



JUL 0 5 2012

Charlie Comfort TRC Operating Company, Inc. P O Box 227 Taft, CA 93268

Notice of Preliminary Decision - Federally Mandated Operating Permit Re:

District Facility # S-2622

Project # 1110982

Dear Mr. Comfort:

Enclosed for your review and comment is the District's analysis of TRC's application for the Federally Mandated Operating Permit for its crude oil and natural gas production operation at its western Kern county fields Heavy Oil stationary source, California.

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

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

Sincerely,

David Warner

Director of Permit Services

DW: DT/cm

Attachments

Seyed Sadredin Executive Director/Air Pollution Control Officer





JUL 0 5 2012

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

Notice of Preliminary Decision - Federally Mandated Operating Permit Re:

District Facility # S-2622

Project # 1110982

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of TRC's application for the Federally Mandated Operating Permit for its crude oil and natural gas production operation at its western Kern county fields Heavy Oil stationary source, California.

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

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

Sincerely,

David Warner

Director of Permit Services

DW: DT/cm

Attachments

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Northern Region

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

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

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





JUL 0 5 2012

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

Re: Notice of Preliminary Decision - Federally Mandated Operating Permit

District Facility # S-2622

Project # 1110982

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of TRC's application for the Federally Mandated Operating Permit for its crude oil and natural gas production operation at its western Kern county fields Heavy Oil stationary source, California.

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

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

Sincerely,

David Warner

Director of Permit Services

DW: DT/cm

Attachments

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Bakersfield Californian

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

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed issuance of the Federally Mandated Operating permits to TRC Operating Company, Inc. for its crude oil and natural gas production operation at its western Kern county fields Heavy Oil stationary source, California.

The District's analysis of the legal and factual basis for this proposed action, project #1110982, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed Federally Mandated Operating initial permits. If requested by the public, the District will hold a public hearing regarding issuance of this initial permit. For additional information, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

TITLE V APPLICATION REVIEW TRC Operating Company FACILITY # S-2622

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Title V Application Review

Heavy Oil Production

Project #: 1110982, Deemed Complete: April 26, 2011

Engineer: David Torii

Lead Engineer: Allan Phillips Asyre ADE

Date:

MAY 2.3 2012

Facility Number: \$-2622

Facility Name: TRC Operating Company

Mailing Address: PO Box 227

Taft, CA 93268

Contact Name: Charlie Comfort

Phone: (661) 763-0081

Responsible Official: Charlie Comfort

Title: Secretary/Treasurer

I. PROPOSAL

TRC Operating Company (TRC) is proposing that the initial Title V Operating Permit be issued for its existing Heavy Oil Western production source (S-2622) located in Kern County. The purpose of this engineering evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

Please note facilities S-3088 and S-2622 are part of the same stationary source. The initial Title V permit for facility S-3088 is being addressed separately.

II. FACILITY LOCATION

This heavy oil production source is located in TRC's Kern County Fields Heavy Oil Western stationary source in Kern County, California.

III. EQUIPMENT LISTING

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

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

TRC Operating Company Facility #: S-2622

Project #: 1110982

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant has requested to utilize Facility-Wide Umbrella template #UM-0-3. Based on the information submitted on the Template Qualification Form, the applicant qualifies for the use of this template.

V. SCOPE OF EPA AND PUBLIC REVIEW

The proposed Facility-Wide Operating Permit is based on a model general permit template that has been previously subject to EPA and public review. The terms and conditions from the model general permit template are included in the proposed permit and are not subject to further EPA and public review.

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

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

Conditions 3-42 of the requirements for permit unit S-2622-0-2

VI. APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES

District Rule 1100, Equipment Breakdown (amended December 17, 1992)²

District Rule 1160, Emission Statements (adopted November 18, 1992)²

District Rule 2010, Permits Required (amended December 17, 1992)²

District Rule 2020, Exemptions (amended March 21, 2002)²

District Rule 2031, Transfer of Permits (adopted December 17, 1992)²

District Rule 2040, Applications (amended December 17, 1992)²

District Rule 2070, Standards for Granting Applications (adopted December 17, 1992)²

² The Umbrella General Template addressed these requirements for all permit units at the facility.

Facility #: S-2622 Project #: 1110982

District Rule 2080, Conditional Approval (amended December 17, 1992)²

District Rule 4101, Visible Emissions (amended November 15, 2001)²

District Rule 4201, Particulate Matter Concentration (amended October 31, 2001)

District Rule 4701, Internal Combustion Engines (amended December 17, 1992)

District Rule 4801, Sulfur Compounds (adopted November 18, 1992)

District Rules 8021, 8031, 8041, 8051, 8061, 8071, <u>Fugitive Dust (PM10)</u> Emissions (amended November 15, 2001)²

VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES

District Rule 2201, New and Modified Stationary Source Review Rule (as amended 1/21/11)

District Rule 1070, Inspections (as amended December 17, 1992)

District Rule 1081, Source Sampling (as amended December 16, 1993)

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

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

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

District Rule 4311, Flares (as amended June 18, 2009)

District Rule 4320, <u>Advanced Emission Reduction Options For Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/h</u>r, (adopted October 16, 2008)

District Rule 4401 <u>Steam-Enhanced Crude Oil Production Well Vents</u> (as amended 6/16/11)

District Rule 4601, Architectural Coatings (as amended December 17, 2009)

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

² The Umbrella General Template addressed these requirements for all permit units at the facility.

Facility #: S-2622 Project #: 1110982

District Rule 4701 Internal Combustion Engines – PHASE 1 (as amended August 21, 2003)

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

District Rule 4801, <u>Sulfur Compounds</u> (as amended December 17, 1992) (Non SIP replacement for Kern County Rule 407)

District Rules 8021, 8031, 8041, 8051, and 8061, <u>Fugitive Dust (PM₁₀) Emissions</u> (as amended August 19, 2004)

District Rule 8071, <u>Fugitive Dust (PM₁₀) Emissions</u> (as amended September 16, 2004)

40 CFR 60 Subpart Dc, <u>New Source Performance Standards</u>; <u>Standards of Performance for Small Industrial-Commercial-Institutional Stream Generating Units</u>

40 CFR 61, Subpart M - Asbestos

40 CFR 82, Subpart F - Stratospheric Ozone

40 CFR Part 64 - Compliance Assurance Monitoring

40 CFR Part 68 - Chemical Accident Prevention Provisions

Kern County Rule 407, Sulfur Compounds

Kern County Rule 424, Sulfur Compounds from Oil Field Steam Generators

VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

The facility is subject to the following District rules which are not currently Federally Enforceable:

1. District Rule 4102 - Nuisance

For this facility, condition 3 of the facility wide requirements is based on the rule identified above and is not Federally Enforceable Through the Title V Permit.

TRC Operating Company Facility #: S-2622 Project #: 1110982

IX. COMPLIANCE

A. Requirements Addressed by Model General Permit Templates

1. Facility Wide Requirements

The applicant is proposing to use a general permit template to address federally applicable facility-wide requirements. Section IV of template SJV-UM-0-3 includes a demonstration of compliance for all applicable requirements. Template conditions have been added to the facility wide requirements as condition numbers 4 through 43 to assure compliance with these requirements.

B. Requirements Not Addressed by Model General Permit Templates

- 1. New and Modified Stationary Source Review Rule (District NSR Rule)
 - a. Steam Generator (S-2622-1-9)

The applicant has requested that ATC S-2622-1-9 serve as the base document for the proposed PTO.

ATC S-2622-1-9 was subject to the District NSR Rule upon application for Authority to Construct (ATC).

- Conditions 1, 9, 13 and 14 from the ATC were included as conditions 1, 8, 11 and 12 of the proposed permit.
- b. TEOR Operation (S-2622-5-2)

Permit unit S-2622-5-2 was not subject to District Rule 2201 at the time the applicant applied for an Authority to Construct.

c. Storage Tank (S-2622-7-7)

The applicant has requested that ATC S-2622-7-5 serve as the base document for the proposed PTO.

 Conditions 3 through 7, 9, and 16 through 27 from the ATC were included as conditions 2 through 6, 8, and 15 through 26 of the proposed permit.

TRC Operating Company Facility #: S-2622

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d. TEOR Operation (S-2622-8-5)

Permit unit S-2622-8-5 was subject to the District NSR Rule upon application for Authority to Construct (ATC).

- Conditions 4 through 8 from the PTO were included as conditions 4 through 8, of the proposed permit.
- e. Steam Generator (S-2622-11-11)

The applicant has requested that ATC S-2622-11-10 serve as the base document for the proposed PTO.

- Conditions 1, 9, 13 and 14 from the ATC were included as conditions
 1, 8, 11 and 12 of the proposed permit.
- f. Storage Tanks (S-2622-14-3 and 16-1)

Permit units S-2622-14-2 and 16-1 were subject to the District NSR Rule upon application for Authority to Construct (ATC).

- Conditions 4 through 11, and 13 through 18 from the PTOs were included as conditions 2 through 9, and 11 through 16 of the proposed permits.
- Condition 20 of PTO S-2622-16-1 was included as condition 1 of the facility wide permit
- g. 62.5 MMBtu/hr Steam Generator (S-2622-17-2)

Permit unit S-2622-17-2 was subject to the District NSR Rule upon application for Authority to Construct (ATC).

- Conditions 5 through 7 from the PTO were included as conditions 3 through 5 of the proposed permit.
- Condition 8 from the PTO was revised as condition 6 for the proposed permit for compliance with section 6.2.9 of Rule 4320.
- h. 62.5 MMBtu/hr Steam Generator (S-2622-18-1)

Permit unit S-2622-18-1 was subject to the District NSR Rule upon application for Authority to Construct (ATC).

- Conditions 4 through 7 and 26 from the PTO were included as conditions 4 through 7 and 26 of the proposed permit.
- i. 62.5 MMBtu/hr Steam Generator (S-2622-19-1 and '20-1)

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Permit units S-2622-19-1 and '20-1 were subject to the District NSR Rule upon application for Authority to Construct (ATC).

- Conditions 2, 4, 5, 6 and 25 from the PTO were included as conditions 2, 4, 5, 6 and 25 of the proposed permit.
- j. 62.5 MMBtu/hr Steam Generator (S-2622-23-0)

Permit unit S-2622-23-0 was subject to the District NSR Rule upon application for Authority to Construct (ATC).

Conditions 16 through 23 from the PTO were included as conditions 16 through 23 of the proposed permit

k. 62.5 MMBtu/hr Steam Generator (S-2622-24-0)

Permit unit S-2622-24-0 was subject to the District NSR Rule upon application for Authority to Construct (ATC).

Conditions 15 through 20 and 22 from the PTO were included as conditions 15 through 20 and 22 of the proposed permit

2. District Rule 1081 Source Sampling (as amended December 17, 1992)

Sections 3.0, 4.0, 5.0, 6.0, and 7.0 of District Rule 1081 set forth requirements for sampling facilities, collection of samples, test methods, test procedures, and administrative requirements, respectively.

- a. Steam Generator S-2622-1-9 (ATC base document)
 - Conditions 7, 22 and 27 from the ATC were included as conditions 7, 20 and 25 of the proposed permit.
- b. Steam Generator S-2622-11-10 (ATC base document)
 - Conditions 7, 23 and 27 from the ATC were included as conditions 7, 21 and 25 of the proposed permit.
- c. Steam Generator S-2622-17-2
 - Conditions 16 and 21 from the PTO were included as conditions 14 and 19 of the proposed permit.
- d. Steam Generator S-2622-18-1

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• Conditions 13, 23, 24 and 25 from the PTO were included as conditions 13, 23, 24 and 25 of the proposed permit.

- e. Steam Generators S-2622-19-1 and '20-1
 - Conditions 12, 23 and 24 from the PTOs were included as conditions 22, 23 and 24 of the proposed permits.
- Steam Generator S-2622-23-0
 - Conditions 5, 37 and 38 from the PTO were included as conditions 5, 37 and 38 of the proposed permit.
- g. Steam Generator S-2622-24-0
 - Conditions 5, 35 and 36 from the PTO were included as conditions 5, 35 and 36 of the proposed permit.

