



May 25, 2023

Mr. Greg Clark Lodi Gas Storage, LLC P.O. Box 230 Acampo, CA 95220

Re: Notice of Preliminary Decision – Title V Permit Renewal

Facility Number: N-4238 Project Number: N-1213877

Dear Mr. Clark:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Lodi Gas Storage, LLC at 23265 N State Route 99 in Acampo, California.

The notice of preliminary decision for this project has been posted on the District's website (www.valleyair.org). 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. Nick Peirce, Permit Services Manager, at (209) 557-6454.

Sincerely,

Brian Clements

Director of Permit Services

Enclosures

CC: Courtney Graham, CARB (w/enclosure) via email Laura Yannayon, EPA (w/enclosure) via EPS CC:

> Samir Sheikh Executive Director/Air Pollution Control Officer

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation Lodi Gas Storage LLC N-4238

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TITLE V PERMIT RENEWAL EVALUATION

Natural Gas Storage Operation

Engineer: Matthew Robinson

Date: May 4, 2023

Facility Number: N-4238

Facility Name: Lodi Gas Storage LLC

Mailing Address: PO Box 230

Acampo, CA 95220-0230

Contact Name: Gregory Clark

Phone: (209) 368-9277, x-21

Responsible Official: Robert Russel

Title: Vice President, Field Operations

Project #: N-1213877

Deemed Complete: January 24, 2022

I. PROPOSAL

Lodi Gas Storage LLC was issued their last renewed Title V permit on May 8, 2018. 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 facility's last renewed 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

Lodi Gas Storage LLC is located at 23265 N State Route 99 in Acampo, 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 from model general permit templates and are not subject to further EPA or public review.

Permit Unit	Condition #s
N-4238-0-3	1 through 22, and 26 through 40

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated or Evaluated

- District Rule 2201, New and Modified Stationary Source Review Rule (amended February 18, 2016 ⇒ amended August 15, 2019)
- District Rule 2520, <u>Federally Mandated Operating Limits</u> (amended June 21, 2001 ⇒ amended August 15, 2019)
- District Rule 4311, <u>Flares</u>
 (amended June 18, 2009 ⇒ amended December 17, 2020)
- District Rule 4601, <u>Architectural Coatings</u>
 (amended December 17, 2009 ⇒ amended April 16, 2020)
- District Rule 4702, <u>Internal Combustion Engines</u>
 (amended November 14, 2013 ⇒ amended August 19, 2021)
- 40 CFR Part 63, Subpart ZZZZ, <u>National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for Stationary Reciprocating Internal Combustion Engines</u> (amended August 10, 2022)
- 40 CFR Part 64, <u>Compliance Assurance Monitoring (CAM)</u> (amended January 3, 2017)
- 40 CFR Part 82, Subpart B, <u>Servicing of Motor Vehicle Air Conditioners</u> (amended April 23, 2021)
- 40 CFR Part 82, Subpart F, <u>Recycling and Emission Reduction</u> (amended June 18, 2008 ⇒ amended April 10, 2020)

B. Rules Removed

There are no applicable rules that were removed since the last Title V renewal.

C. Rules Added

There are no applicable rules that were added since the last Title V renewal.

D. Rules Not Updated

- District Rule 1070, Inspections (amended December 17, 1992)
- District Rule 1100, Equipment Breakdown (amended December 17,1992)
- District Rule 1160, <u>Emission Statements</u> (adopted November 18, 1992)
- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, <u>Transfer of Permits</u> (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2410, <u>Prevention of Significant Deterioration</u> (Adopted June 16, 2011, effective November, 26, 2012)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 4201, <u>Particulate Matter Concentration</u> (amended December 17, 1992)
- District Rule 4301, <u>Fuel Burning Equipment</u> (amended December 17, 1992)
- District Rule 4408, <u>Glycol Dehydration Systems</u> (adopted December 19, 2002)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- 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 (amended August 19, 2004)</u>

- 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</u> <u>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 Part 60 Subpart JJJJ <u>New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines</u> (adopted January 18, 2008)

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, <u>Nuisance</u> (amended December 17, 1992) Title 17 CCR, Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines

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 in 2018.

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

District Rule 2201 has been amended since this facility's Title V permit was last 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.

B. District Rule 2520 - Federally Mandated Operating Permits

This rule has been amended since this facility's previous Title V permit was last renewed. The amendments to this rule were administrative, relating only to the notification procedures for Title V permit modifications that are required to go through a public notice. The amendments to the rule did not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation. 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, no further discussion of GHGs is included in this evaluation.

C. District Rule 4311 - Flares

The purpose of this rule is to limit emissions of volatile organic compounds (VOC), oxides of nitrogen (NOx), and sulfur oxides (SOx) from the operation of flares. Flares at this facility subject to this rule are:

N-4238-8-3: 1,250 MMBtu/hr flare used to evacuate flammable gas from sections of equipment when required for maintanence or

repair. Limited by permit condition to 375,645 scf/day and 2,496,700 scf/year.

N-4238-9-3: 5,000 MMBtu/hr flare used to evacuate flammable gas from equipment when required by emergency. Limited by permit condition to 371,645 scf/day.

The rule compliance discussion for flares under these permits is as follows:

2.0 Applicability

This rule is applicable to operations involving the use of flares. The natural gas storage operations at this facility may discharge gases that are combusted in the flares. Thus, the flares under permits N-4238-8-3 and -9-3 are subject to the requirements of this rule.

4.0 Exemptions

This section exempts the flares that are:

- Flares operated at municipal solid waste landfills that combust less than 2,000 MMscf of landfill gas per calendar year and that have ceased accepting waste.
- Flares that combust only propane or butane or a combination of propane and butane.
- Flares used for well testing, tank degassing, and pipeline degassing operations.
- Flares that combust regeneration gas.

The proposed flares are located at a natural gas storage operation. These flares do not qualify any of the above listed exemptions.

5.0 Requirements

The operator of any source subject to this rule shall comply with the following requirements:

- 5.1 Flares that are permitted to operate only during an emergency are not subject to the requirements of Sections 5.7, 5.8, 5.9 and 5.10.
- 5.2 Flares that are operated 200 hours or less per calendar year as specified in the Permit to Operate, or with an annual throughput limit equivalent to 200 hours per year at flare rating (MMBtu/hr) as specified in the Permit to Operate, are exempt from the requirements of Sections 5.9 and 5.10.
 - 5.2.1 For the 200 hours per year validation, the operator shall use a calibrated non-resettable totalizing time meter or equivalent method approved in writing by the APCO; or

5.2.2 For the annual throughput limit equivalent to 200 hours per year validation, the operator shall use a calibrated fuel meter or equivalent method approved in writing by the APCO.

The flare under permit N-4238-8-3 is limited by permit conditions to an annual throughput limit equivalent to less than 200 hours per year. Therefore, it is not subject to Sections 5.9 and 5.10. The following condition is included in permit N-4238-8-3:

• The quantity of natural gas burned by this flare shall not exceed 371,645 scf during any one day and shall not exceed 624,175 scf during any one calender quarter. [District Rules 2201 and 4311]

The flare under permit N-4238-9-3 is permitted to operate only during emergency and required upkeep. Therefore, it is not subject to Sections 5.7, 5.8, 5.9 and 5.10. The following condition is included in permit N-4238-9-3:

 The flare shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the flare for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District Rules 2201 and 4311]

Section 5.3 requires that the flame shall be present at all times when combustible gases are vented through the flare. The following condition is included in permits N-4238-8-3 and -9-3:

 The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311 and 40 CFR 60.18(c)(2)]

Section 5.4 requires that the outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. The following condition is included in permits N-4238-8-3 and -9-3:

 A pilot flame shall be present at all times that combustible gases are beng vented through the flare or the outlet shall be equipped with an automatic ignition system. [District Rule 4311 and 40 CFR 60.18(f)(2)]

Section 5.5 requires that except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present

shall be installed and operated. The following condition is included in permits N-4238-8-3 and -9-3:

 Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311 and 40 CFR 60.18(f)(2)]

Section 5.6 requires that flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. The following condition is included in permits N-4238-8-3 and -9-3:

 Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging.
 [District Rule 4311 and 40 CFR 60.18(f)(2)]

Section 5.7 requires that open flares in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. The requirements of this section shall not apply to Coanda effect flares. As discussed above in the discussion of Section 5.1, the flare of permit N-4238-9-3 is not subject to this section. The flares of permit N-4238-8-3 is a Coanda effect flare, therefore, the requirements of this section do not apply.

Section 5.8 requires that ground-level enclosed flares shall meet the emission standards in Table 1, except as specified in Section 5.9 and 5.10. The flares of permit N-4238-8-3 and -9-3 are not enclosed flares, therefore, this section does not apply.

Section 5.9 and 5.10 – As noted in Section 5.1 and 5.2, the flares at this facility are not subject Sections 5.9 or 5.10.

Section 5.11 states effective on and after July 1, 2011, flaring is prohibited at petroleum refineries and major sources, except landfill operations, unless it is consistent with an approved flare minimization plan (FMP), pursuant to Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.10 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere. The following condition is included in permit N-4238-8-3 to ensure on-going compliance with this section:

 Flaring is prohibited unless it is consistent with an approved Flare minimization Plan (FMP). The FMP shall be updated at least once every 5 years. [District Rule 4311]

Section 5.12 requires that the operator of a petroleum refinery shall minimize sulfur dioxide flare emissions to less than 0.50 tons per million barrels of crude processing capacity, calculated as an average over one calendar year. This facility is not a petroleum refinery, therefore, this section does not apply.

Section 5.13 requires that the operator of a flare at a petroleum refinery or major source, except landfill operations, subject to flare minimization requirements pursuant to Section 5.11 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate and maintain records pursuant to Section 6.1.7. The following condition is included in permits N-4238-8-3 and -9-3 to ensure ongoing compliance with this section:

 Volumetric flows of both the pilot gases and purge gases shall be monitored utilizing flow measuring devices or other methods approved by the District or they may be calculated based on pilot design and the parameters monitored. [District Rule 4311]

Section 5.14 requires on and after January 1, 2024, the operator of a flare subject to the annual throughput thresholds in Table 2 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate; the operator shall determine the heating value (Btu per cubic foot) of the vent gas annually in accordance with Section 6.3.6; the operator shall maintain records pursuant to Section 6.1.7; flares that the operator can verify, based on permit conditions, are not capable of exceeding the annual throughput thresholds in Table 2 shall not be required to monitor vent gas flow to the flare.

The flares under this project are not subject to any annual heat input limits in Table 2. Therefore, the vent gas flow monitoring with a flow measuring device is not required.

Section 5.15 requires the operator of a petroleum refinery or a flare at a major source, except landfill operations, with a flaring capacity equal to or greater than 50 MMBtu/hr to monitor the flare pursuant to Sections 6.6, 6.7, 6.8, 6.9, and 6.10 and requires that effective on and after January 1, 2024, the operator of any flare with a flaring capacity equal to or greater than 50 MMBtu per hour shall monitor the flare pursuant to Sections 6.6, 6.7, 6.8, 6.9, and 6.10.

