall not exceed 10 milliliters. [District Rule 2201] Federally Enforceable Through Title V Permit

Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7366-19-5: Jul 27 2018 3:16PM - EDGEHILR

- 13. VOC emissions from the denatured ethanol truck loading operation shall not exceed 18.8 lb/day or 5,640 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. VOC emissions from disconnects from the denatured ethanol truck loading operation shall not exceed 7.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Fugitive VOC emissions from equipment leaks associated with the denatured ethanol truck loading operation shall not exceed 4.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Ongoing compliance with VOC emission rate from the exhaust vent of the VRU shall be demonstrated at least once per day by sampling the effluent gas stream with an FID, PID, or other District-approved VOC detection device. The VOC detection device shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations. [District Rule 2201 and 40 CFR Part 64]
- 18. The permittee shall maintain daily and annual records, in gallons, of the quantity of denatured ethanol processed through the loading rack. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain daily and annual records of the quantity of ethanol hose disconnects at the ethanol truck loading operation. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 20. The permittee shall maintain records of: (1) the daily compliance demonstrations taken with a FID, PID, or other District-approved VOC detection device, (2) make and model of the VOC detection device, and (3) calibration records of the VOC detection device. [District Rules 1070 and 2201, 40 CFR Part 64]
- 21. Source testing to demonstrate compliance with the overall VOC emissions rate from the exhaust of the VRU shall be conducted at least once every 12 months, with equipment in operational condition. Source testing shall be conducted while denatured ethanol is being processed through the loading rack. [District Rule 2201]
- 22. 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
- 23. Source testing for VOC emissions shall be conducted using EPA Method 18, 25 or 25A. If applicable, source testing shall also be conducted in accordance with EPA's Midwest Scaling Protocol for the Measurement of "VOC Mass Emissions" at Ethanol Production Facilities and/or any other testing methodology that has been previously approved by the District, CARB, and EPA. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 24. 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
- 25. During source testing, permittee shall maintain records of the amount of the ethanol loaded, measured in galethanol/hour. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 26. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 27. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 28. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

- 29. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 30. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 31. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 32. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 33. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-20-4

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

75.6 MMBTU/HR SUPERIOR BOILER WORKS NATURAL GAS-FIRED BOILER WITH A JOHN ZINK MODEL RMBU 32-G-2500 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #1)

## PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The exhaust stack of this boiler shall have the following parameters: stack height from ground level 50 feet; stack diameter 32 inches; and gas exit flowrate 13,000 cfm. [District Rule 4102]
- 4. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 5. Emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.0013 lb-VOC/MMBtu (equivalent to 3 ppmvd VOC @ 3% O2); 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 6. The combined maximum amount of fuel burned by the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22 shall not exceed 1,392.84 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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
- 8. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 9. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 10. 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
- 11. 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
- 12. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-20-4: Jul 27 2018 3:16PM - EDGEHILR

- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 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. 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
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The permittee shall 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
- 19. 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
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. 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
- 22. The permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain annual records, in standard cubic feet, of the combined quantity of natural gas burned in the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

24. 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 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-21-4

**EXPIRATION DATE: 09/30/2017** 

### **EQUIPMENT DESCRIPTION:**

75.6 MMBTU/HR SUPERIOR BOILER WORKS NATURAL GAS-FIRED BOILER WITH A JOHN ZINK MODEL RMBU 32-G-2500 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #2) .

## PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr [District Rules 4201 and 4301]
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The exhaust stack of this boiler shall have the following parameters: stack height from ground level 50 feet; stack diameter 32 inches; and gas exit flowrate 13,000 cfm. [District Rule 4102]
- 4. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 5. Emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.0013 lb-VOC/MMBtu (equivalent to 3 ppmvd VOC @ 3% O2); 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 6. The combined maximum amount of fuel burned by the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22 shall not exceed 1,392.84 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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
- 8. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 9. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 10. 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
- 11. 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
- 12. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-21-4 : Jul 27 2018 3.16PM - EDGEHILR

- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 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. 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
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The permittee shall 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
- 19. 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
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. 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
- 22. The permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain annual records, in standard cubic feet, of the combined quantity of natural gas burned in the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