3. District Rule 2520, Federally Mandated Operating Permits

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

4. District Rule 4201 Particulate Matter Concentration (as amended December 17, 1992)

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

a. Steam Generators (S-2622-1-5, '11-9, '17-2, '18-1, '19-1, '20-1, '23-0 and '24-0)

The steam generators within this facility fire on gaseous fuel. The following equation based on the unit with the highest PM10 emission factor demonstrates, that the emissions of PM are expected to be well below applicable limits.

$$\left(\frac{80 \text{ lb PM}}{\text{MMscf}}\right) \left(\frac{1 \text{MMscf}}{900 \text{ MMBtu}}\right) \left(\frac{1 \text{MMBtu}}{8710 \text{ dscf}}\right) \left(\frac{7000 \text{ gr}}{1 \text{ lb}}\right) = \left(\frac{0.07 \text{ grain}}{\text{dscf}}\right) < \left(\frac{0.1 \text{ grain}}{\text{dscf}}\right)$$

8

Facility #: S-2622 Project #: 1110982

where:

```
= minimum expected higher heating value of natural gas (AP-42, Table 1.4.1)

8710dscf
MMBtu

F factor, for natural gas at 0% O<sub>2</sub> (40CFR60, App. A, Table 19-1)
```

Since the equation demonstrates that PM emissions will be well below the applicable limit, no further monitoring, recordkeeping or reporting will be necessary.

- 5. District Rule 4301 Fuel Burning Equipment (as amended December 17, 1992)
 - a. Steam Generators (S-2622-1-5, '11-9, '17-2, '18-1, '19-1, '20-1, '23-0 and '24-0)

This rule limits the concentration of combustion contaminants and specifies maximum emission rates for sulfur dioxide, nitrogen oxide and combustion contaminant emissions from fuel burning equipment..

Sections 5.1 and 5.2.3 limits particulate matter emission. Section 5.1 limits the emission of combustion contaminants in the form of PM to 0.1 grain per cubic foot of gas corrected to 12% carbon dioxide. Section 5.2.3 limits PM to 10 lb/hr. As previously demonstrated in District Rule 4201 - Particulate Matter Concentration the following units listed shall not exceed 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr.

Section 5.2.1 limits SO_x emission to 200 lb/hr. and section 5.2.2 limits nitrogen oxides to 140 lb/hr calculated as nitrogen dioxide (NO2).

Permit conditions listing the emissions limits that ensure compliance with hourly NOx & SOx limits of this rule are shown in the following table.

Permit Unit	NOx Emission Limit	SOx Emission Limit	Condition #
S-2622-1-10	0.018 lb/MMBtu	0.003 lb/MMBtu	12
S-262211	0.018 lb/MMBtu	0.003 lb/MMBtu	12
S-2622-17	0.018 lb/MMBtu	0.003 lb/MMBtu	4
S-2622-18	0.036 lb/MMBtu	0.015 lb/MMBtu	5
S-2622-19	0.036 lb/MMBtu	0.015 lb/MMBtu	4
S-2622-20	0.036 lb/MMBtu	0.015 lb/MMBtu	4
S-2622-23	0.018 lb/MMBtu	0.361 lb/MMBtu	22 and 23
S-2622-24	0.018 lb/MMBtu	0.003 lb/MMBtu	20

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

Since emissions limits of District Rules 4306 and 4320 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rules 4306 and 4320 requirements will satisfy requirements of District Rule 4305. Therefore, compliance with District Rule 4305 requirements is expected and no further discussion is required.

7. District Rule 4306 Boilers, Steam Generators and Process Heaters - Phase 3 (as amended October 16, 2008)

Since emissions limits of District Rule 4320 and all other requirements are equivalent or more stringent than District Rule 4306 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4306. Therefore, compliance with District Rule 4306 requirements is expected and no further discussion is required.

- 8. Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters Greater than 5.0 MMBtu/Hr (adopted October 16, 2008
 - a. Steam Generators (S-2622-1-10, '11-11, '17-3, '18-2, '19-2, '20-2, '23-1 and '24-1)

The purpose of this rule is to limit emissions of NO_x , CO and SO_x and PM_{10} from boilers, steam generators, and process heaters. Therefore steam generators S-2622-1-10, '11-11, '17-3, '18-2, '19-2, '20-2, '23-1 and '24-1 are subject to this rule.

Sections 5.1 and 5.2 require that an operator of a unit(s) subject to this rule shall comply with all applicable requirements of the rule and one of the following, on a unit-by-unit basis:

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

An annual emissions fee is paid for the steam generator S-2622-17-3. Compliance with this Section is expected.

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 Compliance with these requirements will be assured by conditions 24 through 26.

Steam generators S-2622-1-10, '11-11, '18-2, '19-2, '20-2, '23-1 and '24-1 are dormant for this rule and according to the Emission Control Plan will comply with this rule by paying the fee.

Steam generator S-2622-1-10:

Compliance with these requirements will be assured by conditions 1 through 6 and 27 through 29.

Steam generator S-2622-11-11:

Compliance with these requirements will be assured by conditions 1 through 6 and 27 through 29.

Steam generator S-2622-18-2:

Compliance with these requirements will be assured by conditions 1 through 3.

Steam generator S-2622-19-2:

Compliance with these requirements will be assured by conditions 1 through 3.

Steam generator S-2622-20-2:

Compliance with these requirements will be assured by conditions 1 through 3.

Steam generator S-2622-23-1:

Compliance with these requirements will be assured by conditions 1 through 4 and 41

Steam generator S-2622-24-1:

Compliance with these requirements will be assured by conditions 1 through 4.

Therefore, compliance with District Rule 4320 requirements is expected and no further discussion is required.

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9. District Rule 4401 Enhanced Crude Oil Production Well Vent (as amended 6/16/11)

The SIP approved version of Rule 4401 is the version amended on 12/14/06. Rule 4401 was amended on 6/16/11, however, these amendments have not yet been approved into the SIP. The 6/16/11 amendments established more stringent requirements for source testing VOC control systems. Therefore, compliance with the currently applicable requirements of the 6/16/11 amendments demonstrates compliance with the requirements of the SIP approved version of Rule 4401.

a. TEOR Operation Serving 12 Wells (S-2622-5-4)

Pursuant to section 4.4, the requirements of this rule shall not apply to up to 20 cyclic wells owned by a small producer, provided the wells are located more than 1000 feet from an existing well vent vapor control system operated by the company, and the operation is under District permit.

- Compliance with these requirements will be assured by conditions
 1 and 2 and no further discussion is required regarding this permit.
- b. TEOR Operation Serving 35 Wells (S-2622-8-5)

Section 5.0 sets forth requirements for limiting the emissions of Volatile Organic Compounds (VOCs). This section lists emission control requirements as well as work practice standards.

Section 6.0 sets forth requirements for testing and recordkeeping. This section also allows the APCO to waive certain control systems from the requirements of section 6.2.1. Section 6.2.1 requires annual source testing to show control efficiency compliance. This waiver applies to control systems consisting of fuel burning equipment, an internal combustion engine, smokeless flares, or systems which do not have a VOC destruction device (specifically, if VOC collected is re-injected underground).

The basis of the waiver for smokeless open flares is that technology does not currently exist for source testing these controls. However, typically these devices have 99% or greater control efficiency.

The basis of the waiver for control systems consisting of fuel burning equipment (primarily steam generators) is that these units have greater than 99% control efficiency for VOC, as demonstrated by the following calculations:

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STEAM GENERATORS:

$$\frac{5.5 \frac{|b \cdot VOC}{10^6 \cdot cf}}{\frac{1 \cdot |b|}{23.8 \cdot cf}} = 0.00013 \frac{|b \cdot VOC|}{|b \cdot gas|} = 0.013 \%$$

where:

$$5.5 \frac{\text{lb \cdot VOC}}{10^6 \cdot \text{cf}}$$
 = VOC emission factor from natural gas fired boilers (AP-42, Table 1.4-2)

The preceding calculations demonstrate that the control efficiency for VOC emissions is greater than 99% by almost two orders of magnitude for steam generators. Therefore, source tests for VOC control effectiveness are clearly unnecessary.

- Compliance with these requirements will be assured by conditions
 9 through 39 and no further discussion is required regarding this permit.
- District Rule 4623 <u>Storage of Organic Liquids</u> (as amended May 19, 2005)

The purpose of this rule is to limit volatile organic compound (VOC) emissions from the storage of organic liquids. This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

This rule limits volatile organic compound (VOC) emissions from the storage of organic liquids. It applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored. The rule was amended in May 19, 2005.

Section 4.3 states that except for complying with Sections 6.3.4 and 7.2, a small producer's tank with a throughput of 50 barrels of crude oil per day or less is exempt from the requirements of this rule. All other small producer tanks that do not qualify for exemption under Section 4.4 shall comply with all the requirements of this rule.

Section 4.4 states that tanks exclusively receiving and/or storing an organic liquid with a TVP less than 0.5 psia are exempt from all other requirements of the rule except for complying with the following provisions:

- 4.4.1 TVP and API Gravity Testing provisions pursuant to Section 6.2,
- 4.4.2 Recordkeeping provisions pursuant to Section 6.3.6,

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4.4.3 Test Methods provisions pursuant to Section 6.4, and

4.4.4 Compliance schedules pursuant to Section 7.2.

The requirements of Section 4.4 shall not apply to tanks that are exempt pursuant to Sections 4.1 through 4.3.

Section 5.1 requires that no organic liquid shall be placed, held, or stored in any tank unless the tank is equipped with a VOC control system identified in Table 1.

Section 5.2 requires that pressure-vacuum relief valve shall be set to within ten (10) percent of the maximum allowable working pressure of the tank. The valves shall be permanently labeled with the operating pressure settings.

Section 5.6 requires that fixed roof tanks shall be fully enclosed and shall be maintained in a leak-free condition. The approved vapor recovery system shall consist of a closed system that collects all VOCs from the storage tank, and a VOC control device. This section also specifies the applicable VOC control device.

Section 5.7 states that only operators who elect to participate in the voluntary tank preventive inspection and maintenance, and tank interior cleaning program shall be allowed to use the provisions specified in Tables 3 to 5 and Section 5.7.5.

Section 6.2 requires initial and periodic TVP testing of each uncontrolled fixed roof tank.

Section 6.3 requires that tank subject to the requirements of this rule shall keep an accurate record of each organic liquid stored in each tank, including its storage temperature, TVP, and API gravity, except for fixed roof tanks equipped with a vapor recovery system.

Section 6.4 addresses the test methods approved by the APCO and EPA.

Crude Oil Storage Tank (S-2622-7-7)

Conditions 6, 7 and 9 through 14 of the requirements for this permit unit assures compliance with this rule.

Crude Oil Storage Tanks (S-2622-14-3 and 16-2)

Conditions 10 through 14 and 17 of the requirements for these units assures compliance with this rule.

permit

Compliance with this rule is expected.

Facility #: S-2622 Project #: 1110982

- **11.** District Rule 4801 <u>Sulfur Compounds</u> (as amended December 17, 1992)
 - a. Steam Generators (S-2622-1-10, '11-11, '17-3, '18-2, '19-2, '20-2, '23-1 and '24-1)

District Rule 4801 has been submitted to the EPA to replace Kern County Rule 407, which is in the SIP. District Rule 4801 is as stringent as Kern County Rule 407, as shown below in Table 3.