The flares in this project are operated at a major source and rated more than 50 MMBtu/hr. Therefore, this section is applicable. Compliance with Sections 6.6 through 6.10 will be discussed below.

6.0 Administrative Requirements

6.1 Recordkeeping

Section 6.1 requires the below records be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request.

- 6.1.1 Copy of the compliance determination conducted pursuant to Section 6.4.1.
- 6.1.2 Copy of the source testing result conducted pursuant to Section 6.4.2.
- 6.1.3 For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation.
- 6.1.4 Operators claiming an exemption pursuant to Section 5.2 shall record annual hours of operation or annual throughput necessary to demonstrate an exemption under that section.
- 6.1.5 A copy of the approved flare minimization plan pursuant to Section 6.5.
- 6.1.6 A copy of annual reports submitted to the APCO pursuant to Section 6.2.
- 6.1.7 Monitoring data collected pursuant to Sections 5.13, 5.14, 6.6, 6.7, 6.8, 6.9, and 6.10.

The following conditions are included on the permits to ensure compliance:

N-4238-8-3:

The following records shall be kept: (1) a copy of the approved Flare
Minimization Plan; (2) a copy of the annual reports that were submitted to
the District; (3) vent gas composition records; (4) pilot and purge gas flow
records; (5) water seal monitoring records; (6) records of inoperation of
the flare monitoring systems. [District Rule 4311]

N-4238-9-3:

• The following records shall be kept: (1) for emergency operation, the duration of flare operation, amount of fuel burned and the nature of the emergency situation; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring activities; (6) records of inoperation of the flare monitoring systems; . [District Rule 4311]

6.2 Flare Reporting

6.2.1 Unplanned Flaring Event

Section 6.2.1 requires the operator to notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time.

The following condition is included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

 The permittee shall report unplanned flaring events within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever comes first. The notification shall include the flare source identification, the start date and time and the end date and time. [District Rule 4311]

6.2.2 Reportable Flaring Event

Section 6.2.2 requires effective on and after July 1, 2012, and annually thereafter, the operator of a flare, except for flares meeting the emission limits in Table 3, subject to flare minimization plans pursuant to Section 5.11 to submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. Beginning January 1, 2024, the report shall be submitted within 30 days following the end of the previous calendar year. The report shall include, but it not limited to all of the followings:

- 6.2.2.1 The results of an investigation to determine the primary cause and contributing factors of the flaring event;
- 6.2.2.2 Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented;
- 6.2.2.3 If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and
- 6.2.2.4 The date, time, and duration of the flaring event.

The flare of permit N-4238-8-3 is subject to requirements for FMP, but is limited by permit conditions to a daily throughput limit below the threshold of a Reportable Flaring Event. Therefore, on-going compliance with this section is expected.

6.2.3 Annual Monitoring Report

Section 6.2.3 requires until January 1, 2024, the operator of a flare at a petroleum refinery or major source, except landfill operations, subject to flare monitoring requirements pursuant to Sections 5.13, 5.14, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period.

Also, Section 6.2.3 states effective on and after January 1, 2024, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Sections 5.13, 5.14, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report in an electronic format approved by the District to the APCO within 30 days following the end of each calendar year for all required monitoring under those sections. The report shall include the following:

- 6.2.3.1 The total volumetric flow of vent gas in standard cubic feet for each day for the previous calendar year.
- 6.2.3.2 Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition, where applicable pursuant to Section 6.6.
- 6.2.3.3 If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.14, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month.
- 6.2.3.4 If the flow monitor used pursuant to Section 5.13 measures molecular weight, the average molecular weight for each hour of each month.
- 6.2.3.5 For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, as applicable pursuant to Section 6.7.
- 6.2.3.6 Flare monitoring system downtime periods, including dates and times, as applicable pursuant to Section 6.9.
- 6.2.3.7 For each day and for each month provide calculated sulfur dioxide emissions, as applicable.
- 6.2.3.8 A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5.
- 6.2.3.9 For flares subject to the annual throughput thresholds specified in Table 2, include the annual throughput in MMBtu for the previous calendar year.

The following condition is included in permit N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

 The permittee shall submit an Annual Monitoring Report in accordance with section 6.2.3 of Rule 4311. [District Rule 4311]

Note that flare is not subject to the annual heat input limit in Table 2; therefore, section 6.2.3.9 is not applicable.

6.3 Test Methods

Section 6.3.4 requires operators subject to vent gas composition monitoring requirements pursuant to Section 6.6 to use the methods described in Section 6.3.4.1 through Section 6.3.4.4. The following condition is included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

 Vent gas composition monitoring shall be conducted as specified in Sections 6.6 and 6.3 of District Rule 4311. [District Rule 4311]

Section 6.3.5 states for purposes of the flow verification report required by Section 6.2.3.8, vent gas flow shall be determined using one or more of the methods specified in Section 6.3.5.1 through Section 6.3.5.4, or by any alternative method approved by the APCO, ARB, and EPA. The following condition is included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

 Vent gas flow shall be determined using one or more of the following methods or by any alternative method approved by the District, ARB and EPA: (1) EPA Method 1 and 2; (2) a verification method recommended by the manufacturer of the flow monitoring equipment installed; (3) tracer gas dilution or velocity; or (4) other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311]

Section 6.3.6 requires that heating value of flare gas shall be determined by ASTM D1826-88 or ASTM D 1945-81 in conjunction with ASTM D3 3588-89; alternatively, an operator may elect to use a default heating value from Table 4. The following condition is included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

 Heating value of flare gas shall be determined by ASTM D1826-88 or ASTM D 1945-81 in conjunction with ASTM D3 3588-89; alternatively, an operator may elect to use 1,000 Btu/scf as default heating value. [District Rule 4311]

6.4 Compliance Determination

Section 6.4.1 requires that upon request, the operator of flares that are subject to Section 5.7 shall make available, to the APCO, the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). As discussed above in the context of Section 5.7, the flares of permit unit N-4238-8-3 and -9-3 are not subject to the requirements of Section 5.7. Therefore, the requirements of this section do not apply.

Section 6.4.2 requires that the operator of flares subject to emission limits in Table 1 and Table 3, Categories A, B, and C shall conduct source testing at least once every 12 months to demonstrate compliance with Section 5.8. The operator shall submit a copy of the testing protocol to the APCO at least 30 days in advance of the scheduled. The operator shall submit the source test results not later than 60 days after completion of the source testing. As discussed above in the context of Section 5.1 and 5.2, the flares of permit unit N-4238-8-3 and -9-3 are not subject to the requirements of Section 5.9 and 5.10. Therefore, the requirements of this section do not apply.

6.5 Flare Minimization Plan

Section 6.5.1 requires that by July 1, 2010, the operator of a petroleum refinery flare or any flare at a major source, except landfill operations, that has a flaring capacity of greater than or equal to 5.0 MMBtu per hour shall submit a flare minimization plan (FMP) to the APCO for approval. Section 6.5.1 required the FMP by July 1, 2010. This facility has submitted FMP as required by this section.

Section 6.5.2 requires that every five years after the initial FMP submittal, the operator hall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. The following condition will be included in permit N-4238-8-3 to ensure on-going compliance with this section:

 Flaring is prohibited unless it is consistent with an approved Flare minimization Plan (FMP). The FMP shall be updated at least once every 5 years. [District Rule 4311]

Section 6.5.3 requires that an updated FMP shall be submitted by the operator pursuant to Section 6.5 addressing new or modified equipment, prior to installing the equipment. Updated FMP submittals are only required if:

- 6.5.3.1 The equipment change would require an authority to construct (ATC) and would impact the emissions from the flare, and
- 6.5.3.2 The modification is not solely the removal or decommissioning of equipment that is listed in the FMP, and has no associated increase in flare emissions.

The following condition is included in permit N-4238-8-3 to ensure on-going compliance with this section:

 An updated FMP shall be submitted by the operator pursuant to section 6.5 of Rule 4311 (12/17/20) addressing new or modified equipment, prior to installing the equipment. Updated FMP submittals are only required if: 1) The equipment change would require an Authority to Construct (ATC) and would impact the emissions from the flare, and 2) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP, and has no associated increase in flare emissions. [District Rule 4311]

Section 6.5.4 requires that when submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. If a document is submitted that contains information designated confidential, the operator shall provide a justification for this designation and shall submit a separate copy of the document with the information designated confidential redacted.

The following condition is included in permit N-4238-8-3 to ensure on-going compliance with this section:

When submitting the initial FMP, or updated FMP, the operator shall
designate as confidential any information claimed to be exempt from public
disclosure under the California Public Records Act, Government Code
Section 6250 et seq. If a document is submitted that contains information
designated confidential, the operator shall provide a justification for this
designation and shall submit a separate copy of the document with the
information designated confidential redacted. [District Rule 4311]

6.6 Vent Gas Composition Monitoring

Section 6.6 requires effective on and after July 1, 2011, the operator of a petroleum refinery flare or any flare at a major source, except landfill operations, that has a flaring capacity equal to or greater than 50 MMBtu per hour shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5, as appropriate.

Effective on and after January 1, 2024, the operator of any flare with a flaring capacity equal to or greater than 50 MMBtu per hour, except landfill

operations, shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5, as appropriate.

The following condition is included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

 Vent gas composition monitoring shall be conducted as specified in Sections 6.6 and 6.3 of District Rule 4311. [District Rule 4311]

Section 6.6.6 states if flares share a common header, a sample from the header will be deemed representative of vent gas composition for all flares served by the header.

The following condition is included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

• If flares (N-4238-8-3 and -9-3) at this site shares a common header, a sample from the header shall be deemed representative of vent gas composition for all flares served by the header. [District Rule 4311]

Section 6.6.7 requires that the operator shall provide the APCO with access to the monitoring system to collect vent gas samples to verify the analysis required by Section 5.14. As discussed above in the context of Section 5.14, these are not subject to Section 5.14. Therefore, these flares are not subject to the requirements of 6.6.7.

6.7 Pilot and Purge Gas Monitoring

Section 6.7 required effective on and after July 1, 2011, the operator of a petroleum refinery flare or any flare at a major source, except landfill operations, that has a flaring capacity equal to or greater than 50 MMBtu per hour shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored.

In addition, section 6.7 require effective on and after January 1, 2024, the operator of any flare that has a flaring capacity equal to or greater than 50 MMBtu per hour shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored.