24. 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 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-22-4

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

75.6 MMBTU/HR SUPERIOR BOILER WORKS NATURAL GAS-FIRED BOILER WITH A JOHN ZINK MODEL RMBU 32-G-2500 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #3)

### PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The exhaust stack of this boiler shall have the following parameters: stack height from ground level 50 feet; stack diameter 32 inches; and gas exit flowrate 13,000 cfm. [District Rule 4102]
- 4. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 5. Emissions shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.0013 lb-VOC/MMBtu (equivalent to 3 ppmvd VOC @ 3% O2); 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 6. The combined maximum amount of fuel burned by the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22 shall not exceed 1,392.84 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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
- 8. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 9. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 10. 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
- 11. 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
- 12. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE,STOCKTON, CA 95206 N-7365-22-4; Jul 27 2018 3:17PM – EDGEHILR

- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 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. 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
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The permittee shall 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
- 19. 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
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. 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
- 22. The permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain annual records, in standard cubic feet, of the combined quantity of natural gas burned in the boilers operating under permits N-7365-20, N-7365-21 and N-7365-22. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

24. 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 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-23-2

**EXPIRATION DATE:** 09/30/2017

### **EQUIPMENT DESCRIPTION:**

21,300 GPM INDUCED DRAFT COOLING TOWER SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
- 4. The exhaust stack of this cooling tower shall have the following parameters: stack height from ground level 40 feet; stack diameter 96 inches; and gas exit flowrate 159,000 acfm. [District Rule 4102]
- 5. Drift eliminator drift rate shall not exceed 0.001%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. PM10 emission rate from the cooling tower shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Compliance with the PM10 daily emission limit shall demonstrated as follows: PM10 lb/day = circulating water recirculation rate x total dissolved solids concentration in the water x design drift rate. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Compliance with the PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory within 120 days of initial operation and quarterly thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-23-2: Jul 27 2018 3:17PM - EDGEHILR

PERMIT UNIT: N-7365-29-1

EXPIRATION DATE: 09/30/2017

#### **EQUIPMENT DESCRIPTION:**

373 BHP CUMMINS MODEL CFP11E-F10 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER 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. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 4. 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, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 5. Emissions from this IC engine shall not exceed any of the following limits: 3.81 g-NOx/bhp-hr, 0.597 g-CO/bhp-hr, or 0.185 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 6. Emissions from this IC engine shall not exceed 0.072 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 7. This engine shall be operated only for testing and maintenance of the engine, 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". 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 Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. 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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-29-1: Jul 27 2018 3:17PM - EDGEHILR

- 11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 12. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-30-1

**EXPIRATION DATE:** 09/30/2017

### **EQUIPMENT DESCRIPTION:**

288 BHP CUMMINS MODEL CFP83-F40 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER 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. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 4. 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, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 5. Emissions from this IC engine shall not exceed any of the following limits: 3.47 g-NOx/bhp-hr, 0.447 g-CO/bhp-hr, or 0.31 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 6. Emissions from this IC engine shall not exceed 0.059 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 13 CCR 2423, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 7. This engine shall be operated only for testing and maintenance of the engine, 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". 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 Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. 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

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

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE,STOCKTON, CA 95206 N-7365-30-1: Jul 27 2018 3:17PM - EDGEHILR

- 11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 12. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 13. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit

**PERMIT UNIT: N-7365-31-1** 

**EXPIRATION DATE:** 09/30/2017

### **EQUIPMENT DESCRIPTION:**

60,000 GALLON TOTALLY ENCLOSED NATURAL GASOLINE STORAGE TANK (PRESSURE VESSEL) WITH A BOTTOM TRUCK UNLOADING RACK

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The maximum amount of natural gasoline removed from this storage tank and mixed with ethanol shall not exceed either of the following limits: 35,000 gallons/day or 6,000,000 gallons/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. There shall be no VOC emissions from this natural gasoline storage tank. [District Rules 2201 and 4623 and 40 CFR 60.110(d)(2)] Federally Enforceable Through Title V Permit
- 4. The maximum number of natural gasoline hose disconnects performed by the natural gasoline truck unloading operation shall not exceed either of the following limits: 12 disconnects/day or 1,200 disconnects/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The maximum liquid spillage/leaks from each hose disconnect shall not exceed 10 milliliters. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. VOC emissions from the natural gasoline truck unloading operation shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Fugitive VOC emissions from equipment leaks associated with this natural gasoline storage tank shall not exceed 0.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Fugitive VOC emissions shall be calculated using the EPA "1995 Protocol for equipment Leak Emissions Estimates" (EPA-453/R-95-017), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The permittee shall maintain daily and annual records, in gallons, of the quantity of natural gasoline removed from this storage tank and mixed with ethanol. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain daily and annual records of the quantity of natural gasoline hose disconnects at the natural gasoline truck unloading operation. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 11. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 12. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-31-1: Jul 27 2018 3:17PM - EDGEHILR

- 13. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 14. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 15. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 16. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 17. All records shall be retained on site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** N-7365-33-2

**EXPIRATION DATE:** 09/30/2017

### **EQUIPMENT DESCRIPTION:**

DENATURED-ETHANOL TRANSFER OPERATION FROM RAIL CAR TANKS TO THE TANKS UNDER PERMITS N-7365-16 AND '-17 CONSITING OF TWO PUMPS AND ASSOCIATED PIPING SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. The operator shall design, install, maintain and operate the equipment under this permit such that there are no leaks and no excess organic liquid drainage at disconnection. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 2. The operator shall install a pressure-vacuum relief device on the top of each rail car tank prior to off loading denatured ethanol. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. 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
- 4. Excess organic liquid drainage is defined as more than 10 mL liquid drainage. Such liquid drainage for disconnect operations shall be determined by computing the average drainage from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit
- 5. The amount of denatured ethanol loaded from rail cars into the storage tanks (N-7365-16 and '-17) using this operation shall be counted toward the daily and annual throughput of permit units N-7365-16 and '-17, and in no case shall exceed the limits in permits N-7365-16 and '-17. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. VOC emissions from disconnects from the denatured ethanol loading operation from rail cars to tanks shall not exceed 1.7 lb/day or 606 lb/yr in any 12 consecutive month rolling period [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Fugitive VOC emissions from equipment leaks associated with the denatured ethanol loading operation from rail cars to tanks shall not exceed 3.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Denatured ethanol shall be loaded into the storage vessels using bottom loading method. [District Rule 4624] Federally Enforceable Through Title V Permit
- 9. The operator shall determine an average organic liquid drainage (mL) for three consecutive disconnects to demonstrate compliance with the 10 mL (excess organic liquid drainage, equivalent to 0.017 pounds per disconnect). The drainage shall be determined within 60 days of initial startup under this permit and at least once a quarter thereafter at the time a leak inspection is performed. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 10. The operator shall inspect the components (e.g. valves, flanges, connectors etc.) for leaks within 60 days of initial startup under this permit and at least once every calendar quarter thereafter. 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 Rules 2201 and 4624] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-33-2; Jul 27 2018 3:17PM - EDGEHILR

- 11. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag with the date and time of leak detection, the date and time of leak measurement, and for gas leaks, the leak concentration in ppmv. The tag shall remain affixed to the component until the component is repaired or replaced. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. 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 Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 13. Valves, threaded connections, and flanges shall not leak VOCs in excess of 100 ppmv above background when measured in accordance with EPA Method 21, provided the total number of leaking tagged components of any component type does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 14. Pressure relief valves (PRVs) shall not leak VOC's in excess of 100 ppmv above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed 0.5 percent of the total number of components of that type inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 15. Process drains shall not leak VOC's in excess of 100 ppmv above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed 0.5 percent of the total number of components inspected. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 16. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 500 ppmv above background when measured in accordance with EPA Method 21. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit
- 17. 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-7365-0. [District Rule 4455] Federally Enforceable Through Title V Permit
- 18. This operation shall comply with the requirements of 40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified on facility wide permit N-7365-0. [40 CFR 60.480 and 60.481] Federally Enforceable Through Title V Permit
- 19. The operator shall keep records of daily liquid unloaded from the rail car tanks in gallons. [District Rule 4624] Federally Enforceable Through Title V Permit
- 20. The operator shall keep daily records of the date, number of disconnections per day, hours of equipment in-use, and VOC emissions (lb/day). Daily emissions shall be estimated as follows: VOC (lb/day) = 0.017 lb-VOC/disconnect x number of disconnections per day + 0.081 lb-VOC/hr x hours per day of equipment in-use. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. The operator shall keep monthly records of the month, year, number of disconnections, hours of equipment in-use, and VOC emissions (lb/month). Monthly emissions shall be estimated as follows: VOC (lb/month) = 0.017 lb-VOC/disconnect x number of disconnections per month + 0.081 lb-VOC/hr x hours per month of equipment in-use. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The operator shall keep record of total VOC emissions for each 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The operator shall keep records of the date, name of component and its location and measured ppmv value, name of the operator and the company conducting the leak inspection. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