Table 3 - Comparison of District Rule 4801 and Kern County Rule 407

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

The following analysis shows that these engines comply with the sulfur compound emissions limit. The combustion equation for natural gas is (neglecting NO_x and SOx relative to O_2 in the exhaust):

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO_2 , on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the emission factors presented in Section VII, the sulfur compound emissions are calculated as follows:

Volume
$$SO_2 = n RT$$

With:

N = moles SO₂ T (Standard Temperature) = 60° F = 520° R P (Standard Pressure) = 14.7 psi R (Universal Gas Constant) = $\frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot {}^{\circ}\text{R}}$

Facility #: S-2622 Project #: 1110982

Worst case SO_x emissions from the steam generators are based on combusting the fuel with a SO_x emission rate of 0.361 lb/MMBtu (S-262-23-1)

$$\frac{0.361 lb SOx}{MMBtu} \times \frac{MMBtu}{8,578 dscf} \times \frac{1 lb \cdot mol}{64 lb} \times \frac{10.73 psi \cdot ft^3}{lb \cdot mol \cdot {}^{\circ}R} \times \frac{520 R}{14.7 psi} \times \frac{1,000,000 parts}{million} = 250 \frac{parts}{million}$$
Sulfur Concentration = 250 $\frac{parts}{million}$ < 2,000 ppmv (or 0.2%)

12. 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

a. Steam Generators (S-2622-1-10, '11-11, '17-3, '18-2, '19-2, '20-2, '23-1 and '24-1)

Subpart Dc defines an affected facility as each steam-generating unit greater than 10 MMBtu/hr, but less than 100 MMBtu/hr for which construction, modification, or reconstruction has commenced after June 9, 1989. Subpart Dc only specifies performance standards for oxides of sulfur (SOx) and particulate emissions (PM) from steam generating equipment fired on liquid and solid fuels. There is no performance standards specified for gaseous fuel-fired steam generating equipment. Therefore, this subpart is not applicable except recordkeeping and reporting.

13. CFR Part 64 Compliance Assurance Monitoring

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet all three following 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
- the unit must have a pre-control potential to emit of greater than the major source thresholds.

Steam generators S-2622-1, '11, '18 and '24 have add-on controls only for NOx in the form of FGR. The steam generators are equipped with low NOx burners which are guaranteed to have NOx emissions of 30 ppmv @ 3% O2 or 0.036 lb/MMBtu.

Therefore uncontrolled NOx emissions from a 62.5 MMBtu/hr unit is calculated as shown below.

TRC Operating Company Facility #: S-2622

Project #: 1110982

0.036 lb/MMBtu x 62.5 MMBtu/hr x 8,760 hrs/year = 19,710 lb/year

Therefore CAM is not applicable for NOx. Major source threshold for NOx is 20,000 lb/yr year.

X. PERMIT SHIELD

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

A. Requirements Addressed by Model General Permit Templates

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

B. Requirements not Addressed by Model General Permit Templates

The applicant has requested a broad permit shield for all of requirements the facility is subject. Per District policy such broad permit shields can not be granted.

XI. PERMIT CONDITIONS

See attached Initial TV Operating Permits.

Attachment A

Equipment Listing

S-2622-4-2:	250 BBL FIXED ROOF PETROLEUM STORAGE TANK (#1-250)
S-2622-7-7:	62.5 MMBTU/HR NATURAL GAS/WASTE GAS FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME G-LE ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION (CYPRESS LEASE)
S-2622-8-11:	THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 150 STEAM ENHANCED CRUDE OIL PRODUCTION WELLS AND 665 SCFM AIR ASSIST STANDBY FLARE, WITH VAPOR PIPING FROM TANKS S-2622-9 THROUGH -16, -21 AND -22, GAS/LIQUID SEPARATORS, COMPRESSORS, HEAT EXCHANGERS, CONDENSATE PUMPS, FOUR SULFATREAT HP PACKED VESSELS, AND INCINERATION IN STEAM GENERATORS S-2622-7 OR -20, OR STANDBY FLARE
S-2622-9-3:	1500 BBL FIXED ROOF CONSTANT LEVEL CRUDE OIL WASH TANK (1000-01) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2622-8
S-2622-10-3:	1000 BBL FIXED ROOF CRUDE OIL SHIPPING/REJECT TANK (T-1000-2) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2622-8
S-2622-11-3:	1000 BBL FIXED ROOF CRUDE OIL SHIPPING/REJECT TANK (T-1000-03) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2622-8
S-2622-12-3:	1000 BBL FIXED ROOF CRUDE OIL SHIPPING/REJECT TANK (T-1000-04) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2622-8
S-2622-13-3:	1000 BBL FIXED ROOF CRUDE OIL SHIPPING/REJECT TANK (T-1000-05) SERVED BY VAPOR CONTROL LISTED ON S-2622-8
S-2622-14-4:	200 BBL FIXED ROOF CRUDE OIL SLOP TANK (T-3000-01) SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-2622-8
S-2622-15-4:	250 BBL FIXED ROOF CRUDE OIL SLOP TANK (T-3000-02) SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-2622-8
S-2622-16-4:	1000 BBL FIXED ROOF CRUDE OIL SLOP TANK (T-3000-03) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-2622-8
S-2622-20-5:	62.5 MMBTU/HR C.E. NATCO NATURAL GAS/WASTE GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION - CYPRESS LEASE
S-2622-21-3:	1500 BBL CONSTANT LEVEL FIXED ROOF CRUDE OIL WASH TANK SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-2622-8
S-2622-24-3:	62.5 MMBTU/HR C.E. NATCO NATURAL GAS/WASTE GAS FIRED STEAM GENERATOR (#92 DIS# 27572-80) WITH NORTH AMERICAN MAGNA FLAME GLE ULTRA LOW NOX BURNER

Attachment B

Exempt Equipment

The following exempt equipment was identified by the applicant on TVFORM-003, Insignificant Activities

Exemption Category	Rule 2020 Citation	
Structure or incinerator assoc. with a structure designed as a dwelling for 4 families or less	4.1	
Locomotives, airplanes, and watercraft used to transport passengers or freight	4.4	
Natural gas or LPG-fired boilers or other indirect heat transfer units of 5 MMBtu/hr or less	6.1.1	✓
Piston-type i.c.engine with maximum continuous rating of 50 braking horsepower (bhp) or less	6.1.2	
Gas turbine engines with maximum heat input rating of 3 MMBtu/hr or less	6.1.3	
Space heating equipment other than boilers	6.1.4	
Cooling towers with a circulation rate less than 10,000 gal/min, and that are not used for cooling of process water, or water from barometric jets or condensers++	, 6.2	
Use of less than 2 gal/day of graphic arts materials	6.3	
Equipment at retail establishments used to prepare food for human consumption	6.4.1	
Ovens at bakeries with total daily production less than 1,000 pounds and exempt by sec. 6.1.1	6.4.3	
Equipment used exclusively for extruding or compression molding of rubber or plastics, where no plastisizer or blowing agent is used	6.5	
Containers used to store clean produced water	6.6.1	✓
Containers ≤100 bbl used to store oil with specific gravity ≥ 0.8762	6.6.2	
Containers ≤ 100 bbl installed prior to 6/1/89 used to store oil with specific gravity ≥ 0.8762	6.6.3	
Containers with a capacity ≤ 250 gallons used to store org-anic material where the actual storage temperature <150 F	6.6.4	✓
Containers used to store unheated organic material with an initial boiling point ≥ 302 F	6.6.5	
Containers used to store fuel oils or non-air-blown asphalt with specific gravity ≥0.9042	6.6.6	
Containers used to store petroleum distillates used as motor fuel with specific gravity ≥ 0.8251	6.6.7	

Exemption Category	Rule 2020 Citation	

Containers used to store refined lubricating oils	6.6.8	✓
Unvented pressure vessels used exclusively to store liquefied gases or assoc with exempt equipment	6.6.9 or 6.13	
Portable tanks used exclusively to store produced fluids for ≤ six months	6.6.10	✓
Mobile transport tanks on delivery vehicles of VOCs	6.6.11	
Loading racks used for the transfer of less than 4,000 gal/day of unheated organic material with initial boiling point ≥ 302 F or of fuel oil with specific gravity ≥0.8251	6.7.1.1	
Loading racks used for the transfer of asphalt, crude or residual oil stored in exempt tanks, or crude oil with specific gravity ≥ 0.8762	6.7.1.2	
Equipment used exclusively for the transfer of refined lubricating oil	6.7.2	
Equipment used to apply architectural coatings	6.8.1	
Unheated, non-conveyorized cleaning equipment with < 10 ft ² open area; using solvents with initial boiling point ≥ 248 F; and < 25 gal/yr. evaporative losses	6.9	
Brazing, soldering, or welding equipment	6.10	✓
Equipment used to compress natural gas	6.11	
Fugitive emissions sources assoc. with exempt equipment	6.12	✓
Pits and Ponds as defined in Rule 1020 ,	6.15	✓
On-site roadmix manufacturing and the application of roadmix as a road base material	6.17	✓
Emissions less than 2 lb/day from units not included above	6.19	✓
Venting PUC quality natural gas from for sole purpose of pipeline and compressor repair and or maintenance	7.2	
Non-structural repairs & maintenance to permitted equipment	7.3	✓
Detonation of explosives ≤ 100 lb/day and 1,000 lb/year	7.4	

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ATTACHMENT C

CURRENT PERMITS TO OPERATE and BASE DOCUMENT AUTHORITIES to CONSTRUCT (PTOs and ATCs)

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2622-1-5

EXPIRATION DATE: 05/31/2014

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

25.2 MMBTU/HR C.E. NATCO GAS-FIRED STEAM GENERATOR #19 WITH DIFFUSER PLATE AND FLUE GAS

RECIRCULATION (CYMRIC OHIO LEASE)

PERMIT UNIT REQUIREMENTS

- 1. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080]
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
- 3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 4. 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]
- 5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 6. This unit is authorized to burn vapors from the vapor control system listed in permit S-2622-7. [District Rule 2201]
- Emissions rates from this unit shall not exceed any of the following limits: 15 ppmv NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.003 lb-SOx/MMBtu, 0.008 lb-PM10/MMBtu, 200 ppmv CO @ 3% O2 or 0.148 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306]
- 8. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]
- 9. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN,CA 8-2622-1-5: Apr 30 2012 2:54PM = TORID

- 10. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
- 11. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
- 12. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306]
- 13. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]
- 14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
- 15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 16. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306]
- 17. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
- 18. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
- For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of
 three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.
 [District Rules 4305 and 4306]
- 20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]
- 22. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
- 23. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
- 24. On and after July 1, 2010, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2622-5-2

EXPIRATION DATE: 05/31/2014

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

TEOR OPERATION INCLUDING 12 UNCONTROLLED CYCLIC WELLS

PERMIT UNIT REQUIREMENTS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all
 operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined
 petroleum products. [District Rule 2080]
- 3. Permittee shall maintain with the permit a current well roster and such roster shall be made readily available for District inspection upon request. [District Rule 2201]

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

Facility Name: TRC OPERATION COMPANY, INC Location: HEAVY OIL WESTERN, CA

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2622-7-4

EXPIRATION DATE: 05/31/2014

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL STOCK TANK INCLUDING VAPOR CONTROL SYSTEM SERVING THIS TANK AND TANKS S-2622-14 AND '16, INCLUDING STANDBY HIRT VCS-200 VAPOR PROCESSOR WITH NATURAL GAS PILOT, PRESSURE VACUUM RELIEF VALVE, VAPOR PIPING AND COMPRESSORS (CYMRIC-OHIO LEASE)

PERMIT UNIT REQUIREMENTS

- 1. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080]
- 2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 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 vapor control system may receive vapor from well vents listed in permit S-2622-8. [District Rule 2201]
- 5. Vapor collected from the vapor control system serving this tank and tanks S-2622-14 and '16 may be incinerated in steam generators S-2622-1 and S-2622-11. [District Rule 2201]
- 6. VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201]
- 7. Operator shall conduct quarterly gas sampling of tank vapor space and vapor control system piping and components. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201]
- 8. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201]
- 9. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201]
- 10. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201]
- 11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201]
- 12. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201]

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA

- 13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201]
- 14. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
- 15. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 2201]
- 16. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
- 17. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
- 18. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
- 19. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201]
- 20. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201]
- 21. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 4623, 6.3]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2622-8-4

EXPIRATION DATE: 05/31/2014

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

35 THERMALLY ENHANCED CYCLIC WELLS WITH CLOSED CASING VENTS OR WITH OPEN VENTS AND SERVED BY CASING VENT COLLECTION AND CONTROL SYSTEM

