



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



NOV 03 2014

Shams Hasan
E&B Natural Resources
3000 James Road
Bakersfield, CA 93308

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: S-4034
Project Number: S-1143284

Dear Mr. Hasan:

Enclosed for your review and comment is the District's analysis of E&B Natural Resources's application for an Authority to Construct for the installation of five fixed roof crude oil tanks with pressure/vacuum relief devices in western Kern County.

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

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Steve Davidson of Permit Services at (661) 392- 5618.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:SDD/st

Enclosures

cc: Mike Tollstrup, CARB (w/ enclosure) via email
cc: Gerardo C. Rios, EPA (w/ enclosure) via email

Sayed Sadredin
Executive Director/Air Pollution Control Officer

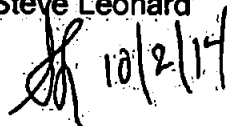
Northern Region
4800 Enterprise Way
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Tel: (209) 557-6400 FAX: (209) 557-6475

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Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
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Authority to Construct Application Review

Fixed Roof Oil Field Production Tank < 5000 BBLs
Uncontrolled Emissions Less than 6 tons/year
Heavy Oil, Not Connected to Vapor Control

Facility:	E&B Natural Resources	Date:	August 20, 2014
Mailing Address:	3000 James Road Bakersfield, CA 93308	Engineer:	Steve Davidson
Contact Person:	Shams Hasan	Lead Engineer:	Steve Leonard
Telephone:	(661) 616-4664		 10/2/14
Application #(s):	S-4034-33-0, '-34-0, '-35-0, '-36-0 and '-37-0		
Project #:	S-1143284		
Deemed Complete:	August 12, 2014		

I. Proposal

E&B Natural Resources is applying for Authority to Construct (ATC) permits for the installation of five fixed roof, bbl crude oil tanks with pressure/vacuum relief devices.

Facility proposes to surrender tank S-4034-7 to offset the increase in VOC emissions proposed by this project.

Facility S-4034 is a Rule 2530 source and therefore Rule 2520 is not applicable.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 2530	Federally Enforceable Operating Permit (12/18/08)
Rule 4001	New Source Performance Standards,

Subpart Kb (Amended 4/14/99) - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) is not applicable. This subpart does not apply to vessels with a design capacity $\leq 1,589.874 \text{ m}^3$ ($\leq 420,000$ gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer. The capacity of these tanks is $\leq 420,000$ gallons,

and they store crude oil prior to custody transfer; therefore, this subpart does not apply to the tanks in this project.

Subpart OOOO (Adopted 8/16/2012) - Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution.

Rule 4409 Components at Light Crude Oil Production facilities, Natural Gas Facilities, and Natural Gas Processing Facilities (4/20/05)

Rule 4101 Visible Emissions (02/17/05)

Rule 4102 Nuisance (12/17/92)

Rule 4623 Storage of Organic Liquids (05/19/05)

CH&SC 41700 Health Risk Assessment

CH&SC 42301.6 School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)

California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The equipment will be located at the following locations within their Light Oil Western stationary source:

Permit #	Section	Township	Range	Lease
S-4034-33-0	NE 23	30S	21E	FE Smith
S-4034-34-0	NW 32	30S	22E	Loma Alta
S-4034-35-0	NE 23	30S	21E	Anderson
S-4034-36-0	NE 23	30S	21E	Anderson
S-4034-37-0	SW 14	30S	21E	FE Smith

The equipment is not located within 1,000 feet of the outer boundary of any K-12 school. Therefore, pursuant to CH&SC 42301.6, California Health and Safety Code (School Notice), public notification is not required.

IV. Process Description

The tanks at the 21S Site are used to store crude oil prior to transfer offsite.

The tanks will be equipped with a pressure-vacuum (PV) relief vent valve set to within 10% of the maximum allowable working pressure of the tank. The PV-valves will reduce VOC wind induced emissions from the tank vent.

The facility diagrams of the leases are found in Attachment E.