- 24. The operator shall keep daily, monthly, and annual records of the amount of denatured ethanol loaded in each storage tanks N-7365-16 and '-17 using the equipment under this permit, and amount of denatured ethanol loaded from plant production. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained for a minimum of five years and shall be made available to the APCO, ARB, or EPA during normal business hours and submitted upon request. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

**PERMIT UNIT: N-7365-34-1** 

**EXPIRATION DATE:** 09/30/2017

**EQUIPMENT DESCRIPTION:** 

PILOT SCALE ANAEROBIC DIGESTER SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. The pilot scale anaerobic digester system includes two mixing tanks, a digester tank, a gas bag, carbon canisters and associated pipes, valves, flanges, connectors and pumps. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The biogas shall be disposed in the 2.4 MMBtu/hr A.H. Lundberg Associates Inc, regenerative thermal oxidizer shared with permit units N-7365-4, '-5, '-6, '-7, '-8, '-9, -10 and '-11. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 4. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of biogas combusted in the RTO shall be utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. No more than 2,112 cubic feet of biogas shall be incinerated in the RTO during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Hydrogen sulfide (H2S) concentration in the biogas prior to the combustion shall not exceed 600 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Emissions rates from the combustion of natural gas and biogas in the RTO burner shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.007 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. At least once every 120 days thereafter, the hydrogen sulfide concentration of the biogas shall be determined by an independent, certified laboratory using one of the following test methods: EPA Method 11, EPA Method 15, ASTM Method D1072, D3031, D4084, D3246, or D5504. Once three consecutive 120-day laboratory tests show compliance with the permitted hydrogen sulfide concentration limit, the laboratory testing frequency may be reduced to annually. If a subsequent annual laboratory test shows a violation of the permitted hydrogen sulfide concentration limit then 120-day laboratory testing shall resume and continue until three consecutive 120-day laboratory tests show compliance. Once compliance is shown on three consecutive 120-day laboratory tests, the laboratory testing frequency may return to annually. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 9. At least once every other week, the facility shall test the biogas to demonstrate compliance with the permitted hydrogen sulfide concentration limit using Draeger tubes or a District approved equivalent method. Once 12 consecutive biweekly tests show compliance, the testing frequency may be reduced to monthly. If a subsequent test shows a violation of the permitted hydrogen sulfide concentration limit then biweekly testing shall resume and continue until 12 consecutive tests show compliance. Once compliance is shown on 12 consecutive biweekly tests, the testing frequency may return to monthly. It is not necessary for the facility to perform Draeger tube or District approved equivalent method testing during the week in which either the 120-day or annual laboratory testing is performed. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

Facility Name: PACIFIC ETHANOL STOCKTON LLC Location: 3028 NAVY DRIVE, STOCKTON, CA 95206 N-7365-34-1: Jul 27 2018 3:17PM - EDGEHILR

- 10. Biogas sampling shall be conducted using the methods and procedures approved by the District. The District shall be notified each time the biogas sampling frequency changes. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The permittee shall maintain records of: (1) the name of the sampler, and the date and time of biogas sampling for H2S, (2) the name of the tester, and the date and time of biogas testing for H2S, (3) test results showing the biogas concentration (in ppmv) of H2S. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. The anaerobic digester system and its associated piping shall be inspected for leaks at least monthly. Any leak detected on the basis of sight, smell, or sound, shall be recorded and a corrective action shall be taken to eliminate the leak. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Records of leak inspections shall contain at least an identification of a person performing an inspection, date and time of the inspection, leak location, and corrective action taken to eliminate leaks. The records shall be maintained, kept, and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