PERMIT UNIT REQUIREMENTS

- 1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 2. An inspection and maintenance program consistent with the requirements of Rule 4401 shall be implemented for all wells included on this permit. [District Rule 4401]
- 3. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5]
- 4. All produced fluids shall be piped to permit unit S-2622-7, '14, or '16. [District Rule 2201]
- 5. Well vent vapor from this operation shall be sent only to tank vapor control system S-2622-7. [District Rule 2201]
- 6. VOC content of well and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201]
- 7. Operator shall conduct quarterly gas sampling of well and vapor control system piping and components. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201]
- 8. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201]
- 9. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4401, 6.1]

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 9-2622-8-1: Apr 30 2012 254PM ~ TORID

San Joaquin Valley, Air Pollution Control District

PERMIT UNIT: S-2622-11-9

EXPIRATION DATE: 05/31/2014

SECTION: NE22 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

14.5 MMBTU/HR GAS-FIRED STEAM GENERATOR WITH DIFFUSER PLATE AND FLUE GAS RECIRCULATION

(MIDWAY-PREMIER LEASE)

PERMIT UNIT REQUIREMENTS

- 1. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080]
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
- 3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 4. 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]
- 5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 6. The unit shall only be fired on natural gas or vapor recovery gas from S-2622-7. [District Rule 2201]
- Emissions from the natural gas-fired unit shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.003 lb-SOx/MMBtu, 0.008 lb-PM10/MMBtu, 48 ppmvd CO @ 3% O2 or 0.036 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306]
- 8. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]
- 9. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 9-2622-11-9: Apr 30 2012 2:55PM - TORID

- 10. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
- 11. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
- 12. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]
- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
- 14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306]
- 15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306]
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 17. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306]
- 18. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
- 19. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
- 20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]
- 22. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
- 23. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
- 24. On and after July 1, 2012, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320]

PERMIT UNIT: S-2622-14-2

EXPIRATION DATE: 05/31/2014

RANGE: 21E SECTION: 21 TOWNSHIP: 29S

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL STORAGE/SHIPPING TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON

S-2622-7 (CYMRIC-OHIO LEASE)

PERMIT UNIT REQUIREMENTS

- To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080]
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 2.
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201]
- Operator shall conduct quarterly gas sampling of tank vapor space and vapor control system piping and components. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201]
- VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201]
- 7. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201]
- A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201]
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201]
- 10. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201]
- 11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201]
- 12. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]

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

cation: HEAVY OIL WESTERN,CA 22-14-2: Apr 30 2012 2:55PM - TORID Location:

- 13. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 2201]
- 14. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 el "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products' (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
- 15. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
- 16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
- 17. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201]
- 18. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201]
- 19. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 4623, 6.3]

PERMIT UNIT: S-2622-16-1

EXPIRATION DATE: 05/31/2014

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

1500 BBL FIXED ROOF CRUDE OIL WASH TANK WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-2622-7 (CYMRIC-OHIO LEASE)

PERMIT UNIT REQUIREMENTS

- 1. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080]
- 2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 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]
- VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight.
 [District Rule 2201]
- 5. Operator shall conduct quarterly gas sampling of tank vapor space and vapor control system piping and components. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201]
- 6. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201]
- 7. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201]
- 8. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201]
- 9. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201]
- 10. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201]
- 11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201]
- 12. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]

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

Facility Name: TRC OPERATION COMPANY, INC.
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- 13. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 2201]
- 14. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 el "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
- 15. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
- 16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
- 17. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201]
- 18. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201]
- 19. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 4623, 6.3]
- 20. Facilities S-3088 and S-2622 are included in the same stationary source. [District Rule 2201]

PERMIT UNIT: S-2622-17-2

EXPIRATION DATE: 05/31/2014

SECTION: NE22 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR (#59 DIS# 22456-79) WITH MAGNA FLAME GLE LOW NOX BURNER AND O2 CONTROLLER (#59 DIS# 22456-79)

PERMIT UNIT REQUIREMENTS

- 1. Formerly S-1547-48-12
- 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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
- Emissions from this unit shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 47.5 ppmvd CO @ 3% O2 or 0.035 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306 5.1.1 and 40 CFR 60.43c(e)(2), 60.45c(c) and 60.47c(c)]
- 7. Steam generator shall be fired on natural gas and/or TEOR gas from S-2622-7 with a sulfur content of no greater than 1.0 gr-S/100 scf or pre-treated using a sulfa-treat (or equivalent) system for 95% control of SOx emissions. [District Rule 2201 and 4801]
- 8. When complying with sulfur emission limits by fuel analysis, each fuel source shall be tested at startup and annually thereafter for sulfur content. Gas analyses shall be performed using ASTM method D3246 or double GC for H2S and mercaptans. [District Rule 2201]
- 9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]

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- 10. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]
- 11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
- 12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
- 13. Source testing to measure NOx and CO emissions from this unit while fired on vapor control/TEOR gas from S-2622-7 shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305 and 4306]
- 14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]
- 15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 17. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306]
- 18. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
- 19. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
- For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of
 three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.
 [District Rules 4305 and 4306]
- 21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 22. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2]

- 23. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1]
- 24. Permittee shall maintain accurate records of sulfur content of gas combusted in steam generator and shall make such records readily available for District inspection upon request. [District Rule 1070]
- 25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]
- 26. ATC S-2622-17-1 is hereby canceled. [District Rule 2201]
- 27. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
- 28. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
- 29. On and after July 1, 2010, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320]

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 9-2022-17-2: Apr 30 2012 25SPM - TORID

PERMIT UNIT: S-2622-18-1

EXPIRATION DATE: 05/31/2014

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR, WITH O2 CONTROLLER, FLUE GAS RECIRCULATION, AIRPOL SO2 SCRUBBER SHARED BETWEEN S-1547-77, -78, -123, -124, -135, -136 AND -146, (#88, DIS# 27470-80) (GEN SITE 2972)

PERMIT UNIT REQUIREMENTS

- 1. No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010]
- 2. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306]
- 3. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306]
- 4. When natural gas fired, emission rates shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, CO: 47.5 ppmv @ 3% O2. [District Rules 2201 and 4305]
- When TEOR gas fired, overall emission rates shall not exceed any of the following: PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.015 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, CO: 47.5 ppmv @ 3% O2. [District Rules 2201 and 4305]
- 6. Only natural gas or a combination of natural gas and scrubbed non-condensible gas shall be used as fuel in this steam generator. [District Rule 2201]
- 7. A fuel gas scrubber or exhaust gas scrubber shall be utilized as required to meet SOx limits when TEOR gas is burned.
 [District Rule 2201]
- 8. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305, 6.2.1 and 4351, 6.2.1]
- 9. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rules 4305, 6.3.2 and 4351, 6.3]
- 10. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2]

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$-2822-18-1; Apr 30 2012 2:55PM - TORIO

- 11. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2]
- 12. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2]
- 13. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rule 4305, 6.3]
- 14. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305]
- 15. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis.

 [District Rule 4305]
- 16. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305]
- 17. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305]
- 18. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305]
- 19. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305]
- 20. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305]
- 21. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305]
- 22. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305]
- 23. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081]
- 24. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 25. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) EPA Method 6 or ARB Method 100 and EPA Method 19, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4305]

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$-2622-18-1: Apr 30 2012 255PM - TORID

26. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201]

PERMIT UNIT: S-2622-19-1

EXPIRATION DATE: 05/31/2014

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (#134, DIS# 28716-83) WITH O2 CONTROLLER AND AIRPOL SCRUBBER SHARED BETWEEN S-1547-77, '-78, '-123, '-124, '-135, '-136 & '-146 (GEN SITE 2972)

PERMIT UNIT REQUIREMENTS

- 1. This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rule 4305. [District Rule 4305]
- 2. No modification(s) to this unit shall be performed without an Authority to Construct for the modification(s), except for changes specified in condition 3 below. [District Rule 2201]
- 3. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080]
- Emission rates shall not exceed any of the following limits: PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.015 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 50 ppmv @3% O2. [District Rules 2201 and District Rule 4305]
- 5. Only natural gas or a combination of natural gas and scrubbed non-condensible gas shall be used as fuel in this steam generator. [District Rule 2201]
- 6. A fuel gas scrubber or exhaust gas scrubber shall be utilized as required to meet SOx limits when TEOR gas is burned.

 [District Rule 2201]
- 7. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305, 6.2.1 and 4351, 6.2.1]
- 8. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rules 4305, 6.3.2 and 4351, 6.3]
- 9. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2]
- 10. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2]

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$-2672-19-1 - April 20 2012 2:55PM - TORID

- 11. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305, 6.3.2]
- 12. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rule 4305, 6.3]
- 13. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305]
- 14. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis.

 [District Rule 4305]
- 15. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305]
- 16. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305]
- 17. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305]
- 18. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305]
- 19. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305]
- 20. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305]
- 21. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305]
- 22. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081]
- 23. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 24. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) EPA Method 6 or ARB Method 100 and EPA Method 19, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4305]
- 25. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201]

PERMIT UNIT: S-2622-20-1

EXPIRATION DATE: 05/31/2014

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (#168, DIS# 28639-82) WITH O2 CONTROLLER AND AIRPOL SCRUBBER SHARED BETWEEN S-1547-77, '-78, '-123, '-124, '-135, '-136 & '-146 (GEN SITE 2972)

PERMIT UNIT REQUIREMENTS

- 1. This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rule 4305. [District Rule 4305]
- 2. No modification(s) to this unit shall be performed without an Authority to Construct for the modification(s), except for changes specified in condition 3 below, [District Rule 2201]
- 3. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080]
- 4. Emission rates shall not exceed any of the following limits: PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.015 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 50 ppmv @3% O2. [District Rules 2201 and District Rule 4305]
- 5. Only natural gas or a combination of natural gas and scrubbed non-condensible gas shall be used as fuel in this steam generator. [District Rule 2201]
- 6. A fuel gas scrubber or exhaust gas scrubber shall be utilized as required to meet SOx limits when TEOR gas is burned.

 [District Rule 2201]
- 7. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305, 6.2.1 and 4351, 6.2.1]
- 8. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rules 4305, 6.3.2 and 4351, 6.3]
- 9. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305, 6.3.2]
- 10. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305, 6.3.2]

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA

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

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- 12. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rule 4305, 6.3]
- 13. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305]
- 14. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis.

 [District Rule 4305]
- 15. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305]
- 16. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305]
- 17. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305]
- 18. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305]
- 19. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305]
- 20. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305]
- 21. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305]
- 22. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081]
- 23. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 24. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) EPA Method 6 or ARB Method 100 and EPA Method 19, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4305]
- 25. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201]

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 6-2622-20-1 : Apr 30 2012 255PM - TORID

PERMIT UNIT: S-2622-23-0

EXPIRATION DATE: 05/31/2014

SECTION: 26 TOWNSHIP: 32S RANGE: 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #44 WITH COEN QLN-ULN

3.2 BURNER (WILBERT LEASE)

PERMIT UNIT REQUIREMENTS

- 1. The fuel supply line shall be physically disconnected from this unit when it is dormant. [District Rule 4306]
- 2. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4306]
- 3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306]
- 4. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4306]
- 5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081 and Kern County Rule 108.1]
- 6. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2]
- 7. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2]
- 8. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6 or CARB Method 100; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2]
- 9. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520, 9.3.2]
- 10. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1]

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN,CA 9-2622-23-0: Apr 30 2012 2:55PM -- TORE)

- 11. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 1070]
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), 4301 (Amended December 17, 1992), 4406 (Amended December 17, 1992, and Rule 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 14. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2]
- 15. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2080]
- 16. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201]
- 17. Scrubber liquor pH shall be maintained between 6.15 and 7.5 and shall be continuously monitored. [District Rule 2201]
- 18. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201]
- 19. Maximum annual heat input of the unit shall not exceed 438,000 MMBtu per calendar year. [District Rule 2201]
- 20. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas/vapor recovery gas combusted in the unit shall be utilized and maintained. Use of an alternate system consisting of calibrated orifice plates, transmitters, and a programmable logic controller (PLC) may be used to meet this requirement. [District Rule 2201]
- 21. Records of monthly and annual heat input of the unit shall be maintained. [District Rule 2201]
- 22. Emission rates shall not exceed either of the following: PM10: 0.080 lb/MMBtu or SOx (as SO2): 0.361 lb/MMBtu. [District Rules 2201, 2520, 4201, and 4301]
- 23. Emission rates, except during startup and shutdown and refractory curing, shall not exceed the following: NOx (as NO2): 15 ppmv @ 3% O2, VOC: 0.007 lb/MMBtu, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351]
- Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rule 4306]
- 25. Duration of refractory curing shall not exceed 30 hours each per occurrence. Permittee shall notify the District in writing prior to refractory curing. [District Rule 2080] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of duration of each start-up, shutdown and refractory curing, per a period of five years and make such records readily available for District inspection upon request. [District Rules 2080 and 4306] Federally Enforceable Through Title V Permit
- 27. Emission rates during refractory curing shall not exceed any of the following: particulate matter 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 2201, 4201, 4301, 4405, 4406 and 4801] Federally Enforceable Through Title V Permit