V. Equipment Listing

New Tanks

- S-4034-33-0: 300 BBL FIXED ROOF CRUDE OIL WASH TANK WITH PV VALVE (FE SMITH)
- S-4034-34-0: 470 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE (LOMA ALTA LEASE)
- S-4034-35-0: 470 BBL FIXED ROOF CRUDE OIL WASH TANK WITH PV VALVE (ANDERSON LEASE)
- S-4034-36-0: 250 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE (ANDERSON LEASE)
- S-4034-37-0: 470 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE (PML LEASE)

Tank to be surrendered:

- S-4034-27-1: 940 BBL FIXED ROOF CRUDE OIL STOCK TANK EQUIPPED WITH PRESSURE/VACUUM VENT (LOMA ALTA)

VI. Emission Control Technology Evaluation

The tanks will be equipped with a pressure-vacuum (PV) relief vent valve set to within 10% of the maximum allowable working pressure of the tank. The PV-valve will reduce VOC wind induced emissions from the tank vent.

VII. Emissions Calculations

A. Assumptions

New Tanks:

- Facility will operate 24 hours per day, 7 days per week, and 52 weeks per year.
- The tanks emit only volatile organic compounds (VOCs),
- The tanks paint conditions are good, the color is gray, and the shade is medium.
- Tanks are unheated
- VOCs molecular weight, 50 lb/lbmol

Tank	RVP	Throughput	Constant Level
S-4034-33-0	3.6	100	Yes
S-4034-34-0	3.6	15	No
S-4034-35-0	3.6	15	Yes
S-4034-36-0	3.6	25	No
S-4034-37-0	3.6	25	No

Tank S-4034-27:

Emissions were calculated in project S-1142258 and will be used in this project.

B. Emission Factors

PE's for each permit unit will be based on the results from the District's Microsoft Excel spreadsheet, "Tank Emissions - Fixed Roof Crude Oil 26 API & Higher" located in Attachment A. The spreadsheet for tanks was developed using the equations for fixed-roof tanks from EPA AP-42, Chapter 7.1.

C. Calculations

1. Pre-Project Potential to Emit, (PE₁)

Permit Unit	VOC - Daily PE1 (lb/day)	VOC - Annual PE1 (lb/Year)
S-4034-27-0	26.3	9611

Since Tanks S-4034-33-0, '-35-0, '-36-0, and '-37-0 are new emissions units, the PE₁ = 0

2. Post Project Potential to Emit, (PE₂)

The following table summarizes the post project potential to emit for units included in this project. See calculations in attachment A.

Permit Unit	VOC - Daily PE2 (lb/day)	VOC - Annual PE2 (lb/Year)
S4034-27-0	0	0
S-4034-33-0	1.8	665
S-4034-34-0	1.4	500
S-4034-35-0	1.4	510
S-4034-36-0	4.9	1787
S-4034-37-0	5.3	1937

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to

Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

SSPE1 (lb/year) ¹					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	3103	158	1308	17,681	75,499

¹ Calculated with the District SSPE calculator. See Attachment B

4. Post-Project Stationary Source Potential to Emit (SSPE2)

SSPE2 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	3103	158	1308	17,681	75,499
S-4034-27-0					<9611>
S-4034-33-0					665
S-4034-34-0					500
S-4034-35-0					510
S-4034-36-0					1787
S-4034-37-0					1937
SSPE2	3103	158	1308	17,681	71,287

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

This source is an existing Major Source for VOC emissions and will remain a Major Source for VOC. No change in other pollutants are proposed or expected as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant and 100,000 tpy for CO₂e.

PSD Major Source Determination (tons/year)						
	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Estimated Facility PE before Project Increase	1.6	37.7	0.1	8.8	0.7	0.7
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source ? (Y/N)	N	N	N	N	N	N

As shown above, the facility is not an existing PSD major source for any regulated NSR pollutant.