The following condition is included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

 Volumetric flows of both the pilot gases and purge gases shall be monitored utilizing flow measuring devices or other methods approved by the District or they may be calculated based on pilot design and the parameters monitored. [District Rule 4311]

6.8 Water Seal Monitoring

Section 6.8 required effective on and after July 1, 2011, the operator of a petroleum refinery flare or any flare at a major source, except landfill operations, that has a flaring capacity equal to or greater than 50 MMBtu per hour with a water seal shall monitor and record the water level and pressure of the water seal that services each flare daily or as specified on the Permit to Operate. In addition, Section 6.8 requires effective on and after January 1, 2024, the operator of any flare that has a flaring capacity equal to or greater than 50 MMBtu per hour with a water seal shall monitor and record the water level and pressure of the water seal that services each flare daily or as specified on the Permit to Operate.

The following condition is included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

• The operator shall monitor and record the water level and pressure of the water seal each day that the flare operates. [District Rule 4311]

6.9 General Monitoring

Section 6.9 required effective on and after July 1, 2011, the operator of a petroleum refinery flare or any flare at a major source, except landfill operations, that has a flaring capacity equal to or greater than 50 MMBtu per hour shall comply with the sections below, as applicable. In addition, section 6.9 also requires effective on and after January 1, 2024, the operator of any flare with a flaring capacity equal to or greater than 50 MMBtu per hour shall also comply with the below sections, as applicable.

- 6.9.1 Periods when the flare monitoring system is inoperative greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating.
- 6.9.2 During periods of inoperation of continuous analyzers or autosamplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4.

- During periods of inoperation of flow monitors required by Section 5.13, flow shall be calculated using good engineering practices.
- 6.9.3 Maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure.
- 6.9.4 All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages.

The following conditions are included in permits N-4238-8-3 and -9-3 to ensure on-going compliance with this section:

N-4238-8-3:

The following records shall be kept: (1) a copy of the approved Flare Minimization Plan; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring records ;(6) records of inoperation of the flare monitoring systems.. [District Rule 4311]

N-4238-9-3:

The following records shall be kept: (1) for emergency operation, the duration of flare operation, amount of fuel burned and the nature of the emergency situation; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring activities; (6) records of inoperation of the flare monitoring systems.

6.10 Video Monitoring

Section 6.10 requires the operator of a petroleum refinery flare to install and maintain equipment records a real-time digital image of the flare and flame at a frame rate of no less than one frame per minute. The recorded image of the flare shall be of sufficient size, contrast, and resolution to be readily apparent in the overall image or frame. The image shall include an embedded date and time stamp. The equipment shall archive the images for each 24-hour period. In lieu of video monitoring the operator may use an alternative monitoring method that provides data to verify date, time, vent gas flow, and duration of flaring events. The flares under this project are not at a petroleum refinery, therefore, the requirements of this section do not apply.

7.0 Compliance Schedule

This section list compliance deadlines for flares with either annual heat input limit (sections 5.9.1 & 5.10), or flares complying with emission limits in Table 3 (section 5.9.2). As discussed above in the context of Sections 5.1 and 5.2, these flares are not subject to Sections 5.9 and 5.10. Therefore, the requirements of this section do not apply.

Compliance is expected with this rule.

D. District Rule 4601 - Architectural Coatings

This rule limits the emissions of VOC's from architectural coatings. The VOC content limits for coatings and colorants are listed in Tables 1 and 2, respectively, of Section 5.0 of the amended rule. This rule also specifies architectural coatings storage, cleanup, and labeling requirements.

The following changes were included in the latest rule amendment that resulted in revising current permit requirements:

- Table of Standards 1 (through 12/31/2010) and Table of Standards 2 (after 1/1/2011) specifying the VOC content of different coatings and colorants have been replaced with Table 1 and Table 2 (effective after 1/1/2022) in Section 5.0.

To ensure compliance with Rule 4601 as amended 4/16/2020, conditions #23, 24, and 25 of the current facility-wide permit N-4238-0-2 will be replaced with conditions #23, 24, and 25 (below) on the draft facility-wide permit N-4238-0-3.

- No person shall manufacture, blend, repackage, supply, market, sell, solicit or apply any architectural coating or colorant with a VOC content in excess of the applicable limits specified in Table 1 (Coatings) and Table 2 (Colorants) of District Rule 4601 (4/16/20), unless exempted under section 4.0 of District Rule 4601 (Amended 4/16/20). [District Rule 4601]
- All VOC-containing materials subject to Rule 4601 (4/16/20) shall be stored in closed containers when not in use. [District Rule 4601]
- The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (4/16/20). [District Rule 4601]

E. District Rule 4702 - Internal Combustion Engines

The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SOx) from internal combustion engines. This rule applies to any internal combustion engine rated at 25 brake horsepower or greater. Therefore, the requirements of this rule apply to the four 4,445 bhp natural gas-fired engines (units N-4238-1 through -4) and the one 1,508 bhp natural gas-fired engine (unit N-4238-7) at this facility. Compliance with the requirements and provisions of this rule for permit units N-4238-1-7, -2-7, -3-7, and -4-7 were evaluated with projects N-1163242; permit unit N-4238-7-3 was evaluated in N-10435256.

a. N-4238-1-7, -2-7, 3-7, -4-7 (4,445 bhp natural gas-fired lean burn IC engines powering compressors):

The latest changes to this rule have not yet been approved by EPA as part of the SIP. Furthermore, the compliance deadline for the revised Rule 4702 requirements for this category of engines is in the future. The revisions to the engine permit for Rule 4702 compliance for these engines will be addressed in a separate project and no further discussion is necessary.

b. N-4238-7-4 (1,508 bhp natural gas-fired rich burn IC engine powering an electrical generator):

This engine is an emergency standby engine equipped with a nonresettable elapsed time meter. Therefore, the amended sections of this rule are not applicable to this engine. Because the amendments to District Rule 4702 do not affect the requirements for this permit unit and no additional conditions are required, the changes will not be addressed further.

F. 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for Stationary Reciprocating Internal Combustion Engines

Amendments to this section, since the most recent TV renewal, are only applicable to engines used to generate electricity to supplement the power grid in non-emergency situations as part of a financial arrangement. The permitted engines at this facility are only used to provide mechanical power or emergency electrical energy onsite. Thus, they are not affected by these amendments. Therefore, the latest amendments to Subpart ZZZZ did not result in any changes to the permits for the engines at this site.

G. 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_X	20,000
SO _X	140,000
PM ₁₀	140,000
CO	200,000
VOC	20,000

40 CFR Part 64 also contains a number of exemptions. The following are some examples of emission limitations or standards explicitly exempt from CAM requirements:

- Ones proposed by EPA after November 15, 1990, including NSPS and MACT standards;
- Ones for which a Part 70 permit already specifies a continuous compliance determination method, as defined in 40 CFR Part 64.1;
- An emission cap that meets the requirements specified in 40 CFR Part 70.4(b)(12); and
- Acid Rain Program requirements of Title IV.

In addition, control devices equipped with continuous emissions monitors are exempt from CAM under the continuous compliance determination method exemption. A CAM applicability review is performed below for the permit units at the facility.

a. N-4238-1-6 through -4-6: 4,445 bhp Natural Gas-Fired Engines w/ SCR

During the Initial Title V permitting action performed for this facility under project N-1110698, it was determined that these engines were subject to CAM requirements for NO_X and VOC emissions. The engines have been modified since the Initial Title V project was finalized on September 11, 2012; however, none of the modifications effect the CAM

applicability or CAM requirements of the engines. Therefore, these units will continue to be subject to the CAM requirements of 40 CFR 64 for NO_X and VOC emissions. The following conditions were taken from the current permits for the IC engines and will be included on the draft renewed permits as a mechanism to ensure continued compliance with the requirements of this subpart.

Permits	Conditions
N-4238-1-8 and '4-8	24, 28, 29, 42, 43, and 44
N-4238-2-10	30, 34, 35, 48, 49, and 50
N-4238-3-10	29, 33, 34, 47, 48, and 49

b. N-4238-5-6 and -6-6: Natural Gas Dehydration Operations Served by a Thermal Oxidizer

Units N-4238-5-6 and -6-6 are identical units. These units consist of gas dehydration equipment served by a shared thermal oxidizer. The permit contains emission limits for the dehydrating operation (VOC) and for the thermal oxidizer (NOx, SOx, PM₁₀, CO, and VOC). Since the thermal oxidizer is used to control emission from the gas dehydration equipment, it is not subject to CAM requirements. The pre-control annual PE for the gas dehydration operations is calculated below:

Pre-Control Annual PE:

EF VOC (Controlled): 0.0031 lb/MMscf of gas treated

Throughput Limit: 500 MMscf/day

VOC Control: 95%

Pre-Controlled EF = $(0.0031 \text{ lb-VOC/MMscf}) \div (1-0.95)$

= 0.062 lb-VOC/MMscf

Pre-Controlled PE = $(500 \text{ MMscf/day}) \times (0.062 \text{ lb/MMscf}) \times (365 \text{ days/year}) = 11,315 \text{ lb-VOC/year}$

Since the pre-control PE for this unit is below the Major Source threshold for VOC, the CAM requirements of 40 CFR 64 are not applicable to this unit and no further discussion is required.

c. N-4238-7-4 – 1,508 bhp Natural Gas-Fired Emergency Standby Engine w/ 3-way Catalyst

This emergency IC engine generates NOx, CO, VOC, PM₁₀ and SO_X emissions. The permit contains emission limits for all of these pollutants,

and engine is equipped with a 3-way catalyst, which controls NOx, CO, and VOC emissions. The pre-control annual PE for the engine is calculated below:

Pre-Control Annual PE:

Pre-control PE = PE \div (1 – CE)

	Pre-Control Annual PE					
	EF (g/bhp- hr)	bhp	Annual Hours	CF* (g/lb)	CE**	Pre-Control PE (lb/year)
NOx	1.0	1,508	100	453.6	0.9	3,325
CO	10	1,508	100	453.6	8.0	16,623
VOC	0.1	1,508	100	453.6	0.5	66

^{*} CF = Conversion Factor

Since the pre-control PE for this unit is below the Major Source threshold for NOx, CO, and VOC, the CAM requirements of 40 CFR 64 are not applicable to this unit and no further discussion is required.

d. N-4238-8-3: Repair and Maintenance Natural Gas Venting Operation

The repair and maintenance natural gas venting operation includes a flare which has the potential to emit NOx, SOx, PM₁₀, CO, and VOC. The permit contains emissions limits for all of these pollutants; however, the flare is not equipped with any add-on emission control device. Therefore, the CAM requirements of 40 CFR 64 are not applicable to this unit and no further discussion is required.

e. N-4238-9-3: Emergency Gas Venting Operation

The emergency gas venting operation includes a flare which has the potential to emit NOx, SOx, PM10, CO, and VOC. The permit contains emissions limits for all of these pollutants; however, the flare is not equipped with any add-on emission control device. Therefore, the CAM requirements of 40 CFR 64 are not applicable to this unit and no further discussion is required.