- 28. Permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Measurement shall be made with the FGR system in the mode of operation (closed or open) in which it was used in the preceding 30 days. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 2520] Federally Enforceable Through Title V Permit
- 29. If the NOx and/or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 31. Permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 32. During the 36-month source testing interval, the operator shall tune the unit at least twice per calendar year, (from four to eight months apart) by a qualified technician in accordance with the procedure described in Rule 4304, and shall monitor, on a monthly basis, the unit's operational characteristics recommended by the manufacturer. Semi-annual tuning is not required if emissions are monitored monthly with a portable analyzer. [District Rule 4306] Federally Enforceable Through Title V Permit
- 33. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 34. Performance testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit
- 35. Performance testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit
- 36. If permittee fails any performance testing for NOx or CO emissions when testing not less than once every 36 months, compliance with NOx and CO emissions testing shall be less than once every 12 months. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit
- 37. 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. 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. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or 10B or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) ARB Method 100 or EPA Method 6 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans performed in a laboratory, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, 6.2, and 4306, 6.2] 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. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 40. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
- 41. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 42. 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
- 43. 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
- 44. 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
- 45. 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. [District Rule 2010, 3.0 and 4.0; 2020] Federally Enforceable Through Title V Permit
- 46. 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 9.12.1] Federally Enforceable Through Title V Permit
- 47. 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
- 48. Every application for a permit required under Rule 2010 (Permits Required) shall be filed in a manner and form prescribed by the District Rule 2040] Federally Enforceable Through Title V Permit
- 49. The operator shall maintain records of required monitoring, where applicable, 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, 9.5.1] Federally Enforceable Through Title V Permit

- 50. 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, 9.5.2] Federally Enforceable Through Title V Permit
- 51. 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, 9.6.1] Federally Enforceable Through Title V Permit
- 52. 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 Rules 2520. [District Rules 2520, 9.6.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 53. 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, 9.8] Federally Enforceable Through Title V Permit
- 54. 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, 9.9.1] Federally Enforceable Through Title V Permit
- 55. 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, 9.9.3] Federally Enforceable Through Title V Permit
- 56. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4] Federally Enforceable Through Title V Permit
- 57. 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, 9.9.5] Federally Enforceable Through Title V Permit
- 58. 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, 9.10] Federally Enforceable Through Title V Permit
- 59. 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, 9.14.2.1] Federally Enforceable Through Title V Permit
- 60. 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, 9.14.2.2] Federally Enforceable Through Title V Permit
- 61. 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, 9.14.2.3] Federally Enforceable Through Title V Permit
- 62. 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, 9.14.2.4] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 5-2822-23-0: Apr 30 2012 255PM - TORID

- 63. 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, by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
- 64. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 65. Special Coating Limitations: No person shall apply, sell, solicit, or offer for sale any specialty architectural coating listed in the Table of Standards (District Rule 4601, Table 1 and Table 2), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs (less water and exempt compounds, excluding any colorant added to tint bases) in excess of the specified limits listed in Table 1 (grams of VOC per liter of coating as applied less water and exempt compounds, excluding any colorant added to tint bases) and in Table 2 (grams of VOC per liter of material), except as provided in Section 5.3 of Rule 4601. [District Rule 4601, 5.2] Federally Enforceable Through Title V Permit
- 66. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 67. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5] Federally Enforceable Through Title V Permit
- 68. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2. [District Rule 4601, 6.1 and 6.2] Federally Enforceable Through Title V Permit
- 69. 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
- 70. 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
- 71. 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
- 72. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020, unless specifically exempted under section 4 of Rule 8020. [District Rule 8020] Federally Enforceable Through Title V Permit
- 73. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030, unless specifically exempted under section 4 of Rule 8030. [District Rule 8030] Federally Enforceable Through Title V Permit
- 74. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after October 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 unless specifically exempted under section 4 of Rule 8060. [District Rule 8060] Federally Enforceable Through Title V Permit

- 75. 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
- 76. 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, 9.17] Federally Enforceable Through Title V Permit
- 77. 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
- 78. 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 permit shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 79. Compliance with permit conditions in the Title V permit shall be deemed 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
- 80. Compliance with permit conditions in the Title V permit shall be deemed 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 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (9/17/97); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96); A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 81. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 82. Should the facility, as defined in 40 CFR 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR part 70. [40 CFR 68] Federally Enforceable Through Title V Permit
- 83. On August 31, 2002, the initial Title V permit was issued, the reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of reporting period. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-2622-24-0

EXPIRATION DATE: 05/31/2014

SECTION: 26 TOWNSHIP: 328 RANGE: 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH COEN QLN LOW NOX BURNER (#J-12, DIS#

27458-81) (WILBERT) WITH FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel supply line shall be physically disconnected from this unit. [District Rule 4306]

- 2. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4306]
- 3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306]
- 4. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4306]
- 5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)]
- 6. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2]
- 7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2]
- 8. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2]
- 9. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or EPA Method 6B; or EPA Method 8; or ARB Methods 8 or 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2]
- 10. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 4468, D 4084, D3246 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory. [District Rule 2520, 9.4.2; 4305, 6.2.1, and 4351, 6.2.1]

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 5-2622-249: Apr 30 2012 255PM - TORID Permit Unit Requirements for S-2622-24-0 (continued)

- 11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1]
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), 4301 (Amended December 17, 1992), 4406 (Amended December 17, 1992, and Rule 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.21
- 14. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2]
- 15. No less than 1.65 miles of roadway shall be paved with asphalt concrete and maintained in good repair. [District Rule
- 16. Only asphalt concrete shall be used as road paving material. [District Rule 2201]
- 17. Caltrans Standard Specifications for paving and materials shall be fully satisfied. [District Rule 2201]
- 18. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201]
- 19. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201]
- 20. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306, 4405, 4406, 4801 and Kern County Rules 424 and 425]
- 21. Emission rates during startup, shutdown and refractory curing shall not exceed: particulate matter 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 - 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4301, 4405, 4406, 4801 and Kern County Rules 424 and 425]
- 22. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201]
- 23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rule 4305 and 4306]
- 24. Duration of refractory curing shall not exceed 30 hours each per occurrence. Permittee shall notify the District in writing prior to refractory curing. [District Rule 2080]
- 25. Permittee shall maintain records of duration of each start-up and shutdown, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4306]
- 26. If FGR system on unit is used intermittently, monitoring shall consist of use of a portable analyzer. If FGR system on unit is continuously used, monitoring shall consist of either use of a portable analyzer or monitoring of FGR rate based on parameters established during initial compliance source testing. If FGR system on unit is not used, monitoring shall consist of either use of a portable analyzer or monitoring of stack O2 and burner mechanical adjustments. The alternate monitoring scheme selected for this unit shall be established prior to implementation of this Authority to Construct. [District Rule 4306]
- 27. Permittee monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]

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

Facility Name: TRC OPERATION COMPANY, INC.

HEAVY OIL WESTERN,CA

- 28. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306]
- 29. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
- 30. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
- 31. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306]
- 32. Whenever the unit is switched to operate with the flue gas recirculation (FGR) system in the closed position, compliance source testing for NOx and CO shall be conducted within 60 days of cessation of FGR operation date unless source testing with FGR system in the closed position has occurred within the previous 12 months. [District Rule 1070]
- 33. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]
- 34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
- 35. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 36. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or 10B or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content ASTM D1072, D4468, D3246, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, and 4305, 6.2]
- 37. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306]

- 38. All records shall be maintained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]
- 39. 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)]
- 40. 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)]
- 41. 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]
- 42. 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. [District Rule 2010, 3.0 and 4.0; and 2020]
- 43. 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 9.12.1]
- 44. 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]
- 45. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040]
- 46. The operator shall maintain records of required monitoring, where applicable, 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, 9.5.1]
- 47. 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, 9.5.2]
- 48. 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, 9.6.1]
- 49. 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(6/15/95) [District Rules 2520, 9.6.2 and 1100, 7.0]
- 50. 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, 9.8]

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

- 51. 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, 9.9.2]
- 52. 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, 9.9.3]
- 53. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4]
- 54. 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, 9.9.5]
- 55. 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, 9.10]
- 56. 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, 9.14.2.1]
- 57. 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, 9.14.2.2]
- 58. 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, 9.14.2.3]
- 59. 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, 9.14.2.4]
- 60. 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 (11/15/01), by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)]
- 61. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1]
- 62. Specialty Coating Limitations: No person shall apply, sell, solicit, or offer for sale any architectural coating listed in the Tables of Standards (District Rule 4601, Table 1 and Table 2), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs in excess of the specified limits after the corresponding date listed in Table 1(grams of VOC per liter of coating as applied less water and exempt compounds, excluding any colorant added to tint bases) and in Table 2 (grams of VOC per liter of material), except as provided in Section 5.3 of Rule 4601. [District Rule 4601, 5.2]
- 63. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4]
- 64. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5]

- 65. The permittee shall comply with all the Labeling and Test Method requirements outlined in Rule 4601 sections 6.1 and 6.2 (9/17/97). [District Rule 4601, 6.1 and 6.2]
- 66. 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, 9.14.1 and 10.0]
- 67. 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]
- 68. 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]
- 69. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 (4/25/96) unless specifically exempted under section 4 of Rule 8020 (4/25/96). [District Rule 8020]
- 70. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030 (4/25/96), unless specifically exempted under section 4 of Rule 8030 (4/25/96). [District Rule 8030]
- 71. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after December 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 (4/25/96) unless specifically exempted under section 4 of Rule 8060 (4/25/96). [District Rule 8060]
- 72. 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]
- 73. 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, 9.17]
- 74. 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]
- 75. 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 permit shall apply. [District Rule 2520, 9.1.1]
- 76. 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]
- 77. Compliance with permit conditions in the Title V permit shall be deemed 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 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (10/31/01); 8021 (11/15/01); 8031 (11/15/01); 8061 (11/15/01); A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 78. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA

- 79. Facility shall comply with all applicable requirements regarding preparation and implementation of a risk management plan by June 21, 1999 and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR 68]
- 80. The permittee shall submit a Stationary Source Curtailment Plan and/or a Traffic Abatement Plan, pursuant to District Rule 6130 (as amended December 17, 1992) within 45 days to the APCO upon request. [District Rule 6130, 3.1]
- 81. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520]





AUTHORITY TO CONSTRUCT

PERMIT NO: S-2622-1-9

ISSUANCE DATE: 08/23/2010

LEGAL OWNER OR OPERATOR: TRC OPERATION COMPANY, INC.