6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.22

Tank S-4034-7-1 is a clean unit, BE= PE1

Since tanks S-4034-33-0, '-34-0, '-35-0, '-36-0 and '-37-0 are new emissions unit, the annual BE is equal to zero.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is a major source for VOCs, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
VOC	-4212	50,000	No

Since SB 288 Major Modification Threshold for VOCs was not surpassed with this project, this project does not constitute a SB288 Major Modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

Step 1

The tanks are new; therefore, the increase in emissions is equal to the PE2 for each new unit included in this project.

The project's combined total emission increases are calculated in below and compared to the Federal Major Modification Thresholds in the following table.

Permit Unit	VOC - Daily PE2 (lb/year)
S-4034-33-0	665
S-4034-34-0	500
S-4034-35-0	510
S-4034-36-0	1787
S-4034-37-0	1937
Total	5399

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)**	Thresholds (lb/yr)	Federal Major Modification?
VOC*	5539	0	Yes

*If there is any emission increases VOC, this project is a Federal Major Modification and no further analysis is required.

Since the Federal Major Modification Threshold is being surpassed with this project, this project constitutes a Federal Major Modification and no further analysis is required.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. . The proposed equipment only emits VOC. VOC is a non-attainment pollutant; therefore, this rule does not apply.

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Attachment G.

VIII. Compliance

Rule 2201 - New and Modified Stationary Source Review Rule

A. BACT

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

The applicant is proposing to install five new tank. The PE is less than 2.0 lb-VOC/day for tanks S-4034-33-0, '-34-0, and '-35-0. The PE is greater than 2.0 lb-VOC for tanks S-4034-36-0 and '-37-0. Since the daily VOC emissions for tanks S-4034-36-0 and '-37-0 is greater than 2.0 lbs/day, BACT is triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore, BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

As discussed in Section I above, there are no modified tanks associated with this project; therefore, BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does not constitute a SB 288 Modification for VOC emissions; therefore, BACT is not triggered for SB 288 Modification purposes.

As discussed in Section VII.C.7 above, this project constitutes a Federal Major Modification for VOC emissions; therefore, BACT is triggered for VOC for all emissions units in the project for which there is an emission increase over 0.5 lb/day (S-4034-33-0, '-34-0, '-35-0, '-36-0, and '-37-0).

2. BACT Guidance

BACT Guideline 7.3.1, applies to Petroleum and Petrochemical Production – Fixed Roof Organic Liquid Storage or Processing Tank, < 5,000 bbl tank capacity (see Attachment B)

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

The applicant is proposing to use PV relief valve on the tank vent set to within 10% of maximum allowable pressure. The technologically feasible option of waste gas incinerated in steam generator, heater treater, or other fired equipment; transfer of noncondensable vapors to gas pipeline; reinjection to formation (if appropriate wells are available); or equal] and inspection and maintenance program at 99% control are not cost effective (see Attachment C); the following proposed equipment satisfies the BACT requirement of BACT Guideline 7.3.1:

VOC: pressure and vacuum (PV) relief valve on tank vent set to within 10% of maximum allowable pressure

B. Offsets

1. Offset Applicability

Pursuant to Rule 2201, Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the post-project stationary source Potential to Emit (SSPE2) equals or exceeds the offset threshold levels in Table 4-1 or Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

Offset Applicability			
Pollutant	SSPE2 (lb/yr)	Offset Threshold Levels (lb/yr)	Offsets Required?
VOC	71,287	20,000	Yes

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset threshold; therefore, offset calculations will be required for this project.

Per Rule 2201, Sections 4.7, the quantity of offsets in pounds per year VOC is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = $(\Sigma[PE2 - BE] + ICCE) \times DOR$, for all new or modified emissions units in the project,

Where,

- PE2 = Post Project Potential to Emit, (lb/year)
- BE = Baseline Emissions, (lb/year)
- ICCE = Increase in Cargo Carrier Emissions, (lb/year)
- DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE)

The facility is proposing to install five new emissions unit; therefore, Baseline Emissions are equal to zero for these tanks. Tank S-4034-27-0 is a clean emissions unit; therefore, $BE = PE1$. Also, there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