# ATTACHMENT C

**Detailed Summary List of Facility Permits** 

SJVUAPCD NORTHERN

Detailed Facility Report
For Facility=7365 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

		ဢ	orted by I	Sorted by Facility Name and Permit Number	e and Perr	nit Numbe	<u></u>
PACIFIC ETHANOL STOCKTON LLC 3028 NAVY DRIVE STOCKTON, CA 95206	STOCKTON LLC 206		FAC# STATUS: TELEPHO	S: HONE:	N 7365 A		TYPE: <b>TitleV</b> EXPIRE ON: 09/30/2017 TOXIC ID: <b>70171</b> AREA: 9 / INSP. DATE: 06/19
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	ΔΠΥ	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-7365-1-3	380.5 total electric hp	3020-01 E	-	473.00	473.00	∢	TRUCK AND RAILCAR GRAIN RECEIVING AND STORAGE OPERATION INCLUDING A RECEIVING SHED, RAILCAR AND TRUCK RECEIVING HOPPERS, A RECEIVING DRAG CONVEYOR, A RECEIVING LEG (ELEVATOR), ALL SERVED BY A 25,000 GFM MAC EQUIPMENT MODEL 120MCF255 STYLE III BAGHOUSE; AND TWO (2) 500,000 BUSHEL CAPACITY STORAGE SILOS, TWO 5,000 BUSHEL CAPACITY INTERSTICE BINS AND ENCLOSED MECHANICAL CONVEYORS ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-2 AND -3)
N-7365-2-2	365 total electric hp	3020-01 E	<del>-</del>	473.00	473.00	∢	GRAIN GRINDING OPERATION #1 CONSISTING OF FULLY ENCLOSED MECHANICAL CONVEYORS, ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-1 AND '-3); AND ONE HAMMERMILL SERVED BY A 7,200 CFM MAC EQUIPMENT MODEL 96LVS81 STYLE II BAGHOUSE (BAGHOUSE EXHAUST SHARED WITH BAGHOUSE EXHAUST SHARED WITH BAGHOUSE
N-7365-3-2	365 total electric hp	3020-01 E	<del>.</del>	473.00	473.00	∢	GRAIN GRINDING OPERATION #2 CONSISTING OF FULLY ENCLOSED MECHANICAL CONVEYORS, ALL SERVED BY A 3,500 CFM MAC EQUIPMENT MODEL 96AVS36N STYLE III BAGHOUSE (BAGHOUSE SHARED WITH PERMITS N-7365-1 AND '-2); AND ONE HAMMERMILL SERVED BY A 7,200 CFM MAC EQUIPMENT MODEL 96LVS81 STYLE II BAGHOUSE (BAGHOUSE EXHAUST SHARED WITH BAGHOUSE EXHAUST SHARED WITH BAGHOUSE
N-7365-4-5	2.4 MMBtu/hr	3020-02 E	<del>-</del>	473.00	473.00	⋖	ONE 18,500 GALLON SLURRY TANK AND ONE 78,050 GALLON SLURRY MIX TANK SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-5, '-6, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-5, '-6, '-7, '-8, '-9, -10 AND '-11)
N-7365-5-5	29,653 Gallon	3020-05 C	-	157.00	157.00	⋖	29,653 GALLON YEAST TANK SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-6, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-6, '-7, '-8, '-9, -10 AND '-11)
N-7365-6-4	177,748 gallons	3020-05 E	-	283.00	283.00	⋖	ONE 177,748 GALLON LIQUEFACTION TANK SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-9, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTUJHR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-7, '-8, '-9, '-10 AND '-11)

718	Ed
7/27	3:20

SJVUAPCD NORTHERN

Detailed Facility Report
For Facility=7365 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