H. 40 CFR Part 82 Subpart B – Servicing of Motor Vehicle Air Conditioners

^{**} CE = Control Efficiency of 3-way Catalyst from *Update On Emissions - Form 960*, Second Edition, Waukesha Engine Division, Dresser Industries, October, 1991

The purpose of 40 CFR Part 82 Subpart B is to implement section 609 of the Clean Air Act, as amended regarding the servicing of motor vehicle air conditioners (MVACs), and to implement section 608 of the Clean Air Act regarding certain servicing, maintenance, repair and disposal of air conditioners in MVACs and MVAC-like appliances.

These regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

The amendments to this subpart did not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation. The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

Permit Unit	Condition #
N-4238-0-3	28

I. 40 CFR Part 82 Subpart F – <u>Servicing of Motor Vehicle Air Conditioners</u>

The purpose of 40 CFR Part 82 Subpart F is to reduce emissions of class I and class II refrigerants and their substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair, and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I and class II ODS in accordance with Title VI of the Clean Air Act.

These regulations apply to any person servicing, maintaining, or repairing appliances. This subpart also applies to persons disposing of appliances, including small appliances and motor vehicle air conditioners. In addition, this subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturer of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

The amendments to this subpart do not have any effect on the current permit requirements and therefore will not be addressed further in this evaluation.

Permit Unit	Condition #
N-4238-0-3	27

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

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-4238-0-3).

B. Requirements not Addressed by Model General Permit Templates

This Title V permit renewal does not include any proposals for new permit shields or modifications to any pre-existing permit shields. The proposed renewed Title V permit therefore does not include any new or modified permit shields.

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
- В.
- Previous Title V Operating Permit
 Detailed Summary List of Facility Permits C.

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-4238-0-3 EXPIRATION DATE: 06/30/2022

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 REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: LODI GAS STORAGE LLC

Location: 23265 N STATE ROUTE 99, ACAMPO, CA 95220 N-4238-0-3: Mar 1 2023 11:08AM - ROBINSOM

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

Facility Name: LODI GAS STORAGE LLC

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location:

N-4238-0-3 : Mar 1 2023 11:08AM -- ROBINSON

- 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. No person shall manufacture, blend, repackage, supply, market, sell, solicit or apply any architectural coating or colorant with a VOC content in excess of the applicable limits specified in Table 1 (Coatings) and Table 2 (Colorants) of District Rule 4601 (4/16/20), unless exempted under section 4.0 of District Rule 4601 (Amended 4/16/20) [District Rule 4601] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials subject to Rule 4601 (4/16/20) shall be stored in closed containers when not in use. [District Rule 4601] 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 (4/16/20). [District Rule 4601] 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

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Location: 23265 N STATE ROUTE 99,ACAMPO, CA 9522

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- 34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District 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. On September 30, 2012, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
- 42. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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Facility Name: LODI GAS STORAGE LLC 23265 N STATE ROUTE 99, ACAMPO, CA 9522

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Location:

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-4238-1-8

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

PERMIT UNIT REQUIREMENTS

- 1. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
- 2. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 5. Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 6. The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 7. The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 8. Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 9. An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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- 11. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The owners or operators must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 16. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 17. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
- 18. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
- 19. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 20. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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- 25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 28. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 31. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 34. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 35. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V

36. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

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- 37. 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
- 38. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 41. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. 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
- 43. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 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
- 44. 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
- 45. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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Facility Name: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95

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PERMIT UNIT: N-4238-2-10

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

PERMIT UNIT REQUIREMENTS

- 1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 7. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
- 8. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
- 9. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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Facility Name: LODI GAS STORAGE LLC

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- 13. The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 17. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 19. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. The owners or operators must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 21. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 22. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 23. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 24. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 25. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 26. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit

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- 29. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 32. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 34. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages, [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 37. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 38. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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Facility Name: LODI GAS STORAGE LLC

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- 39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 40. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 41. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 42. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
- 43. 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
- 44. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 45. 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 15% O2, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 46. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 47. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 48. 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
- 49. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 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
- 50. 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
- 51. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 9522

N-4238-2-10 : Mar 1 2023 11:08AM -- ROBINSON

PERMIT UNIT: N-4238-3-10

SECTION: 13 **TOWNSHIP:** 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

4.445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

PERMIT UNIT REQUIREMENTS

- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title 6. V Permit
- 7. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
- The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] 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: LODI GAS STORAGE LLC

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- 13. Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 17. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 19. The owners or operators must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 21. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 22. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 23. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 24. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 25. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit

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Facility Name: LODI GAS STORAGE LLC

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- 28. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 31. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 33. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 34. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages, [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 36. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 37. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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- 38. 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 39. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 40. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 41. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
- 42. 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
- 43. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. 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 15% O2, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 46. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 47. 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
- 48. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 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
- 50. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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Facility Name: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 9522

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PERMIT UNIT: N-4238-4-8

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

PERMIT UNIT REQUIREMENTS

- 1. The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
- 2. The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 5. Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 6. The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 7. The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 8. Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 9. An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] 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: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95220

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- 11. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The owners or operators must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 16. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 17. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 19. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 20. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC

Location: 23265 N STATE ROUTE 99, ACAMPO, CA 95220

N-4238-4-8 : Mar 1 2023 11:08AM -- ROBINSO

- 25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 28. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 31. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 34. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 35. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit

36. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC

- 37. 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
- 38. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 41. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. 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
- 43. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 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
- 44. 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
- 45. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC 23265 N STATE ROUTE 99, ACAMPO, CA 95

Location: N-4238-4-8 : Mar 1 2023 11:08AM -- ROBINSON

PERMIT UNIT: N-4238-5-6

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

NATURAL GAS DEHYDRATION OPERATION SERVED BY A 4.1 MMBTU/HR PERTREX GLYCOL REBOILER (PERMIT EXEMPT), 3-PHASE SEPARATOR SYSTEM, AND A 10.0 MMBTU/HR FIRECAT MODEL #2.10.12 THERMAL OXIDIZER AND TWO (2) BACK-UP EVOQUA MODEL SCRUB 2000 CARBON CANISTERS IN SERIES SHARED WITH PERMIT UNITS N-4238-5 AND N-4238-6

PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally 1. Enforceable Through Title V Permit
- The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 3. The thermal oxidizer shall only be fired on PUC-quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be equipped with an operational temperature indicator, and the temperature shall be recorded daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit before allowing the contaminated air stream into the thermal oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The thermal oxidizer shall operate in smokeless mode at all times. [District Rule 4408] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be equipped with an electronically controlled ignition system with a malfunction alarm if the pilot flame fails. [District Rule 4408] Federally Enforceable Through Title V Permit
- The emission control system shall be equipped with a liquid knock-out system to condense any condensible vapors. [District Rule 4408] Federally Enforceable Through Title V Permit
- 10. The thermal oxidizer shall be equipped with sight glass ports if the flame is not otherwise visible. [District Rule 4408] Federally Enforceable Through Title V Permit
- 11. Only glycol shall be used as the dehydration media. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. NOx emissions from the thermal oxidizer shall not exceed 0.06 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. SOx emissions from the thermal oxidizer shall not exceed 0.00285 lb/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: LODI GAS STORAGE LLC

N-4238-5-6 : Mar 1 2023 11:08AM -- ROBINSON

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location:

- 14. PM10 emissions from the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. CO emissions from the thermal oxidizer shall not exceed 0.2 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. VOC emissions from the thermal oxidizer shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The combined quantity of natural gas treated by permit units N-4238-5 and N-4238-6 shall not exceed 500 MMdscf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. VOC emissions from the dehydrator/reboiler shall not exceed 0.0031 lb/MMdscf of gas throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. VOC control efficiency of the thermal oxidizer shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 20. VOC control efficiency of the back-up carbon canisters shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 21. Source testing to measure the VOC control efficiency of the thermal oxidizer shall be conducted at least once every 24 months. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 22. Ongoing back-up carbon canister compliance with VOC emission rate and control efficiency requirements shall be demonstrated during each use of carbon canisters, by sampling both the influent and the effluent gas streams with an FID, PID, or other District-approved VOC detection device. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. 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 Rules 1081 and 4408] Federally Enforceable Through Title V Permit
- 25. 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. [District Rule 1081] Federally Enforceable Through Title V Permit
- 26. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 28. VOC emissions from the emission control system shall be determined by using EPA Method 25, 25A, 25B, or 18. Measurement of vapor flow through pipes shall be determined by EPA Methods 2 or 2A. [District Rules 1081 and 4408] Federally Enforceable Through Title V Permit
- 29. The VOC control efficiency shall be determined by comparing the measurements of VOC emissions from the uncontrolled glycol dehydration vent with measurements of VOC emissions from the emission control system. For both measurements, the glycol dehydration system shall operate under similar conditions for the following parameters: glycol flow rate, reboiler temperature, gas flow rate, and gas moisture removal efficiency. [District Rule 4408] Federally Enforceable Through Title V Permit
- 30. VOC emissions from glycol dehydration vents shall be determined using the Glycol Material Balance Method described in Section 6.2.1, or tested according to the methods listed in Section 6.2.2 of Rule 4408. [District Rule 4408] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95220

N-4238-5-6 : Mar 1 2023 11:08AM -- ROBINSON

- 31. The GRI-GLYCalc software, version 3.0 or higher, may be used to determine flow rates in lieu of methods listed in Section 6.2.2.6, 6.2.2.7 and 6.3.1.2 of Rule 4408. APCO and EPA approval must be gained prior to the use of this software. [District Rule 4408] Federally Enforceable Through Title V Permit
- 32. The permittee shall keep a record of the combined amount of natural gas treated by permit units N-4238-5 and N-4238-6, in MMdscf. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 33. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used; carbon canister emission rate and control efficiency measurements. [District Rule 4408] Federally Enforceable Through Title V Permit
- 34. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 952

N-4238-5-6 : Mar 1 2023 11:08AM -- ROBINSON

PERMIT UNIT: N-4238-6-6

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

NATURAL GAS DEHYDRATION OPERATION SERVED BY A 4.1 MMBTU/HR PERTREX GLYCOL REBOILER (PERMIT EXEMPT), 3-PHASE SEPARATOR SYSTEM, AND A 10.0 MMBTU/HR FIRECAT MODEL #2.10.12 THERMAL OXIDIZER AND TWO (2) BACK-UP EVOQUA MODEL SCRUB 2000 CARBON CANISTERS IN SERIES SHARED WITH PERMIT UNITS N-4238-5 AND N-4238-6