Offsets Required (lb/year) = $([PE2 - BE] + ICCE) \times DOR$

Tank 4034-27-1:

PE2 = 0 lb-VOC/year
BE = -9611 lb-VOC/year
PE2 - BE = -9611 lb-VOC/year

Tank S-4034-33-0:

PE2 = 665 lb-VOC/year
BE = 0 lb-VOC/year
PE2 - BE = 665 lb-VOC/year

Tank S-4034-34-0:

PE2 = 500 lb-VOC/year
BE = 0 lb-VOC/year
PE2 - BE = 500 lb-VOC/year =

Tank S-4034-35-0:

PE2 = 510 lb-VOC/year
BE = 0 lb-VOC/year
PE2 - BE = 510 lb-VOC/year =

Tank S-4034-36-0:

PE2 = 1787 lb-VOC/year
BE = 0 lb-VOC/year
PE2 – BE = 1787 lb-VOC/year =

Tank s-4034-37-0:

PE2 = 1937 lb-VOC/year
BE = 0 lb-VOC/year
PE2 – BE = 1937 lb-VOC/year =

ICCE = 0 lb-VOC/year

The project is a Federal Major Modification and therefore the correct offset ratio for VOCs is 1.5:1.

The amount of VOC ERCs that need to be withdrawn is:

$$\begin{aligned}\text{Offsets Required (lb/year)} &= \frac{[(-9611 + 665 + 500 + 510 + 1787 + 1973) + 0]}{1.5} \\ &= -4676 \times 1.5 \\ &= 0 \text{ lb VOC/year}\end{aligned}$$

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.
- e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in VII.C.7, this project does not constitute a SB 288; therefore, public noticing for SB 288 is not required.

As demonstrated in VII.C.8, this project constitutes a Federal Major Modification; therefore, public noticing for Federal Major Modification purposes is required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore, public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Threshold				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
VOC	75,499	71,287	20,000 lb/year	No

As detailed above, the VOC threshold was not surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e. $SSIPE = SSPE2 - SSPE1$. The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table:

Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
VOC	71,287	75,499	-4212	20,000 lb/year	No

As demonstrated above, the SSIPs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIP purposes is not required.

e. Title V Significant Permit Modification

Since this facility does not have a Title V operating, this change is not a Title V Significant Modification, and therefore public noticing is not required.

2. Public Notice Action

As discussed above, public noticing for Federal Major Modification purposes is required for this project. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emissions Limits (DEL)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

DELs for the emission units in this project will be included on the ATCs in the form of tanks' throughput and the tank contents' maximum true vapor pressure (TVP). The permittee will be required to maintain accurate records of tank content TVP and tanks monthly average daily throughput to validate the DEL.

E. Compliance Assurance

The following measures shall be taken to ensure continued compliance with District Rules:

1. Source Testing

The permittee will be required to perform periodic TVP testing for all tanks in this project using the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The testing shall be conducted once every 24 month period or every time when the source of liquid stored is changed.

2. Monitoring

Monitoring is not required.

3. Record Keeping

Record keeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions will appear on the permits:

- Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] N
- All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] N

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis

Section 4.14.1 of this Rule requires that an ambient air quality analysis (AAQA) be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. However, since VOCs are the only criteria pollutant associated with the project and VOCs are not evaluated in an AAQA, no further review was performed for the Ambient Air Quality Analysis.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Title I Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Sections VIII-Rule 2201-C.1.a and VIII-Rule 2201-C.1.b, this facility is a new major source and this project does constitute a Title I modification, therefore this requirement is applicable. Included in **Attachment F** is E&B's compliance certification.

H. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to install five new tanks.

Since the project will provide oil storage and processing at the locations E&B Natural Resources currently operates, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2410 Prevention of Significant Deterioration

This rule applies to attainment pollutants only. The proposed equipment only emits VOC. VOC is a non-attainment pollutant; therefore, this rule does not apply.

Rule 2520 Federally Mandated Operating Permits

Since this facility's emissions exceed the major source thresholds of District Rule 2201, this facility is a major source. However, this facility has elected to comply with Rule 2530, exempts it from the requirements of Rule 2520.