MAILING ADDRESS:

P.O. BOX 227 **TAFT, CA 93268**

LOCATION:

HEAVY OIL WESTERN

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 25.2 MMBTU/HR C.E. NATCO GAS-FIRED STEAM GENERATOR #19 WITH DIFFUSER PLATE AND FLUE GAS RECIRCULATION (CYMRIC OHIO LEASE): DESIGNATE AS A RULE 4306 COMPLIANT DORMANT **EMISSIONS UNIT**

CONDITIONS

- No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201]
- The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070]
- When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306]
- When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306]
- A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306]
- This unit may not be operated after the applicable compliance schedule from Rule 4320, unless a valid ATC is obtained that approves the changes allowing this unit to comply with the applicable requirements of Rule 4320. [District Rule 4320]

CONDITIONS CONTINUE ON NEXT PAGE

YOU <u>MUST</u> NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

- 7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081]
- 8. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080]
- 9. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
- 10. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 11. 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]
- 12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 13. This unit is authorized to burn vapors from the vapor control system listed in permit S-2622-7. [District Rule 2201]
- 14. Emissions rates from this unit shall not exceed any of the following limits: 15 ppmv NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.003 lb-SOx/MMBtu, 0.008 lb-PM10/MMBtu, 200 ppmv CO @ 3% O2 or 0.148 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306]
- 15. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]
- 16. Upon recommencing operation, if either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]
- 17. Upon recommencing operation, all alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
- 18. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
- 19. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306]
- 20. Upon recommencing operation, source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]

- 21. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
- 22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 23. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306]
- 24. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
- 25. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
- 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 Rules 4305 and 4306]
- 27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]
- 29. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
- 30. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
- 31. On and after July 1, 2010, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320]

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AUTHORITY TO CONSTRUCT

PERMIT NO: S-2622-7-5

ISSUANCE DATE: 07/15/2008

LEGAL OWNER OR OPERATOR: TRC OPERATION COMPANY, INC.

P.O. BOX 227

MAILING ADDRESS:

TAFT, CA 93268

LOCATION:

HEAVY OIL WESTERN

CA

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 42,000 GALLON FIXED ROOF CRUDE OIL STOCK TANK INCLUDING VAPOR CONTROL SYSTEM SERVING THIS TANK AND TANKS S-2622-14 AND '16, INCLUDING STANDBY HIRT VCS-200 VAPOR PROCESSOR WITH NATURAL GAS PILOT, PRESSURE VACUUM RELIEF VALVE, VAPOR PIPING AND COMPRESSORS (CYMRIC-OHIO LEASE): REPLACE STEAM GENERATORS S-2622-1 AND '-11 WITH '-17 AS AUTHORIZED VAPOR COMBUSTION DEVICE

CONDITIONS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. This vapor control system may receive vapor from well vents listed in permit S-2622-8. [District Rule 2201]
- 4. Hirt burner shall be fired on natural gas and/or TEOR gas from S-2622-8 with a sulfur content of no greater than 1.0 gr-S/100 scf or pre-treated using a sulfa-treat (or equivalent) system for 95% control of SOx emissions. [District Rule 2201 and 4801]
- 5. When complying with sulfur emission limits by fuel analysis, each fuel source shall be tested at startup and annually thereafter for sulfur content. Gas analyses shall be performed using ASTM method D3246 or double GC for H2S and mercaptans. [District Rule 2201]
- 6. Vapor collected from the vapor control system serving this tank and tanks S-2622-14 and '-16 may be incinerated in steam generator S-2622-17. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

- 7. The tank shall be equipped with a vapor control system consisting of a closed system that collects VOCs from the storage tank and a VOC control device. The vapor control system shall be APCO-approved. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 99% by weight as determined by the test method specified in section 6.4 of District Rule 4623. [District Rule 2201]
- 8. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
- 9. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201]
- 10. Permittee shall conduct true vapor pressure (TVP) and API gravity testing of fluid stored by tanks S-2622-7, '-14, and '-16 at least once every 24 months during summer (July- September), and/or whenever there is a change in the source or type of organic liquid stored in tanks S-2622-7, '-14, and '-16 in order to maintain exemption form the rule. Sample for TVP analysis shall be taken from tank with highest storage temperature. [District Rule 4623]
- 11. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623]
- 12. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623]
- 13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623]
- 14. Permittee shall submit the records of TVP and API gravity testing to the Compliance Section of the Southern Region of the SJVAPCD within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623]
- 15. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623]
- 16. Operator shall conduct quarterly gas sampling of gas from vapor recovery system serving tanks S-2622-7, '-14, and '16. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201]
- 17. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201]
- 18. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201]
- 19. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201]
- 20. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201]

- 21. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201]
- 22. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2201]
- 23. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2201]
- 24. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2201]
- 25. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201]
- 26. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2201]
- 27. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201]
- 28. Permittee shall maintain accurate records of sulfur content of gas combusted in Hirt burner (as required by Condition #5) and shall make such records readily available for District inspection upon request. [District Rule 1070]
- 29. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080]
- 30. ATC shall be implemented concurrently with or subsequent to ATC S-2622-17-1. [District Rule 2201]





AUTHORITY TO CONSTRUCT

PERMIT NO: S-2622-11-10

ISSUANCE DATE: 08/23/2010

LEGAL OWNER OR OPERATOR: TRC OPERATION COMPANY, INC.

MAILING ADDRESS:

P.O. BOX 227 TAFT, CA 93268

LOCATION:

HEAVY OIL WESTERN

SECTION: NE22 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 14.5 MMBTU/HR GAS-FIRED STEAM GENERATOR WITH DIFFUSER PLATE AND FLUE GAS RECIRCULATION (MIDWAY-PREMIER LEASE): DESIGNATE AS A RULE 4306 COMPLIANT DORMANT EMISSIONS

UNIT

CONDITIONS

- No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201]
- The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070]
- When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306]
- When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306]
- A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306]
- This unit may not be operated after the applicable compliance schedule from Rule 4320, unless a valid ATC is obtained that approves the changes allowing this unit to comply with the applicable requirements of Rule 4320. [District Rule 4320]

CONDITIONS CONTINUE ON NEXT'PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of Issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

- 7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081]
- 8. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080]
- 9. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
- 10. No air contaminant shall be released into the atmosphere which causes a public nuisance, [District Rule 4102]
- 11. 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]
- 12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 13. The unit shall only be fired on natural gas or vapor recovery gas from S-2622-7. [District Rule 2201]
- 14. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.003 lb-SOx/MMBtu, 0.008 lb-PM10/MMBtu, 48 ppmvd CO @ 3% O2 or 0.036 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu, [District Rules 2201, 4305, and 4306]
- 15. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]
- 16. Upon recommencing operation, if either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]
- 17. Upon recommencing operation, all alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
- 18. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
- 19. Upon recommencing operation, source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]
- 20. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]

- 21. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306]
- 22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306]
- 23. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 24. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306]
- 25. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
- 26. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
- 27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]
- 29. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
- 30. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
- 31. On and after July 1, 2012, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320]

ATTACHMENT D

INITIAL TV PERMITS TO OPERATE (PTOs)

FACILITY: S-2622-0-2

FACILITY-WIDE REQUIREMENTS

- 1. Facilities S-3088 and S-2622 are included in the same stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 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, 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, 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] 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, 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, 2080; and 2520] 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
- 10. 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]

FACILITY-WIDE REDU NTINUE ON NEXT PAGE

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 9-2622-0-2: Mey 2 2012 4:00PM - TORID

- 11. 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] Federally Enforceable Through Title V Permit
- 12. 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] Federally Enforceable Through Title V Permit
- 13. 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] Federally Enforceable Through Title V Permit
- 14. 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, 1100] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. 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] Federally Enforceable Through Title V Permit
- 17. 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] Federally Enforceable Through Title V Permit
- 18. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520] Federally Enforceable Through Title V Permit
- 19. 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] Federally Enforceable Through Title V Permit
- 20. 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] Federally Enforceable Through Title V Permit
- 21. 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] Federally Enforceable Through Title V Permit
- 22. 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] Federally Enforceable Through Title V Permit
- 23. 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] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$-2622-0-2: May 2 2012 4:00PM - TORID

- 24. 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] Federally Enforceable Through Title V Permit
- 25. 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
- 26. 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] Federally Enforceable Through Title V Permit
- 27. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601] Federally Enforceable Through Title V Permit
- 28. 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] Federally Enforceable Through Title V Permit
- 29. 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] Federally Enforceable Through Title V Permit
- 30. 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
- 31. 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
- 32. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
- 33. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
- 34. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
- 35. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
- 36. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2622-0-2: May 2 2012 4:00PM - TORID

- 37. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 38. 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
- 39. 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] Federally Enforceable Through Title V Permit
- 40. 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] Federally Enforceable Through Title V Permit
- 41. 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] Federally Enforceable Through Title V Permit
- 42. 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] Federally Enforceable Through Title V Permit
- 43. 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] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$-\$822-0-2: May 2 2012 4:00PM - TORID

PERMIT UNIT: S-2622-1-10

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

25.2 MMBTU/HR C.E. NATCO GAS-FIRED STEAM GENERATOR #19 WITH DIFFUSER PLATE AND FLUE GAS

RECIRCULATION (CYMRIC OHIO LEASE)

PERMIT UNIT REQUIREMENTS

- No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
- The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit, [District Rule 1070]
- When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- This unit may not be operated after the applicable compliance schedule from Rule 4320, unless a valid ATC is obtained that approves the changes allowing this unit to comply with the applicable requirements of Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 11. This unit is authorized to burn vapors from the vapor control system listed in permit S-2622-7. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Emissions rates from this unit shall not exceed any of the following limits: 15 ppmv NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.003 lb-SOx/MMBtu, 0.008 lb-PM10/MMBtu-200 ppmv CO @ 3% O2 or 0.148 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4\$06] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$-2622-1-10: May 2 2012 4:00PM - TORID

- 13. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. Upon recommencing operation, if either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. Upon recommencing operation, all alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 18. Upon recommencing operation, source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 19. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 21. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 22. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC.

Location: HEAVY OIL WESTERN, CA 8-2522-1-10: May 2 2012 4:00PM - TORID

- 23. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 24. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 25. 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
- 26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
- 27. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
- 29. On and after July 1, 2010, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA

PERMIT UNIT: S-2622-5-4

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

TEOR OPERATION INCLUDING 12 UNCONTROLLED CYCLIC WELLS

EXPIRATION DATE: 85/31/2014

PERMIT UNIT REQUIREMENTS

- 1. All wells authorized by this permit shall be located more than 1000 feet from any existing well vent vapor recovery system operated by the company. [District Rule 4401] Federally Enforceable Through Title V Permit
- 2. Permittee shall maintain with the permit a current well roster and such roster shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN,CA

PERMIT UNIT: S-2622-7-7

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL STOCK TANK INCLUDING VAPOR CONTROL SYSTEM SERVING THIS TANK AND TANKS S-2622-14 AND '16, INCLUDING STANDBY HIRT VCS-200 VAPOR PROCESSOR WITH NATURAL GAS PILOT, PRESSURE VACUUM RELIEF VALVE, VAPOR PIPING AND COMPRESSORS (CYMRIC-OHIO LEASE)

PERMIT UNIT REQUIREMENTS

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three
 minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
 Federally Enforceable Through Title V Permit
- 2. This vapor control system may receive vapor from well vents listed in permit S-2622-8. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Hirt burner shall be fired on natural gas and/or TEOR gas from S-2622-8 with a sulfur content of no greater than 1.0 gr-S/100 scf or pre-treated using a sulfa-treat (or equivalent) system for 95% control of SOx emissions. [District Rule 2201 and 4801] Federally Enforceable Through Title V Permit
- 4. When complying with sulfur emission limits by fuel analysis, each fuel source shall be tested at startup and annually thereafter for sulfur content. Gas analyses shall be performed using ASTM method D3246 or double GC for H2S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Vapor collected from the vapor control system serving this tank and tanks S-2622-14 and '-16 may be incinerated in steam generator S-2622-17. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The tank shall be equipped with a vapor control system consisting of a closed system that collects VOCs from the storage tank and a VOC control device. The vapor control system shall be APCO-approved. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 99% by weight as determined by the test method specified in section 6.4 of District Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 8. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Permittee shall conduct true vapor pressure (TVP) and API gravity testing of fluid stored by tanks S-2622-7, '-14, and '-16 at least once every 24 months during summer (July- September), and/or whenever there is a change in the source or type of organic liquid stored in tanks S-2622-7, '-14, and '-16 in order to maintain exemption form the rule. Sample for TVP analysis shall be taken from tank with highest storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4028] 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: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2822-7-7: May 2 2012 4:00PM - TORIO EXPIRATION DATE: 05/31/2014

- 11. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
- 12. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. Permittee shall submit the records of TVP and API gravity testing to the Compliance Section of the Southern Region of the SJVAPCD within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. Operator shall conduct quarterly gas sampling of gas from vapor recovery system serving tanks S-2622-7, '-14, and '16. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of this permit. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2022-7-7: Nay 2 2012 4:00PM - TORID

- 23. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Permittee shall maintain accurate records of sulfur content of gas combusted in Hirt burner (as required by Condition #5) and shall make such records readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 28. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

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Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN,CA \$-2622-7-7: Mey 2 2012 4:00PM - TORID

PERMIT UNIT: S-2622-8-5

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

35 THERMALLY ENHANCED CYCLIC WELLS WITH CLOSED CASING VENTS OR WITH OPEN VENTS AND SERVED

BY CASING VENT COLLECTION AND CONTROL SYSTEM

PERMIT UNIT REQUIREMENTS

No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit

- An inspection and maintenance program consistent with the requirements of Rule 4401 shall be implemented for all wells included on this permit. [District Rule 4401] Federally Enforceable Through Title V Permit
- The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
- All produced fluids shall be piped to permit unit S-2622-7, '14, or '16. [District Rule 2201] Federally Enforceable Through Title V Permit
- Well vent vapor from this operation shall be sent only to tank vapor control system S-2622-7. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of well and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly gas sampling of well and vapor control system piping and components. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair, [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 10. The inspection requirements of Section 5.4.1 through Section 5.4.7 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10%) or less, as determined by the test methods in Section 6.3.4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREME IUE ON NEXT PAGE These terms and condition

HEAVY OIL WESTERN, CA

Facility Name: TRC OPERATION COMPANY, INC.