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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 3. The thermal oxidizer shall only be fired on PUC-quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The thermal oxidizer shall be equipped with an operational temperature indicator, and the temperature shall be recorded daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit before allowing the contaminated air stream into the thermal oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The thermal oxidizer shall operate in smokeless mode at all times. [District Rule 4408] Federally Enforceable Through Title V Permit
- 8. The thermal oxidizer shall be equipped with an electronically controlled ignition system with a malfunction alarm if the pilot flame fails. [District Rule 4408] Federally Enforceable Through Title V Permit
- 9. The emission control system shall be equipped with a liquid knock-out system to condense any condensible vapors. [District Rule 4408] Federally Enforceable Through Title V Permit
- 10. The thermal oxidizer shall be equipped with sight glass ports if the flame is not otherwise visible. [District Rule 4408] Federally Enforceable Through Title V Permit
- 11. Only glycol shall be used as the dehydration media. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. NOx emissions from the thermal oxidizer shall not exceed 0.06 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. SOx emissions from the thermal oxidizer shall not exceed 0.00285 lb/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: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95220

N-4238-6-6: Mar 1 2023 11:08AM -- ROBINSOM

- 14. PM10 emissions from the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. CO emissions from the thermal oxidizer shall not exceed 0.2 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. VOC emissions from the thermal oxidizer shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The combined quantity of natural gas treated by permit units N-4238-5 and N-4238-6 shall not exceed 500 MMdscf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. VOC emissions from the dehydrator/reboiler shall not exceed 0.0031 lb/MMdscf of gas throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. VOC control efficiency of the thermal oxidizer shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 20. VOC control efficiency of the back-up carbon canisters shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 21. Source testing to measure the VOC control efficiency of the thermal oxidizer shall be conducted at least once every 24 months. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 22. Ongoing back-up carbon canister compliance with VOC emission rate and control efficiency requirements shall be demonstrated during each use of carbon canisters, by sampling both the influent and the effluent gas streams with an FID, PID, or other District-approved VOC detection device. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. 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 Rules 1081 and 4408] Federally Enforceable Through Title V Permit
- 25. 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. [District Rule 1081] Federally Enforceable Through Title V Permit
- 26. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 28. VOC emissions from the emission control system shall be determined by using EPA Method 25, 25A, 25B, or 18. Measurement of vapor flow through pipes shall be determined by EPA Methods 2 or 2A. [District Rules 1081 and 4408] Federally Enforceable Through Title V Permit
- 29. The VOC control efficiency shall be determined by comparing the measurements of VOC emissions from the uncontrolled glycol dehydration vent with measurements of VOC emissions from the emission control system. For both measurements, the glycol dehydration system shall operate under similar conditions for the following parameters: glycol flow rate, reboiler temperature, gas flow rate, and gas moisture removal efficiency. [District Rule 4408] Federally Enforceable Through Title V Permit
- 30. VOC emissions from glycol dehydration vents shall be determined using the Glycol Material Balance Method described in Section 6.2.1, or tested according to the methods listed in Section 6.2.2 of Rule 4408. [District Rule 4408] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location: N-4238-6-6 : Mar 1 2023 11:08AM -- ROBINSON

- 31. The GRI-GLYCalc software, version 3.0 or higher, may be used to determine flow rates in lieu of methods listed in Section 6.2.2.6, 6.2.2.7 and 6.3.1.2 of Rule 4408. APCO and EPA approval must be gained prior to the use of this software. [District Rule 4408] Federally Enforceable Through Title V Permit
- 32. The permittee shall keep a record of the combined amount of natural gas treated by permit units N-4238-5 and N-4238-6, in MMdscf. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 33. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used; carbon canister emission rate and control efficiency measurements. [District Rule 4408] Federally Enforceable Through Title V Permit
- 34. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC 23265 N STATE ROUTE 99, ACAMPO, CA 952

Location: N-4238-6-6 : Mar 1 2023 11:08AM -- ROBINSON

PERMIT UNIT: N-4238-7-4

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

1.508 BHP WAUKESHA MODEL VHP7100GSI RICH BURN NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR. THE ENGINE IS SERVED BY A 3-WAY CATALYTIC CONVERTER

PERMIT UNIT REQUIREMENTS

- The exhaust stack height shall be at least 25 feet above ground level. [District Rule 4102]
- 2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] 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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 7. Only PUC-quality natural gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 1.0 g-NOx/bhp-hr; 10 g-CO/bhp-hr; 0.1 g-VOC/bhp-hr; 0.1 g-PM10/bhp-hr; or 0.0066 g-SOx/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per year. [District Rules 2201, 4701, and 4702, and 40 CFR Part 63 Subpart ZZZZ] 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
- 11. 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] 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: LODI GAS STORAGE LLC

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location: N-4238-7-4 : Mar 1 2023 11:09AM -- ROBINSON

- 12. 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
- 13. The permittee shall maintain monthly records of emergency and non-emergency operation and of the type of fuel used. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. The permittee must collect and submit an annual report including location, dates and times of operation if the engine operates for more than 15 hours and up to 100 hours per year for emergency demand response. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 17. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 19. The engine's spark plugs shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC 23265 N STATE ROUTE 99, ACAMPO, CA 9522

Location: N-4238-7-4 : Mar 1 2023 11:09AM -- ROBINSOM

PERMIT UNIT: N-4238-8-3

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

REPAIR AND MAINTENANCE NATURAL GAS VENTING OPERATIONS SERVED BY A 1,250 MMBTU/HR FLARE WITH ONE KALDAIR MODEL I-12-H-VS TIP

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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 3. The maintenance flare (N-4238-8) and the emergency flare (N-4238-9) shall not operate simultaneously. The flares shall be equipped with an interlock system that prevents simultaneous operation. [District Rule 4102]
- The quantity of natural gas burned by this flare shall not exceed 120,000 scf during any one hour while other fuel burning equipment is operating. [District Rule 4102]
- The quantity of natural gas burned by this flare shall not exceed 350,000 scf during any one hour while no other fuel burning equipment is operating. [District Rule 4102]
- The quantity of natural gas burned by this flare shall not exceed 371,645 scf during any one day and shall not exceed 624,175 scf during any one calender quarter. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- The NOx emissions shall not exceed 0.14 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CO emissions shall not exceed 0.43 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- The VOC emissions shall not exceed 0.11 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.00285 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 0.0075 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The flare shall operate with smokeless combustion. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. A flame shall be present at all times that combustible gases are being vented through the flare. [District Rule 4311and 40 CFR 60.18(c)(2)] Federally Enforceable Through Title V Permit
- 14. A pilot flame shall be present at all times that combustible gases are beng vented through the flare or the outlet shall be equipped with an automatic ignition system. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit

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

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location:

N-4238-8-3 : Mar 1 2023 11:09AM -- ROBINSON

Facility Name: LODI GAS STORAGE LLC

- 15. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
- 16. Flares that use flow-sensing automatic ignition systems and do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
- 17. Flaring is prohibited unless it is consistent with an approved Flare minimization Plan (FMP). The FMP shall be updated at least once every 5 years. [District Rule 4311] Federally Enforceable Through Title V Permit
- 18. An updated FMP shall be submitted by the operator pursuant to section 6.5 of Rule 4311 (12/17/20) addressing new or modified equipment, prior to installing the equipment. Updated FMP submittals are only required if: 1) The equipment change would require an Authority to Construct (ATC) and would impact the emissions from the flare, and 2) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP, and has no associated increase in flare emissions. [District Rule 4311] Federally Enforceable Through Title V Permit
- 19. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. If a document is submitted that contains information designated confidential, the operator shall provide a justification for this designation and shall submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311] Federally Enforceable Through Title V Permit
- 20. Inoperation of the flare monitoring equipment shall not exceed 14 days during any 18-consecutive-month period. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1 and 6.9.2] Federally Enforceable Through Title V Permit
- 21. Periods of flare monitoring system inoperation of greater than 24 continuous hours shall be reported to the District by the following working day, followed by notification of resumption of monitoring. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 22. The permittee shall report unplanned flaring events within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever comes first. The notification shall include the flare source identification, the start date and time and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
- 23. The permittee shall submit an Annual Monitoring Report in accordance with section 6.2.3 of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
- 24. All required monitoring and recording devices shall be maintained in accordance with the applicable manufacturer's specifications. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 25. Vent gas composition monitoring shall be conducted as specified in Sections 6.6 and 6.3 of District Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
- 26. If flares (N-4238-8-3 and -9-3) at this site shares a common header, a sample from the header shall be deemed representative of vent gas composition for all flares served by the header. [District Rule 4311] Federally Enforceable Through Title V Permit
- 27. Vent gas flow shall be determined using one or more of the following methods or by any alternative method approved by the District, ARB and EPA: (1) EPA Method 1 and 2; (2) a verification method recommended by the manufacturer of the flow monitoring equipment installed; (3) tracer gas dilution or velocity; or (4) other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311] Federally Enforceable Through Title V Permit
- 28. Volumetric flows of both the pilot gases and purge gases shall be monitored utilizing flow measuring devices or other methods approved by the District or they may be calculated based on pilot design and the parameters monitored.

 [District Rule 4311] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC

Location: 23265 N STATE ROUTE 99, ACAMPO, CA 95220 N-4238-8-3: Mar 1 2023 11:09AM -- ROBINSOM

- 29. Heating value of flare gas shall be determined by ASTM D1826-88 or ASTM D 1945-81 in conjunction with ASTM D3 3588-89; alternatively, an operator may elect to use 1,000 Btu/scf as default heating value. [District Rule 4311] Federally Enforceable Through Title V Permit
- 30. The operator shall monitor and record the water level and pressure of the water seal each day that the flare operates. [District Rule 4311] Federally Enforceable Through Title V Permit
- 31. The following records shall be kept: (1) a copy of the approved Flare Minimization Plan; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring records; (6) records of inoperation of the flare monitoring systems. [District Rule 4311] Federally Enforceable Through Title V Permit
- 32. Records of the hourly, daily, quarterly and annual fuel consumption, in standard cubic feet, shall be kept. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 33. All records shall be maintained, retained on site for a minimum of five years and shall be made available to the District, ARB or EPA upon request. [District Rules 2201, 4102, and 4311, 6.1] Federally Enforceable Through Title V Permit

These terms and condition he Facility-wide Permit to Operate.