Rule 2530 Federally Enforceable Potential to Emit

The purpose of this rule is to restrict the emissions of a stationary source so that the source may elect to be exempt from the requirements of Rule 2520. Pursuant to Rule 2530, since this facility has elected exemption from the requirements of Rule 2520 by ensuring actual emissions from the stationary source in every 12-month periods to not exceed the following: $\frac{1}{2}$ the major source thresholds for NO_x, VOCs, CO, and PM₁₀; 50 tons per year SO₂; 5 tons per year of a single HAP; 12.5 tons per year of any combination of HAPs; 50 percent of any lesser threshold for a single HAP as the EPA may establish by rule; and 50 percent of the major source threshold for any other regulated air pollutant not listed in Rule 2530.

Rule 4101 - Visible Emissions

Rule 4101 states that 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.

As long as the equipment is properly maintained and operated, compliance with visible emissions limits is expected under normal operating conditions.

Rule 4102 - Public Nuisance

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Compliance is expected

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (**Attachment D**), the total facility prioritization score including this project was less than or equal to one. Therefore, no future analysis is required to determine the impact from this project and compliance with the District's Risk Management Policy is expected.

Rule 4409 Component at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities

This rule applies to components containing or contacting VOC streams at light crude oil production facilities, natural gas production facilities, and natural gas processing facilities.

Per Section 4.1, the requirements of this rule shall not apply to components subject to Rule 4623 (Storage of Organic Liquids); to components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623; or to components subject to Rule 4401 (Steam Enhanced Crude Oil Production Well Vents). The tanks in this project are subject to Rule 4623; thus, the components associated with the tanks will not be subject to this rule.

Rule 4623, 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.

Applicant also states that the crude oil TVP is 3.27 and the tanks have less than 471bbl capacity. Therefore, the following conditions will apply:

This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 3.27 psia under all storage conditions. [District Rules 2201 & 4623] N

Crude oil throughput shall not exceed XX barrels per day based on a monthly average. [District Rules 2201 and 4623] N

{2486} This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] N

{2487} This tank shall be in a leak-free condition. 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. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623] N

{Modified 2910} Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank upon initial start-up, 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 and 4623] N

{2911} The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rules 2201] N

The permittee shall conduct API gravity testing upon initial start-up. [District Rules 4623] N{2483}

For crude oil with an API gravity of greater than 26 degrees, the TVP shall be determined by measuring the Reid Vapor Pressure (RVP) using the latest version of ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products) and converting the RVP to TVP at the maximum liquid storage temperature using the procedures in Rule 4623, Appendix B [District Rule 4623] N

{2912} 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 Rules 2201] N

{2497} Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201] N

{2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623] N

Applicant has specifically requested to enter the District's "Voluntary Tank Preventions and Maintenance Program" and for the conditions to be placed on the permit; therefore, the following conditions from District Policy SSP 2215 (2-22-08), "Organic Liquid Storage Tanks – Voluntary Inspection and Maintenance Program" will be placed on the ATC:

"Organic Liquid Storage Tanks – Voluntary Inspection and Maintenance Program"

Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 or 2080]

Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 or 2080]

Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 or 2080]

Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 or 2080]

Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking

components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 or 2080]

If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 or 2080]

Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 or 2080]

Applicant has requested the District place tank gassing and cleaning conditions on the Permit; therefore, the following conditions from District Policy SSP 2210, "Organic Liquid Storage Tanks – Cleaning Requirements":

Notification Condition:

Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623 or 2080]

Degassing Conditions:

This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 4623 or 2080]

Tank Cleaning :

While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623 or 2080]

Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623 or 2080]

Removed Sludge Handling

The following conditions only apply to tanks that are subject to District Rule 4623 holding organic liquids with a TVP of 1.5 psia or greater:

If the crude oil stored in the tank has a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]

If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]

If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623]

Compliance with the requirements of this rule is expected.