- 11. An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or the steamenhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 12. An operator shall be in violation of this rule if any District inspection demonstrates the existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.6.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401] Federally Enforceable Through Title V Permit
- 13. An operator shall be in violation of this rule if any District inspection demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or a gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 14. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.6.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.9 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 15. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] Federally Enforceable Through Title V Permit
- 16. An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401] Federally Enforceable Through Title V Permit
- 17. District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401] Federally Enforceable Through Title V Permit
- 18. An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401] Federally Enforceable Through Title V Permit
- 19. An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and 5.9.2.3 of Rule 4401, or the component is found to be in compliance with the requirements of this rule, [District Rule 4401] Federally Enforceable Through Title V Permit
- 20. An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401] Federally Enforceable Through Title V Permit
- 21. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 4 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401] 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: TRC OPERATION COMPANY, INC. cation: HEAVY OIL WESTERN, CA Location:

- 22. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401] Federally Enforceable Through Title V Permit
- 23. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 24. The time of the initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 25. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401] Federally Enforceable Through Title V Permit
- 26. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 27. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4401] Federally Enforceable Through Title V Permit
- 28. Operator shall maintain a list of all gauge tanks, as defined in Section 3.17. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401] Federally Enforceable Through Title V Permit
- 29. The results of gauge tank TVP testing conducted pursuant to Section 6.2.5 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401] Federally Enforceable Through Title V Permit
- 30. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401] Federally Enforceable Through Title V Permit
- 31. An operator shall comply with the following requirements for each gauge tank, as defined in Section 3.17 of Rule 4401: Conduct periodic TVP testing of each gauge tank at least once every 24 months during summer (July September), and whenever there is a change in the source or type of produced fluid in the gauge tank. The TVP testing shall be conducted at the actual storage temperature of the produced fluid in the gauge tank using the applicable TVP test method specified in Section 6.4 of Rule 4623 (Storage of Organic Liquids). The operator shall submit the TVP testing results to the APCO as specified in Section 6.1.10 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 32. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-282-8-5- May 2 2012 4-00PM TORID

- 33. Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak. the date of repair, replacement, or removal from operation of leaking components, identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401] Federally Enforceable Through Title V Permit
- 34. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401] Federally Enforceable Through Title V Permit
- 35. Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 36. A small producer shall maintain monthly records of county-specific crude oil production. For the purpose of this rule, the monthly crude oil production records required by the California Division of Oil, Gas, and Geothermal Resources may be used to satisfy Section 6.1.2 or Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 37. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401] Federally Enforceable Through Title V Permit
- 38. All records required by this permit shall be maintained and retained on-site for a minimum of five (5) years and made available for District, ARB, and EPA inspection upon request. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
- 39. 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 2201 and 4401] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA

PERMIT UNIT: S-2622-11-11

SECTION: NE22 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

14.5 MMBTU/HR GAS-FIRED STEAM GENERATOR WITH DIFFUSER PLATE AND FLUE GAS RECIRCULATION

(MIDWAY-PREMIER LEASE)

PERMIT UNIT REQUIREMENTS

- No modification to this unit shall be performed without an Authority to Construct (ATC) for such modifications, except for changes specified in the conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070]
- 3. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- 4. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- 6. This unit may not be operated after the applicable compliance schedule from Rule 4320, unless a valid ATC is obtained that approves the changes allowing this unit to comply with the applicable requirements of Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081]
- 8. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 11. The unit shall only be fired on natural gas or vapor recovery gas from S-2622-7. [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: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA

S-2522-11-11 : May 3 2012 8:50AM - TORID

- 12. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.003 lb-SOx/MMBtu, 0.008 lb-PM10/MMBtu, 48 ppmvd CO @ 3% O2 or 0.036 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 13. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. Upon recommencing operation, if either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. Upon recommencing operation, all alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. Upon recommencing operation, source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 18. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306 Federally Enforceable Through Title V Permit
- 19. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 20. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. ocation: HEAVY OIL WESTERN,CA 1822-11-11: May 3 2012 8:50AM - TORID

Permit Unit Requirements for S-2622-11-11 (continued)

- 21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 22. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 23. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 24. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 25. 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
- 26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
- 27. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
- 29. On and after July 1, 2012, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 6-2622-11-11: May 3 2012 8:50AM - TORIO

PERMIT UNIT: S-2622-14-3

SECTION: 21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL STORAGE/SHIPPING TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON

S-2622-7 (CYMRIC-OHIO LEASE)

PERMIT UNIT REQUIREMENTS

No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit

- VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly gas sampling of tank vapor space and vapor control system piping and components. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval, [District Rule 2201] Federally Enforceable Through Title V Permit
- All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmy, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
- All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. HEAVY OIL WESTERN, CA

- 11. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 12. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 el "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 13. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 14. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 15. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA

PERMIT UNIT: S-2622-16-2

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

1500 BBL FIXED ROOF CRUDE OIL WASH TANK WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON

PERMIT S-2622-7 (CYMRIC-OHIO LEASE)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit

- 2. VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Operator shall conduct quarterly gas sampling of tank vapor space and vapor control system piping and components. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA

S-2622-16-2 : May 2 2012 4:00PM - TORIO

- 11. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit
- 12. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 13. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 14. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit
- 15. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2622-16-2: May 2 2012 4:00PM - TORID

PERMIT UNIT: S-2622-17-3

SECTION: NE22 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR C.E. NATCO NATURAL GAS FIRED STEAM GENERATOR (#59 DIS# 22456-79) WITH MAGNA FLAME

GLE LOW NOX BURNER AND O2 CONTROLLER (#59 DIS# 22456-79)

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. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Emissions from this unit shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 47.5 ppmvd CO @ 3% O2 or 0.035 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 5. Steam generator shall be fired on natural gas and/or TEOR gas from S-2622-7 with a sulfur content of no greater than 1.0 gr-S/100 scf or pre-treated using a sulfa-treat (or equivalent) system for 95% control of SOx emissions. [District Rules 2201, 4320 and 4801] Federally Enforceable Through Title V Permit
- 6. When complying with sulfur emission limits by fuel analysis, each fuel source shall be tested at startup and annually thereafter for sulfur content. Gas analyses shall be performed using EPA Method 11 or Method 15. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 8. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Fitte V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 9-2822-17-3: May 2 2012 4:00PM - TORIO

- 9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Source testing to measure NOx and CO emissions from this unit while fired on vapor control/TEOR gas from S-2622-7 shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 17. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 18. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit
- 21. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520; 4305; and 4351] Federally Enforceable Through Title V Permit
- 22. Permittee shall maintain accurate records of sulfur content of gas combusted in steam generator and shall make such records readily available for District inspection upon request. [District Rules 1070 and 4320] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location; HEAVY OIL WESTERN, CA \$-2622-17-3: May 2 2012 4:00PM - TORID

- 23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 24. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit
- 26. On and after July 1, 2010, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$-2622-17-3; May 2 2012 4:00PM - TORID

PERMIT UNIT: S-2622-18-2

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR,

WITH 02 CONTROLLER, FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit

- 2. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
- 3. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- 4. When natural gas fired, emission rates shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, CO: 47.5 ppmv @ 3% O2. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit
- 5. When TEOR gas fired, overall emission rates shall not exceed any of the following: PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.015 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, CO: 47.5 ppmv @ 3% O2. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit
- 6. Only natural gas or a combination of natural gas and scrubbed non-condensible gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. A fuel gas scrubber shall be utilized as required to meet SOx limits when TEOR gas is burned. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
- 9. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit

PERMIT UNIT REOUNE MENTS (CONTINUE ON NEXT PAGE
These terms and conditions are pan-on the Facility-wide Permit to Operate.

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2622-18-2: Jun 27 2012 11:04AM - TORIO

- 10. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305] Federally Enforceable Through Title V Permit
- 11. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305] Federally Enforceable Through Title V Permit
- 12. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305] Federally Enforceable Through Title V Permit
- 13. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rule 4305] Federally Enforceable Through Title V Permit
- 14. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
- 15. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit
- 16. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
- 17. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit
- 19. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit
- 20. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305] Federally Enforceable Through Title V Permit
- 21. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305] Federally Enforceable Through Title V Permit
- 22. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305] Federally Enforceable Through Title Y Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$-2622-18-2: Jun 27 2012 11:04AM - TORID

- 23. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. 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. The results of each source test shall be submitted to the District within 60 days thereafter, [District Rule 1081] Federally Enforceable Through Title V Permit
- 25. The following test methods shall be used: NOx (ppmy) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - EPA Method 6 or ARB Method 100 and EPA Method 19, fuel gas sulfur content -ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4305] Federally Enforceable Through Title V Permit
- 26. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC.

HEAVY OIL WESTERN, CA S-2622-18-2 : Jun 27 2012 11:04AM

PERMIT UNIT: S-2622-18-2

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR,

WITH O2 CONTROLLER, FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

No modification(s) to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit

- This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
- The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- When natural gas fired, emission rates shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, CO: 47.5 ppmv @ 3% O2. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit
- When TEOR gas fired, overall emission rates shall not exceed any of the following: PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.015 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, CO: 47.5 ppmv @ 3% O2. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit
- Only natural gas or a combination of natural gas and scrubbed non-condensible gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
- A fuel gas scrubber shall be utilized as required to meet SOx limits when TEOR gas is burned. [District Rule 2201] Federally Enforceable Through Title V Permit
- If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
- Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit

PERMIT UNIT REQ These terms and condition

Facility Name: TRC OPERATION COMPANY, INC. HEAVY OIL WESTERN, CA LOCATION: FIELD TO THE VI-

- 10. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305] Federally Enforceable Through Title V Permit
- 11. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305] Federally Enforceable Through Title V Permit
- 12. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305] Federally Enforceable Through Title V Permit
- 13. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rule 4305] Federally Enforceable Through Title V Permit
- 14. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
- 15. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit
- 16. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
- 17. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit
- 19. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit
- 20. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305] Federally Enforceable Through Title V Permit
- 21. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305] Federally Enforceable Through Title V Permit
- 22. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305] Federally Enforceable Through Title Y Permit

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

Facility Name: TRC OPERATION COMPANY, INC.