EQUIPMENT DESCRIPTION	FERMENTATION PROCESS CONSISTING OF FOUR 705,000 GALLON FIXED RCOF PROCESS TANKS, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-9) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-8). THE EXHAUST FROM THE PROCESS TANKS IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-8, '-9, -10 AND '-11)	ONE 928,526 GALLON FIXED ROOF BEERWELL PROCESS TANK, A CHILLER SYSTEM (SHARED WITH PERMIT N-7365-7) CONSISTING OF AN AIR COOLED ROTARY LIQUID CHILLER, AN ENCLOSED CHILLED WATER HOLDING TANK, CHILLED WATER INJECTORS, AND A KOCH GLICH CO2 WET SCRUBBER (SHARED WITH PERMIT N-7365-7). THE EXHAUST FROM THE PROCESS TANK IS VENTED THROUGH THE CHILLED WATER INJECTORS BEFORE ITS RELEASE INTO THE CO2 SCRUBBER WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-9, '-10 AND '-11)	DISTILLATION PROCESS CONSISTING OF ONE DE-GAS VESSEL, ONE BEER STRIPPER, ONE SIDE STRIPPER, ONE RECTIFIER, TWO MOLECULAR SIEVES AND ONE 200 PROOF ETHANOL CONDENSER, ALL SERVED BY KOCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-10 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-10 AND '-11)	ONE 190,400 GALLON PROCESS CONDENSATE TANK, COLLECTING WATER FROM THE CO2 AND VENT GAS SCRUBBERS, SERVED BY A KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-11) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-11)
PERMIT STATUS	⋖	∢	∢	⋖
FEE TOTAL	440.00	346.00	00.869	283.00
COLOR DE LE PERMIT  QTY AMOUNT TOTAL STATUS	440.00	346.00	698.00	283.00
dolled by	-	~	-	<del>-</del>
FEE RULE	3020-05 G	3020-05 F	3020-01 F	3020-05 E
FEE DESCRIPTION	4 × 750,000 gallons	928,526 gallons	555 total electric hp	190,400 gallons
PERMIT NUMBER	N-7365-7-5	N-7365-8-6	N-7365-9-3	N-7365-10-4

SJVUAPCD	NORTHERN

7/27/18 3:20 pm

Detailed Facility Report
For Facility=7365 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