Facility Name: LODI GAS STORAGE LLC 23265 N STATE ROUTE 99, ACAMPO, CA 953

Location: N-4238-8-3 : Mar 1 2023 11:09AM -- ROBINSON

PERMIT UNIT: N-4238-9-3

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

EMERGENCY GAS VENTING OPERATION SERVED BY A 5,000 MMBTU/HR FLARE WITH FOUR KALDAIR MODEL I-

12-H-VS TIPS

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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 3. The emergency flare (N-4238-9) and the maintenance flare (N-4238-8) shall not operate simultaneously. The flares shall be equipped with an interlock system that prevents simultaneous operation. [District Rule 4102]
- The flare shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the flare for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- The quantity of natural gas burned for testing and maintenance purposes shall not exceed 120,000 scf during any one hour. [District Rule 4102]
- The quantity of natural gas burned shall not exceed 371,645 scf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The NOx emissions shall not exceed 0.14 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CO emissions shall not exceed 0.43 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- The VOC emissions shall not exceed 0.11 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.00285 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 0.0075 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The flare shall operate with smokeless combustion. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. A flame shall be present at all times that combustible gases are being vented through the flare. [District Rule 4311 and 40 CFR 60.18(c)(2)] Federally Enforceable Through Title V Permit
- 14. A pilot flame shall be present at all times that combustible gases are beng vented through the flare or the outlet shall be equipped with an automatic ignition system. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC 23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location:

N-4238-9-3 : Mar 1 2023 11:09AM -- ROBINSON

- 15. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
- 16. Flares that use flow-sensing automatic ignition systems and do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311 and 40 CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
- 17. Inoperation of the flare monitoring equipment shall not exceed 14 days during any 18-consecutive-month period. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1 and 6.9.2] Federally Enforceable Through Title V Permit
- 18. Periods of flare monitoring system inoperation of greater than 24 continuous hours shall be reported to the District by the following working day, followed by notification of resumption of monitoring. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 19. The permittee shall report unplanned flaring events within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever comes first. The notification shall include the flare source identification, the start date and time and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
- 20. The permittee shall submit an Annual Monitoring Report in accordance with section 6.2.3 of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
- 21. All required monitoring and recording devices shall be maintained in accordance with the applicable manufacturer's specifications. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 22. Vent gas composition monitoring shall be conducted as specified in Sections 6.6 and 6.3 of District Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
- 23. If flares (N-4238-8-3 and -9-3) at this site shares a common header, a sample from the header shall be deemed representative of vent gas composition for all flares served by the header. [District Rule 4311] Federally Enforceable Through Title V Permit
- 24. Vent gas flow shall be determined using one or more of the following methods or by any alternative method approved by the District, ARB and EPA: (1) EPA Method 1 and 2; (2) a verification method recommended by the manufacturer of the flow monitoring equipment installed; (3) tracer gas dilution or velocity; or (4) other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311] Federally Enforceable Through Title V Permit
- 25. Volumetric flows of both the pilot gases and purge gases shall be monitored utilizing flow measuring devices or other methods approved by the District or they may be calculated based on pilot design and the parameters monitored. [District Rule 4311] Federally Enforceable Through Title V Permit
- 26. Heating value of flare gas shall be determined by ASTM D1826-88 or ASTM D 1945-81 in conjunction with ASTM D3 3588-89; alternatively, an operator may elect to use 1,000 Btu/scf as default heating value. [District Rule 4311] Federally Enforceable Through Title V Permit
- 27. The operator shall monitor and record the water level and pressure of the water seal each day that the flare operates. [District Rule 4311] Federally Enforceable Through Title V Permit
- 28. The following records shall be kept: (1) for emergency operation, the duration of flare operation, amount of fuel burned and the nature of the emergency situation; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring activities; (6) records of inoperation of the flare monitoring systems. [District Rule 4311] Federally Enforceable Through Title V Permit
- 29. Records of the hourly and daily fuel consumption, in standard cubic feet, shall be kept. [District Rules 2201 and 4102] 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: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95220

N-4238-9-3 : Mar 1 2023 11:09AM -- ROBINSOM

30. All records shall be maintained, retained on site for a minimum of five years and shall be made available to the District, ARB or EPA upon request. [District Rules 2201, 4102, and 4311, 6.1] Federally Enforceable Through Title V Permit

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

Facility Name: LODI GAS STORAGE LLC Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95220 N-4238-9-3: Mar 1 2023 11:09AM - ROBINSOM

ATTACHMENT B Previous Title V Operating Permit

FACILITY: N-4238-0-2 **EXPIRATION DATE:** 06/30/2022

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
- 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
- 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
- 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
- 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
- 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
- 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
- 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
- The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: LODI GAS STORAGE LLC

Location: 23265 N STATE ROUTE 99, ACAMPO, CA 95220 N-4238-0-2: Feb 21 2023 3:33PM -- ROBINSOM

- 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.

Facility Name: LODI GAS STORAGE LLC

Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95220 N-4238-0-2: Feb 21 2023 3:33PM -- ROBINSOM

- 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
- 30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 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. On September 30, 2012, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
- 42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

N-4238-0-2 : Feb 21 2023 3:33PM -- ROBINSON

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: N-4238-1-1 EXPIRATION DATE: 06/30/2027

LEGAL OWNER OR OPERATOR: LODI GAS STORAGE LLC

MAILING ADDRESS: PO BOX 230

ACAMPO, CA 95220

FACILITY LOCATION: 23265 N STATE ROUTE 99

ACAMPO, CA 95220

EQUIPMENT DESCRIPTION:

4.5 MMBTU/HR PETREX S/N JO172V02 NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL XPO 4 PB4 1B3HNYLT LOW NOX BURNER

CONDITIONS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
- 5. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
- 6. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
- 7. The owner/operator shall maintain records to verify that the required tune-ups have been performed. [District Rule 4307]
- 8. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
- 9. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Samir Sheikh

Director of Permit Service

Executive Director / APCO

PERMIT UNIT: N-4238-1-6 **EXPIRATION DATE:** 06/30/2022

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

4.445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

PERMIT UNIT REQUIREMENTS

- The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
- The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZl Federally Enforceable Through Title V Permit
- Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and 7. shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] 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: LODI GAS STORAGE LLC Location:

23265 N STATE ROUTE 99, ACAMPO, CA 95220

- 11. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The owners or operators must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 16. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 17. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
- 18. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
- 19. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 20. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 28. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 31. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 34. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 35. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V
- 36. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

Facility Name: LODI GAS STORAGE LLC

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location:

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- 37. 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
- 38. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 41. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. 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
- 43. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 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
- 44. 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
- 45. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location:

N-4238-1-6 : Feb 21 2023 3:33PM -- ROBINSON

PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: N-4238-2-1 EXPIRATION DATE: 06/30/2027

LEGAL OWNER OR OPERATOR: LODI GAS STORAGE LLC

MAILING ADDRESS: PO BOX 230

ACAMPO, CA 95220

FACILITY LOCATION: 23265 N STATE ROUTE 99

ACAMPO, CA 95220

EQUIPMENT DESCRIPTION:

4.5 MMBTU/HR PETREX S/N JO245V02 NATURAL GAS-FIRED PROCESS HEATER WITH A MAXON MODEL XPO 4 PB4 1B3HNYLT LOW NOX BURNER

CONDITIONS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
- 5. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
- 6. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
- 7. The owner/operator shall maintain records to verify that the required tune-ups have been performed. [District Rule 4307]
- 8. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
- 9. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

Samir Sheikh

Director of Permit Service

Executive Director / APCO

PERMIT UNIT: N-4238-2-7 **EXPIRATION DATE:** 06/30/2022

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

4.445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

PERMIT UNIT REQUIREMENTS

- The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
- The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR Part 63 Subpart ZZZZI Federally Enforceable Through Title V Permit
- Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and 7. shall be replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V **Permit**
- 10. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR Part 63 Subpart ZZZZ] 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: LODI GAS STORAGE LLC

Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95220 N-4238-2-7 : Feb 21 2023 3:33PM - ROBINSOM

- 11. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The owners or operators must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 16. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 17. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
- 18. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
- 19. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
- 20. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. All portable analyzer 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 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 28. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
- 31. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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 Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 34. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 35. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V
- 36. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

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- 37. 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
- 38. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 41. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. 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
- 43. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 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
- 44. 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
- 45. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702 and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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EXPIRATION DATE: 06/30/2022 **PERMIT UNIT:** N-4238-5-5

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

NATURAL GAS DEHYDRATION OPERATION SERVED BY A 4.1 MMBTU/HR PERTREX GLYCOL REBOILER (PERMIT EXEMPT), 3-PHASE SEPARATOR SYSTEM, AND A 10.0 MMBTU/HR FIRECAT MODEL #2.10.12 THERMAL OXIDIZER AND TWO (2) BACK-UP EVOQUA MODEL SCRUB 2000 CARBON CANISTERS IN SERIES SHARED WITH PERMIT UNITS N-4238-5 AND N-4238-6

PERMIT UNIT REQUIREMENTS

- The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures 1. of District Rule 2520. [District Rule 2520] 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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall only be fired on PUC-quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be equipped with an operational temperature indicator, and the temperature shall be recorded daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit before allowing the contaminated air stream into the thermal oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall operate in smokeless mode at all times. [District Rule 4408] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be equipped with an electronically controlled ignition system with a malfunction alarm if the pilot flame fails. [District Rule 4408] Federally Enforceable Through Title V Permit
- 10. The emission control system shall be equipped with a liquid knock-out system to condense any condensible vapors. [District Rule 4408] Federally Enforceable Through Title V Permit
- 11. The thermal oxidizer shall be equipped with sight glass ports if the flame is not otherwise visible. [District Rule 4408] Federally Enforceable Through Title V Permit
- 12. Only glycol shall be used as the dehydration media. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. NOx emissions from the thermal oxidizer shall not exceed 0.06 lb/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: LODI GAS STORAGE LLC

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location:

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- 14. SOx emissions from the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. PM10 emissions from the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. CO emissions from the thermal oxidizer shall not exceed 0.2 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. VOC emissions from the thermal oxidizer shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The combined quantity of natural gas treated by permit units N-4238-5 and N-4238-6 shall not exceed 500 MMdscf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. VOC emissions from the dehydrator/reboiler shall not exceed 0.0031 lb/MMdscf of gas throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. VOC control efficiency of the thermal oxidizer shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 21. VOC control efficiency of the back-up carbon canisters shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 22. Source testing to measure the VOC control efficiency of the thermal oxidizer shall be conducted at least once every 24 months. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 23. Ongoing back-up carbon canister compliance with VOC emission rate and control efficiency requirements shall be demonstrated during each use of carbon canisters, by sampling both the influent and the effluent gas streams with an FID, PID, or other District-approved VOC detection device. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 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 Rules 1081 and 4408] Federally Enforceable Through Title V Permit
- 26. 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. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
- 28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 29. VOC emissions from the emission control system shall be determined by using EPA Method 25, 25A, 25B, or 18. Measurement of vapor flow through pipes shall be determined by EPA Methods 2 or 2A. [District Rules 1081 and 44081 Federally Enforceable Through Title V Permit
- 30. The VOC control efficiency shall be determined by comparing the measurements of VOC emissions from the uncontrolled glycol dehydration vent with measurements of VOC emissions from the emission control system. For both measurements, the glycol dehydration system shall operate under similar conditions for the following parameters: glycol flow rate, reboiler temperature, gas flow rate, and gas moisture removal efficiency. [District Rule 4408] Federally Enforceable Through Title V Permit