Location: HEAVY OIL WESTERN, CA \$-2622-18-2: Jun 27 2012 11:04AM - TORID

- 23. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 25. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) EPA Method 6 or ARB Method 100 and EPA Method 19, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4305] Federally Enforceable Through Title V Permit
- 26. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

PERMIT UNIT: S-2622-19-2

SECTION: NE21 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR

(#134, DIS# 28716-83) WITH O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rule 4305. [District Rule 4305] Federally Enforceable Through Title V Permit

- 2. No modification(s) to this unit shall be performed without an Authority to Construct for the modification(s), except for changes specified in condition 3 below. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Emission rates shall not exceed any of the following limits: PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.015 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 50 ppmv @3% O2. [District Rules 2201 and District Rule 4305] Federally Enforceable Through Title V Permit
- 5. Only natural gas or a combination of natural gas and scrubbed non-condensible gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. A fuel gas scrubber shall be utilized as required to meet SOx limits when TEOR gas is burned. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
- 8. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
- 9. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA \$2822-19-21 Jun 27 2012 11:04AM = TORID

- 10. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305] Federally Enforceable Through Title V Permit
- 11. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305] Federally Enforceable Through Title V Permit
- 12. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rule 4305] Federally Enforceable Through Title V Permit
- 13. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
- 14. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis. [District Rule 4305] Federally Enforceable Through Title V Permit
- 15. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
- 16. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit
- 18. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit
- 19. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305] Federally Enforceable Through Title V Permit
- 20. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305] Federally Enforceable Through Title V Permit
- 21. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305] Federally Enforceable Through Title V Permit
- 22. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8:7827-18-7: Jun 27 7012 11:04AM - TORID

- 24. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) EPA Method 6 or ARB Method 100 and EPA Method 19, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4305] Federally Enforceable Through Title V Permit
- 25. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

PERMIT UNIT: S-2622-20-2

SECTION: NE21 TOWNSHIP: 298 RANGE: 21E

EQUIPMENT DESCRIPTION:

DORMANT 62.5 MMBTU/HR C.E. NATCO NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR

(#168, DIS# 28639-82) WITH O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

- This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rule 4305. [District Rule 4305] Federally Enforceable Through Title V Permit
- 2. No modification(s) to this unit shall be performed without an Authority to Construct for the modification(s), except for changes specified in condition 3 below. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Emission rates shall not exceed any of the following limits: PM10: 0.015 lb/MMBtu, SOx (as SO2): 0.015 lb/MMBtu, NOx (as NO2): 30 ppmv @3% O2, VOC: 0.003 lb/MMBtu, or CO: 50 ppmv @3% O2. [District Rules 2201 and District Rule 4305] Federally Enforceable Through Title V Permit
- 5. Only natural gas or a combination of natural gas and scrubbed non-condensible gas shall be used as fuel in this steam generator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. A fuel gas scrubber shall be utilized as required to meet SOx limits when TEOR gas is burned. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
- 8. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.). [District Rules 4305 and 4351] Federally Enforceable Through Title V Permit
- 9. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rule 4305] 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: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2522-20-2: Jun 27 2012 11:05AM - TORID

- 10. All units in a group for which representative units are source for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rule 4305] Federally Enforceable Through Title V Permit
- 11. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rule 4305] Federally Enforceable Through Title V Permit
- 12. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. [District Rule 4305] Federally Enforceable Through Title V Permit
- 13. The acceptable range of positions of the atmospheric combustion air control valve and fuel firing rates shall be established by testing emissions from this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 4305] Federally Enforceable Through Title V Permit
- 14. The atmospheric combustion air control valve position and fuel firing rates shall be recorded at least on a weekly basis.

 [District Rule 4305] Federally Enforceable Through Title V Permit
- 15. If the atmospheric combustion air control valve position or fuel firing rate deviate from the acceptable range for more than 20 minutes, the steam generator shall be automatically shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
- 16. The acceptable range of atmospheric combustion air control valve position shall be documented for each steam generator in a District approved plan. Permittee shall maintain a copy of the current plan with the steam generator permit. [District Rule 4305] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain records of the weekly atmospheric combustion air control valve position and fuel firing rate. The records must also include a description of any corrective action taken to return the atmospheric combustion air control valve position and fuel firing rate to the acceptable range. Permittee shall maintain records of steam generator automatic shutdown and corrective action taken prior to restarting the unit. [District Rule 4305] Federally Enforceable Through Title V Permit
- 18. Within two hours after a continuous period in which fuel flow to the unit has been shut off for 30 minutes or longer the atmospheric combustion air control valve and fuel firing rate shall be returned to the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit
- 19. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305] Federally Enforceable Through Title V Permit
- 20. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305] Federally Enforceable Through Title V Permit
- 21. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305] Federally Enforceable Through Title V Permit
- 22. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2822-20-2: Jun 27 2012 11:055M—TORID

- 24. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) EPA Method 6 or ARB Method 100 and EPA Method 19, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4305] Federally Enforceable Through Title V Permit
- 25. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2022-20-2: Jun 27 2012 11:06AM - TORID

PERMIT UNIT: S-2622-23-1

SECTION: 26 TOWNSHIP: 32S RANGE: 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR #44 WITH COEN QLN-ULN

3.2 BURNER

PERMIT UNIT REQUIREMENTS

- The fuel supply line shall be physically disconnected from this unit when it is dormant. [District Rule 4306] Federally Enforceable Through Title V Permit
- Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081 and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
- Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520] Federally Enforceable Through Title V Permit
- When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520] Federally Enforceable Through Title V Permit
- When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6 or CARB Method 100; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit
- If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculated emissions. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Location: HEAVY OIL WESTERN, CA \$-2622-23-1: Jun 27 2012 11:05AM - TORID

Facility Name: TRC OPERATION COMPANY, INC.

- 10. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520; 4305; and 4351] Federally Enforceable Through Title V Permit
- 11. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing under scrubbed operation has occurred within the previous 12 months. [District Rule 1070] Federally Enforceable Through Title V Permit
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), 4301 (Amended December 17, 1992), 4406 (Amended December 17, 1992, and Rule 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 14. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 15. Scrubber shall be located on site. Duct work to steam generators may be blinded off or removed. [District Rule 2080] Federally Enforceable Through Title V Permit
- 16. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Scrubber liquor pH shall be maintained between 6.15 and 7.5 and shall be continuously monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. When scrubber is in operation, steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall be maintained with no detectable leaks. [District Rule 2201]
- 19. Maximum annual heat input of the unit shall not exceed 438,000 MMBtu per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas/vapor recovery gas combusted in the unit shall be utilized and maintained. Use of an alternate system consisting of calibrated orifice plates, transmitters, and a programmable logic controller (PLC) may be used to meet this requirement. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. Records of monthly and annual heat input of the unit shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Emission rates shall not exceed either of the following: PM10: 0.080 lb/MMBtu or SOx (as SO2): 0.361 lb/MMBtu. [District Rules 2201, 2520, 4201, and 4301] Federally Enforceable Through Title V Permit
- 23. Emission rates, except during startup and shutdown and refractory curing, shall not exceed the following: NOx (as NO2): 15 ppmv @ 3% O2, VOC: 0.007 lb/MMBtu, or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
- Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rule 4306] Federally Enforceable Through Title V Permit
- 25. Duration of refractory curing shall not exceed 30 hours each per occurrence. Permittee shall notify the District in writing prior to refractory curing. [District Rule 2080] Federally Enforceable Through Title V Permit

- 26. Permittee shall maintain records of duration of each start-up, shutdown and refractory curing, per a period of five years and make such records readily available for District inspection upon request. [District Rules 2080 and 4306] Federally Enforceable Through Title V Permit
- 27. Emission rates during refractory curing shall not exceed any of the following: particulate matter 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 2201, 4201, 4301, 4405, 4406 and 4801] Federally Enforceable Through Title V Permit
- 28. Permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Measurement shall be made with the FGR system in the mode of operation (closed or open) in which it was used in the preceding 30 days. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 2520] Federally Enforceable Through Title V Permit
- 29. If the NOx and/or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 31. Permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 32. During the 36-month source testing interval, the operator shall tune the unit at least twice per calendar year, (from four to eight months apart) by a qualified technician in accordance with the procedure described in Rule 4304, and shall monitor, on a monthly basis, the unit's operational characteristics recommended by the manufacturer. Semi-annual tuning is not required if emissions are monitored monthly with a portable analyzer. [District Rule 4306] Federally Enforceable Through Title V Permit
- 33. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 34. Performance testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA S-2822-23-1: Jun 27 2012 11:054M - TORID

- 35. Performance testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 36. If permittee fails any performance testing for NOx or CO emissions when testing not less than once every 36 months, compliance with NOx and CO emissions testing shall be less than once every 12 months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 37. 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. 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. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or 10B or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) ARB Method 100 or EPA Method 6 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans performed in a laboratory, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081, 4305, and 4306] 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. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 40. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
- 41. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

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

Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA 8-2822-23-1: Jun 27 2012 11:05AM - TORID

PERMIT UNIT: S-2622-24-1

SECTION: 26 TOWNSHIP: 32S RANGE: 23E

EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR, WITH COEN QLN LOW NOX BURNER WITH FLUE

GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit

- 2. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- 3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
- 4. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
- 5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
- 6. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520] Federally Enforceable Through Title V Permit
- 8. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520] Federally Enforceable Through Title V Permit
- 9. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or EPA Method 6B; or EPA Method 8; or ARB Methods 8 or 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520] Federally Enforceable Through Title V Permit

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Facility Name: TRC OPERATION COMPANY, INC. Location: HEAVY OIL WESTERN, CA S-2622-24-1: Jun 27 2012 11:05AM - TORIO

- 10. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 4468, D 4084, D3246 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory. [District Rule 2520, 4305 and 4351] Federally Enforceable Through Title V Permit
- 11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 4305 and 4351] Federally Enforceable Through Title V Permit
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), 4301 (Amended December 17, 1992), 4406 (Amended December 17, 1992, and Rule 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 14. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520) Federally Enforceable Through Title V Permit
- 15. No less than 1.65 miles of roadway shall be paved with asphalt concrete and maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Only asphalt concrete shall be used as road paving material. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Caltrans Standard Specifications for paying and materials shall be fully satisfied. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Compliance with particulate matter offset requirements shall be demonstrated by District inspection of roads annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Natural gas fuel sulfur content shall not exceed 1.1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. Emission rates, except during startup, shutdown, and refractory curing shall not exceed any of the following PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.003 lb/MMBtu, VOC: 0.003 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 0.030 lb/MMBtu or 40 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4305, 4306, 4405, 4406, 4801 and Kern County Rules 424 and 425] Federally Enforceable Through Title V Permit
- 21. Emission rates during startup, shutdown and refractory curing shall not exceed; particulate matter 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 - 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4301, 4405, 4406, 4801 and Kern County Rules 424 and 425] Federally Enforceable Through Title V Permit
- 22. Emission rates shall not exceed any of the following: PM10: 12.0 lb/day, SOx (as SO2): 4.5 lb/day, VOC: 4.5 lb/day, NOx (as NO2): 54.0 lb/day or 9855 lb/year, or CO: 45.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
- 24. Duration of refractory curing shall not exceed 30 hours each per occurrence. Permittee shall notify the District in writing prior to refractory curing. [District Rule 2080] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain records of duration of each start-up and shutdown, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit

Facility Name: TRC OPERATION COMPANY, INC.

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- 26. If FGR system on unit is used intermittently, monitoring shall consist of use of a portable analyzer. If FGR system on unit is continuously used, monitoring shall consist of either use of a portable analyzer or monitoring of FGR rate based on parameters established during initial compliance source testing. If FGR system on unit is not used, monitoring shall consist of either use of a portable analyzer or monitoring of stack O2 and burner mechanical adjustments. The alternate monitoring scheme selected for this unit shall be established prior to implementation of this Authority to Construct. [District Rule 4306] Federally Enforceable Through Title V Permit
- 27. Permittee monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 28. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 29. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 30. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 31. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 32. Whenever the unit is switched to operate with the flue gas recirculation (FGR) system in the closed position, compliance source testing for NOx and CO shall be conducted within 60 days of cessation of FGR operation date unless source testing with FGR system in the closed position has occurred within the previous 12 months. [District Rule 1070] Federally Enforceable Through Title V Permit
- 33. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

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- 34. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 35. 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. 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
- 36. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or 10B or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content ASTM D1072, D4468, D3246, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rule 1081, and 4305] Federally Enforceable Through Title V Permit
- 37. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 38. All records shall be maintained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit

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