ITEU DY FACILITY NAME TO THE PERMIT OUT OF AMOUNT TOTAL STATUS EQUIPMENT DESCRIPTION	WET CAKE PROCESS CONSISTING OF ONE 194,400 GALLON WHOLE STILLAGE TANK, ONE CENTRIFUGE SYSTEM WITH FIVE CENTRIFUGES, ONE 127,000 GALLON THIN STILLAGE TANK, THREE EVAPORATORS, ONE 129,600 GALLON STRUP TANK, CORN OIL EXTRACTION SYSTEM CONSISTING OF ONE 36,000 GALLON HEAT SOAK TANK, THREE CENTRIFUGES, ONE 800 GALLON BUFFER TANK, ONE 1,286 GALLON FINAL PRODUCT TANK, THREE 10,500 GALLON CORN OIL LOADOUT STORAGE TANKS ALL SERVED BY AN KOTCH GLICH VENT GAS SCRUBBER (SCRUBBER SHARED WITH PERMITS N-7365-4, '-5, '-6, '-9 AND '-10) WHICH IS VENTED TO A 2.4 MMBTU/HR A.H. LUNDBERG ASSOCIATES, INC. REGENERATIVE THERMAL OXIDIZER WITH A MAXON MODEL KINEDIZER LE LOW NOX BURNER (RTO SHARED WITH PERMITS N-7365-4, '-5, '-6, '-7, '-8, '-9 AND '-10) AND A TRUCK LOADOUT SYSTEM	NO A WET CAKE STORAGE AND TRUCK LOADOUT OPERATION WITH MECHANICAL CONVEYORS AND A PERMANENT STRUCTURE WITH EXHAUST VENTILATION SYSTEM (REVISED 4/20/09)	00 A 190,357 GALLON INTERNAL FLOATING ROOF 190-PROOF ETHANOL STORAGE TANK WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM	00 A 190,357 GALLON INTERNAL FLOATING ROOF 200-PROOF ETHANOL STORAGE TANK #1 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM	00 A 190,357 GALLON INTERNAL FLOATING ROOF 200-PROOF ETHANOL STORAGE TANK #2 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM	10 A 582,750 GALLON INTERNAL FLOATING ROOF DENATURED ETHANOL STORAGE TANK #1 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM	10 A 582,750 GALLON INTERNAL FLOATING ROOF DENATURED ETHANOL STORAGE TANK #2 WITH A ULTRAFLOTE MODEL DUAL ULTRASEAL SEAL SYSTEM	0 A DENATURED ETHANOL BOTTOM TRUCK LOADING RACK WITH DRY BREAK COUPLERS SERVED BY A JOHN ZINK MODEL S3-AAD-1-70-90-6 HYDROCARBON VAPOR RECOVERY UNIT (VRU)	0 A 75.6 MMBTU/HR SUPERIOR BOILER WORKS NATURAL GAS-FIRED BOILER WITH A JOHN ZINK MODEL RMBU 32-G-2500 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #1)	0 A 75.6 MMBTU/HR SUPERIOR BOILER WORKS NATURAL GAS-FIRED BOILER WITH A JOHN ZINK MODEL RMBU 32-G-2500 ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION SYSTEM (BOILER #2) .	
Name and Pe : FEE NT TOTAL	00.	00 136.00	00 283.00	00 283.00	00 283.00	00 346.00	00 346.00	228.00	1,183.00	00 1,183.00	00 1.183.00
LEG BY FACILITY INSTRUCTOR AMOUNT	698.00	1 136.00	1 283.00	1 283.00	1 283.00	1 346.00	1 346.00	1 228.00	1,183.00	1,183.00	1,183.00
SOLIE FEE RULE	3020-01 F	3020-01 B	3020-05 E	3020-05 E	3020-05 E	3020-05 F	3020-05 F	3020-01 C	3020-02 Н	3020-02 Н	3020-02 H
FEE DESCRIPTION	600 hp	32.5 total electric hp	190,357 gallons	190,357 gallons	190,357 gallons	582,750 gallons	582,750 gallons	55 total electric hp	75.6 MMBtu/hr	75.6 MMBtu/hr	75.6 MMBtu/hr
PERMIT NUMBER	N-7365-11-7	N-7365-12-2	N-7365-13-3	N-7365-14-3	N-7365-15-3	N-7365-16-3	N-7365-17-3	N-7365-19-5	N-7365-20-4	N-7365-21-4	N-7365-22-4

ω	Ε
127/1	20 pr
<u></u>	8

iled Facility I	Repor
iled	acility
Ŏ	etailed

SJVUAPCD NORTHERN

For Facility=7365 and excluding Deleted Permits Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	ατγ	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-7365-23-2	200 total electric hp	3020-01 E	<del>-</del>	473.00	473.00	<	21,300 GPM INDUCED DRAFT COOLING TOWER SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR
N-7365-29-1	373 bhp IC engine	3020-10 C	<del></del>	277.00	277.00	∢	373 BHP CUMMINS MODEL CFP11E-F10 TIER 2 CERTIFIED DIESEL- FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP
N-7365-30-1	288 bhp IC engine	3020-10 C	<del></del>	277.00	277.00	∢	288 BHP CUMMINS MODEL CFP83-F40 TIER 2 CERTIFIED DIESEL- FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP
N-7365-31-1	60,000 gallons	3020-05 D	<del>-</del>	213.00	213.00	∢	60,000 GALLON TOTALLY ENCLOSED NATURAL GASOLINE STORAGE TANK (PRESSURE VESSEL) WITH A BOTTOM TRUCK UNLOADING RACK
N-7365-33-2	50 hp electric motor	3020-01 C	<del></del>	228.00	228.00	∢	DENATURED-ETHANOL TRANSFER OPERATION FROM RAIL CAR TANKS TO THE TANKS UNDER PERMITS N-7365-16 AND '-17 CONSITING OF TWO PUMPS AND ASSOCIATED PIPING SYSTEM
N-7365-34-1	12,500 gallon tanks	3020-05 B	<del>-</del>	108.00	108.00	٧	PILOT SCALE ANAEROBIC DIGESTER SYSTEM

Number of Facilities Reported: 1

4