- 31. VOC emissions from glycol dehydration vents shall be determined using the Glycol Material Balance Method described in Section 6.2.1, or tested according to the methods listed in Section 6.2.2 of Rule 4408. [District Rule 4408] Federally Enforceable Through Title V Permit
- 32. The GRI-GLYCalc software, version 3.0 or higher, may be used to determine flow rates in lieu of methods listed in Section 6.2.2.6, 6.2.2.7 and 6.3.1.2 of Rule 4408. APCO and EPA approval must be gained prior to the use of this software. [District Rule 4408] Federally Enforceable Through Title V Permit
- 33. The permittee shall keep a record of the combined amount of natural gas treated by permit units N-4238-5 and N-4238-6, in MMdscf. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 34. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used; carbon canister emission rate and control efficiency measurements. [District Rule 4408] Federally Enforceable Through Title V Permit
- 35. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

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EXPIRATION DATE: 06/30/2022 **PERMIT UNIT:** N-4238-3-6

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

4.445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

PERMIT UNIT REQUIREMENTS

- The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
- The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZl Federally Enforceable Through Title V Permit
- Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and 7. shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] 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: LODI GAS STORAGE LLC

- 11. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The owners or operators must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 16. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 17. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 19. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 20. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
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- 23. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
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- 33. 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 34. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 35. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V
- 36. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

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- 37. 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
- 38. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 41. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. 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
- 43. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 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
- 44. 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
- 45. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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PERMIT UNIT: N-4238-4-6 EXPIRATION DATE: 06/30/2022

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

4.445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS-FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR

PERMIT UNIT REQUIREMENTS

- The engine shall be fired solely on PUC-quality natural gas. [District Rule 4702] Federally Enforceable Through Title V Permit
- The engine shall be equipped and operated with a properly maintained nonresettable elapsed time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. The facility shall install and properly maintain a fuel flow meter, a pressure and temperature transmitter and a gas chromatograph for the purpose of monitoring the fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- The engine shall be in compliance with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZl Federally Enforceable Through Title V Permit
- Owners and operators of the engine shall change the oil and filter every 2,160 hours of operation or annually, whichever comes first, or utilize the oil analysis program prescribed in this permit to extend this oil change requirement. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's spark plugs shall be inspected every 2,160 hours of operation or annually, whichever comes first, and shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's hoses and belts shall be inspected every 2,160 hours of operation or annually, whichever comes first, and 7. shall be replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- Owners and operators of the engine may utilize an oil analysis program in order to extend the specified oil change requirement contained in this permit. The oil analysis must be performed at the same frequency specified for changing the oil. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- An oil analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The not to exceed limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. If the oil analysis shows that none of the stated parameter limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. [40 CFR 63 Subpart ZZZZ] 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: LODI GAS STORAGE LLC

- 11. The owner or operator must keep records, including dates, of the baseline data for each parameter when the oil is new, when the oil is analyzed as part of the program, the results of each analysis, and the oil changes for the engine. The oil analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. Owners and operators of the engine that meet the definition of remote stationary RICE in §63.6675 of 40 CFR Part 63 Subpart ZZZZ as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The owners or operators must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 16. The concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 17. The NOx emission concentration shall not exceed 11.9 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The CO emission concentration shall not exceed 40.5 ppmvd @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 19. The VOC emission concentration shall not exceed 34.1 ppmvd, as methane, @ 15% O2. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 20. The SOx emission concentration shall not exceed 0.0066 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. The PM10 emission concentration shall not exceed 0.1 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The ammonia emission concentration shall not exceed 10 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The combined fuel usage of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall not exceed 127,279 MMBtu during any one calendar quarter and shall not exceed 424,264 MMBtu during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month using a portable emission monitor that meets District specifications. Monitoring for a given calendar month shall not be required if the engine is not operated during that calendar month (i.e. the engine need not be started solely to perform monitoring), or the engine is operated for less than 60 minutes after completing manufacturer recommended maintenance not related to engine's emission control equipment and the engine/compressor assembly is not used to conduct its primary function of compressing natural gas into a storage bunker or moving gas into the pipeline. For all other activities, monitoring shall be performed within 72 hours after restarting the engine unless monitoring has been performed during that month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies as well as records of all manufacturer recommended maintenance activities including the date, name of each maintenance activity performed, total time the engine stayed in operation after completing each maintenance activity. [District Rules 4701, 4702, and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. All portable analyzer 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 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 28. With the exception of engine startups, shutdowns, and nonoperation, the catalyst inlet temperature shall be maintained between 400 degrees Fahrenheit and 1,350 degrees Fahrenheit. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. The permittee shall monitor and record the catalyst inlet temperature at least once every 15 minutes. The data shall be reduced to 4 hour rolling averages. [40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. Source testing for NOx, CO, VOC and ammonia slip shall be conducted annually. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
- 31. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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 Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 34. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 35. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 18, 25A or 25B, or ARB Method 100, where methane and ethane are exempt compounds, shall be excluded from the result of the test. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V
- 36. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit

Facility Name: LODI GAS STORAGE LLC

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- 37. 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
- 38. Records of the quarterly and the annual fuel consumption, in Btu, of the engines operating under N-4238-1, N-4238-2, N-4238-3 and N-4238-4 shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of the 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; (1) Total hours of operation; (2) type and quantity of fuel burned (in cubic feet); (3) maintenance or modifications performed; (4) monitoring data; (5) compliance source test results; (6) the purpose of engine operation; (7) any other information necessary to demonstrate compliance with District Rules 4701 and 4702. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 41. The permittee shall maintain monthly records of the following: (1) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment, and (2) actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 42. 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
- 43. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 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
- 44. 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
- 45. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 4701 and 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

23265 N STATE ROUTE 99, ACAMPO, CA 95220 Location:

N-4238-4-6 : Feb 21 2023 3:33PM -- ROBINSON

EXPIRATION DATE: 06/30/2022 **PERMIT UNIT:** N-4238-6-5

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

NATURAL GAS DEHYDRATION OPERATION SERVED BY A 4.1 MMBTU/HR PERTREX GLYCOL REBOILER (PERMIT EXEMPT), 3-PHASE SEPARATOR SYSTEM, AND A 10.0 MMBTU/HR FIRECAT MODEL #2.10.12 THERMAL OXIDIZER AND TWO (2) BACK-UP EVOQUA MODEL SCRUB 2000 CARBON CANISTERS IN SERIES SHARED WITH PERMIT UNITS N-4238-5 AND N-4238-6

PERMIT UNIT REQUIREMENTS

- The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures 1. of District Rule 2520. [District Rule 2520] 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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall only be fired on PUC-quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be equipped with an operational temperature indicator, and the temperature shall be recorded daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit before allowing the contaminated air stream into the thermal oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall operate in smokeless mode at all times. [District Rule 4408] Federally Enforceable Through Title V Permit
- The thermal oxidizer shall be equipped with an electronically controlled ignition system with a malfunction alarm if the pilot flame fails. [District Rule 4408] Federally Enforceable Through Title V Permit
- 10. The emission control system shall be equipped with a liquid knock-out system to condense any condensible vapors. [District Rule 4408] Federally Enforceable Through Title V Permit
- 11. The thermal oxidizer shall be equipped with sight glass ports if the flame is not otherwise visible. [District Rule 4408] Federally Enforceable Through Title V Permit
- 12. Only glycol shall be used as the dehydration media. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. NOx emissions from the thermal oxidizer shall not exceed 0.06 lb/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: LODI GAS STORAGE LLC

- 14. SOx emissions from the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. PM10 emissions from the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. CO emissions from the thermal oxidizer shall not exceed 0.2 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. VOC emissions from the thermal oxidizer shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The combined quantity of natural gas treated by permit units N-4238-5 and N-4238-6 shall not exceed 500 MMdscf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. VOC emissions from the dehydrator/reboiler shall not exceed 0.0031 lb/MMdscf of gas throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. VOC control efficiency of the thermal oxidizer shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 21. VOC control efficiency of the back-up carbon canisters shall be at least 95%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 22. Source testing to measure the VOC control efficiency of the thermal oxidizer shall be conducted at least once every 24 months. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 23. Ongoing back-up carbon canister compliance with VOC emission rate and control efficiency requirements shall be demonstrated during each use of carbon canisters, by sampling both the influent and the effluent gas streams with an FID, PID, or other District-approved VOC detection device. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 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 Rules 1081 and 4408] Federally Enforceable Through Title V Permit
- 26. 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. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081] Federally Enforceable Through Title V Permit
- 28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 29. VOC emissions from the emission control system shall be determined by using EPA Method 25, 25A, 25B, or 18. Measurement of vapor flow through pipes shall be determined by EPA Methods 2 or 2A. [District Rules 1081 and 44081 Federally Enforceable Through Title V Permit
- 30. The VOC control efficiency shall be determined by comparing the measurements of VOC emissions from the uncontrolled glycol dehydration vent with measurements of VOC emissions from the emission control system. For both measurements, the glycol dehydration system shall operate under similar conditions for the following parameters: glycol flow rate, reboiler temperature, gas flow rate, and gas moisture removal efficiency. [District Rule 4408] Federally Enforceable Through Title V Permit

- 31. VOC emissions from glycol dehydration vents shall be determined using the Glycol Material Balance Method described in Section 6.2.1, or tested according to the methods listed in Section 6.2.2 of Rule 4408. [District Rule 4408] Federally Enforceable Through Title V Permit
- 32. The GRI-GLYCalc software, version 3.0 or higher, may be used to determine flow rates in lieu of methods listed in Section 6.2.2.6, 6.2.2.7 and 6.3.1.2 of Rule 4408. APCO and EPA approval must be gained prior to the use of this software. [District Rule 4408] Federally Enforceable Through Title V Permit
- 33. The permittee shall keep a record of the combined amount of natural gas treated by permit units N-4238-5 and N-4238-6, in MMdscf. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
- 34. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used; carbon canister emission rate and control efficiency measurements. [District Rule 4408] Federally Enforceable Through Title V Permit
- 35. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

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Location: N-4238-6-5 : Feb 21 2023 3:34PM -- ROBINSON

EXPIRATION DATE: 06/30/2022 **PERMIT UNIT:** N-4238-7-3

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

1.508 BHP WAUKESHA MODEL VHP7100GSI RICH BURN NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR. THE ENGINE IS SERVED BY A 3-WAY CATALYTIC CONVERTER

PERMIT UNIT REQUIREMENTS

- The exhaust stack height shall be at least 25 feet above ground level. [District Rule 4102]
- 2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] 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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 7. Only PUC-quality natural gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 1.0 g-NOx/bhp-hr; 10 g-CO/bhp-hr; 0.1 g-VOC/bhp-hr; 0.1 g-PM10/bhp-hr; or 0.0066 g-SOx/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per year. [District Rules 2201, 4701, and 4702, and 40 CFR Part 63 Subpart ZZZZ] 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
- 11. 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] Federally Enforceable Through Title V Permit

Facility Name: LODI GAS STORAGE LLC

- 12. 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
- 13. The permittee shall maintain monthly records of emergency and non-emergency operation and of the type of fuel used. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. 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 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. The permittee must collect and submit an annual report including location, dates and times of operation if the engine operates for more than 15 hours and up to 100 hours per year for emergency demand response. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 17. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 19. The engine's spark plugs shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

EXPIRATION DATE: 06/30/2022 **PERMIT UNIT:** N-4238-8-2

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

REPAIR AND MAINTENANCE NATURAL GAS VENTING OPERATIONS SERVED BY A 1,250 MMBTU/HR FLARE WITH ONE KALDAIR MODEL I-12-H-VS TIP

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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 3. The maintenance flare (N-4238-8) and the emergency flare (N-4238-9) shall not operate simultaneously. The flares shall be equipped with an interlock system that prevents simultaneous operation. [District Rule 4102]
- The quantity of natural gas burned by this flare shall not exceed 120,000 scf during any one hour while other fuel burning equipment is operating. [District Rule 4102]
- The quantity of natural gas burned by this flare shall not exceed 350,000 scf during any one hour while no other fuel burning equipment is operating. [District Rule 4102]
- The quantity of natural gas burned by this flare shall not exceed 371,645 scf during any one day and shall not exceed 624,175 scf during any one calander quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- The NOx emissions shall not exceed 0.14 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CO emissions shall not exceed 0.43 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- The VOC emissions shall not exceed 0.11 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.00285 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 0.0075 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The flare shall operate with smokeless combustion. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. A flame shall be present at all times that combustible gases are being vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 14. A pilot flame shall be present at all times that combustible gases are beng vented through the flare or the outlet shall be equipped with an automatic ignition system. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit

Facility Name: LODI GAS STORAGE LLC

- 15. Except for flares equipped with a flow-sensing system, a heat sensing device such as as thermocouple, ultraviolet beam sensor, infrared sensor, capable of continuously detecting at least one pilot flame or the flare flame shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
- 16. Flares that use flow-sensing automatic ignition systems and do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
- 17. Flaring is prohibited unless it is consistent with an approved Flare minimization Plan (FMP). The FMP shall be updated at least once every 5 years. [District Rule 4311, 5.8 and 6.5] Federally Enforceable Through Title V Permit
- 18. Inoperation of the flare monitoring equipment shall not exceed 14 days during any 18-consecutive-month period. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1 and 6.9.2] Federally Enforceable Through Title V Permit
- 19. Periods of flare monitoring system inoperation of greater than 24 continuous hours shall be reported to the District by the following working day, followed by notification of resumption of monitoring. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 20. The permittee shall report unplanned flaring events within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever comes first. The notification shall include the flare source identification, the start date and time and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit
- 21. The permittee shall submit an Annual Monitoring Report in accordance with section 6.2.3 of Rule 4311. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
- 22. All required monitoring and recording devices shall be maintained in accordance with the applicable manufacturer's specifications. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 23. Vent gas composition monitoring shall be conducted by one of the methods specified in section 6.6 of District Rule 4311 (Flares). [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 24. Volumetric flows of both the pilot gases and purge gases shall be monitored utilizing flow measuring devices or other methods approved by the District or they may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
- 25. The operator shall monitor and record the water level and pressure of the water seal each day that the flare operates. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit
- 26. The following records shall be kept: (1) a copy of the approved Flare Minimization Plan; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring records; (6) records of inoperation of the flare monitoring systems. [District Rule 4311, 6.1.5, 6.1.6, and 6.1.7] Federally Enforceable Through Title V Permit
- 27. Records of the hourly, daily, quarterly and annual fuel consumption, in standard cubic feet, shall be kept. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 28. All records shall be maintained, retained on site for a minimum of five years and shall be made available to the District, ARB or EPA upon request. [District Rules 2201, 4102, and 4311, 6.1] Federally Enforceable Through Title V Permit

PERMIT UNIT: N-4238-9-2 **EXPIRATION DATE:** 06/30/2022

SECTION: 13 TOWNSHIP: 4N RANGE: 6E

EQUIPMENT DESCRIPTION:

EMERGENCY GAS VENTING OPERATION SERVED BY A 5,000 MMBTU/HR FLARE WITH FOUR KALDAIR MODEL I-

12-H-VS TIPS

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 concentration of sulfur compounds in the exhaust shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 4801] Federally Enforceable Through Title V Permit
- 3. The emergency flare (N-4238-9) and the maintenance flare (N-4238-8) shall not operate simultaneously. The flares shall be equipped with an interlock system that prevents simultaneous operation. [District Rule 4102]
- 4. The flare shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the flare for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The quantity of natural gas burned for testing and maintenance purposes shall not exceed 120,000 scf during any one hour. [District Rule 4102]
- 6. The quantity of natural gas burned shall not exceed 371,645 scf during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The NOx emissions shall not exceed 0.14 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. The CO emissions shall not exceed 0.43 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The VOC emissions shall not exceed 0.11 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.00285 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 0.0075 lb/MMBtu of heat input. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The flare shall operate with smokeless combustion. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. A flame shall be present at all times that combustible gases are being vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 14. A pilot flame shall be present at all times that combustible gases are beng vented through the flare or the outlet shall be equipped with an automatic ignition system. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit

Facility Name: LODI GAS STORAGE LLC

Location: 23265 N STATE ROUTE 99,ACAMPO, CA 95220

N-4238-9-2 : Feb 21 2023 3:34PM -- ROBINSOM

- 15. Except for flares equipped with a flow-sensing system, a heat sensing device such as as thermocouple, ultraviolet beam sensor, infrared sensor, capable of continuously detecting at least one pilot flame or the flare flame shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
- 16. Flares that use flow-sensing automatic ignition systems and do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
- 17. Inoperation of the flare monitoring equipment shall not exceed 14 days during any 18-consecutive-month period. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1 and 6.9.2] Federally Enforceable Through Title V Permit
- 18. Periods of flare monitoring system inoperation of greater than 24 continuous hours shall be reported to the District by the following working day, followed by notification of resumption of monitoring. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 19. The permittee shall report unplanned flaring events within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever comes first. The notification shall include the flare source identification, the start date and time and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit
- 20. The permittee shall submit an Annual Monitoring Report in accordance with section 6.2.3 of Rule 4311. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
- 21. All required monitoring and recording devices shall be maintained in accordance with the applicable manufacturer's specifications. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 22. Vent gas composition monitoring shall be conducted by one of the methods specified in 6.6 of District Rule 4311 (Flares). [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 23. Volumetric flows of both the pilot gases and purge gases shall be monitored utilizing flow measuring devices or other methods approved by the District or they may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
- 24. The operator shall monitor and record the water level and pressure of the water seal each day that the flare operates. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit
- 25. The following records shall be kept: (1) for emergency operation, the duration of flare operation, amount of fuel burned and the nature of the emergency situation; (2) a copy of the annual reports that were submitted to the District; (3) vent gas composition records; (4) pilot and purge gas flow records; (5) water seal monitoring activities; (6) records of inoperation of the flare monitoring systems; . [District Rule 4311, 6.1.3, 6.1.5, 6.1.6, and 6.1.7] Federally Enforceable Through Title V Permit
- 26. Records of the hourly and daily fuel consumption, in standard cubic feet, shall be kept. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 27. All records shall be maintained, retained on site for a minimum of five years and shall be made available to the District, ARB or EPA upon request. [District Rules 2201, 4102, and 4311, 6.1] Federally Enforceable Through Title V Permit

ATTACHMENT C

Detailed Summary List of Facility Permits

Detailed Facility Report
For Facility=4238
Sorted by Facility Name and Permit Number 2:59 pm FAC# N 4238 TYPE: EXPIRE ON: TitleV 06/30/2022

2/21/23

LODI GAS STORAGE LLC FAC # N 4238 TYPE: TitleV EXPIRE ON:							TYPE: TitleV EXPIRE ON: 06/30/2022
23265 N STATE RO			STA"		N 4230 A		TOXIC ID: 70164 AREA: 6/
ACAMPO, CA 9522				EPHONE:			INSP. DATE: 09/23
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-4238-1-6	4,445 bhp IC engine	3020-10 F	1	900.00	900.00	А	4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS- FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR
N-4238-2-7	4,445 bhp IC engine	3020-10 F	1	900.00	900.00	А	4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS- FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR
N-4238-3-6	4,445 bhp IC engine	3020-10 F	1	900.00	900.00	А	4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS- FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR
N-4238-4-6	4,445 bhp IC engine	3020-10 F	1	900.00	900.00	А	4,445 BHP CATERPILLAR MODEL G3616 LEAN BURN NATURAL GAS- FIRED IC ENGINE SERVED BY A SELECTIVE CATALYTIC REDUCTION SYSTEM AND A 2-WAY OXIDATION CATALYST, POWERING A COMPRESSOR
N-4238-5-5	10 MMBtu/hr thermal oxidizer	3020-02 G	1	980.00	980.00	А	NATURAL GAS DEHYDRATION OPERATION SERVED BY A 4.1 MMBTU/HR PERTREX GLYCOL REBOILER (PERMIT EXEMPT), 3-PHASE SEPARATOR SYSTEM, AND A 10.0 MMBTU/HR FIRECAT MODEL #2.10.12 THERMAL OXIDIZER AND TWO (2) BACK-UP EVOQUA MODEL SCRUB 2000 CARBON CANISTERS IN SERIES SHARED WITH PERMIT UNITS N-4238-5 AND N-4238-6
N-4238-6-5	10 MMBtu/hr thermal oxidizer	3020-02 G	1	980.00	980.00	А	NATURAL GAS DEHYDRATION OPERATION SERVED BY A 4.1 MMBTU/HR PERTREX GLYCOL REBOILER (PERMIT EXEMPT), 3-PHASE SEPARATOR SYSTEM, AND A 10.0 MMBTU/HR FIRECAT MODEL #2.10.12 THERMAL OXIDIZER AND TWO (2) BACK-UP EVOQUA MODEL SCRUB 2000 CARBON CANISTERS IN SERIES SHARED WITH PERMIT UNITS N-4238-5 AND N-4238-6
N-4238-7-3	1,508 bhp IC engine	3020-10 F	1	900.00	900.00	А	1,508 BHP WAUKESHA MODEL VHP7100GSI RICH BURN NATURAL GAS- FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR. THE ENGINE IS SERVED BY A 3-WAY CATALYTIC CONVERTER
N-4238-8-2	1,250 MMBtu/hr flare	3020-02 H	1	1,238.00	1,238.00	А	REPAIR AND MAINTENANCE NATURAL GAS VENTING OPERATIONS SERVED BY A 1,250 MMBTU/HR FLARE WITH ONE KALDAIR MODEL I- 12-H-VS TIP
N-4238-9-2	5,000 MMBtu/hr flare	3020-02 H	1	1,238.00	1,238.00	Α	EMERGENCY GAS VENTING OPERATION SERVED BY A 5,000 MMBTU/HR FLARE WITH FOUR KALDAIR MODEL I-12-H-VS TIPS

Number of Facilities Reported: 1