CH&SC 42301.6 California Health & Safety Code (School Notice)

The District has verified that these sites are not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001.

The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The tanks are equipped with a PV-vent set to within 10% of maximum allowable pressure satisfies the Best Performance Standards (BPS) for Front-line Organic Liquid Storage Tanks, Fixed Roof Tanks < 5,000 bbl. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change and no other discussion for green house gas emissions is required.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendations

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue Authority to Construct S-4034-33-0, '-34-0, '-35-0, '-36-0, and '-37-0 subject to the permit conditions on the attached draft Authority to Construct in Attachment H.

X. Billing Information

Permit Number	Fee Schedule	Fee Description	Annual Fee
S-4034-33-0	3020-5-B	300 BBLs	\$93
S-4034-34-0	3020-5-B	470 BBLs	\$93
S-4034-35-0	3020-5-B	470 BBLs	\$93
S-4034-36-0	3020-5-B	250 BBLs	\$93
S-4034-37-0	3020-5-B	470 BBLs	\$93

ATTACHMENT A: Emissions Calculations
ATTACHMENT B: BACT Guideline
ATTACHMENT C: Top down BACT Analysis
ATTACHMENT D: Health Risk Assessment
ATTACHMENT E: Facility Diagrams
ATTACHMENT F: Compliance Certification
ATTACHMENT G: QNEC
ATTACHMENT H: Draft ATC(s)

Attachment A

Emissions Calculations

Detailed SSPE Report

Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	4034	0	0						0
S	4034	1	4	0	0	0	0	2300	0
S	4034	2	2	0	0	0	0	1705	0
S	4034	5	0	0	0	0	0	708	0
S	4034	6	0	0	0	0	0	708	0
S	4034	7	0	0	0	0	0	726	0
S	4034	8	0	0	0	0	0	716	0
S	4034	13	1	0	0	0	0	7528	1
S	4034	14	3	0	0	0	0	5116	1
S	4034	15	2	0	0	0	0	7528	1
S	4034	16	1	0	0	0	0	3589	1
S	4034	17	1	0	0	0	0	3589	1
S	4034	18	1	0	0	0	0	4567	1
S	4034	19	1	0	0	0	0	884	0
S	4034	20	0	0	0	0	0	2746	1
S	4034	21	1	621	54	359	4176	640	0
S	4034	22	1	0	0	0	0	2096	0
S	4034	23	0	0	0	0	0	13562	0
S	4034	24	0	0	0	0	0	4097	0
S	4034	25	2	2482	104	949	13505	2330	0
S	4034	26	0	0	0	0	0	292	0
S	4034	27	1	0	0	0	0	9611	0
S	4034	28	0	0				100	0
S	4034	29	1	0	0	0	0	312	0
S	4034	30	1	0	0	0	0	69	0

Tuesday, September 30, 2014

Page 1 of 2

Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

<i>Region Facility</i>	<i>Unit Mod</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>CO</i>	<i>VOC</i>	<i>Number of Outstanding ATCs</i>
<i>SSPE (lbs)</i>		3103	158	1308	17681	75499	

Tuesday, September 30, 2014

Page 2 of 2

Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

TANK ID	TANK USE	SJVUAPCD PERMIT #	TANK TYPE H OR V	SHELL DIMENSIONS		CAPACITY (BBL)	ROOF TYPE (C/D)	VENT PSIG	
				D (FT)	Hs (FT)			VAC.	PRESS.
3	Wash	S-4034-33	VERTICAL	16.5	8.0	304.7	CONE	-0.03	0.03

TANK ROOF		PAINT FACTOR	LIQUID DATA				CONSTANT LEVEL?	VAPOR MOL. WT.	VOC CNTRL %EFF (w/w)
COND.	COLOR		TYPE	Hi=H(lx)	Kp	RVP			
GOOD	GRAY	0.68	CRUDE	6.0	0.75	3.60	YES	50.00	0.0

UNCONTROLLED EMISSIONS

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/MON)	TURNOVER PER MON.	FAC-(Kn)	VOC (LBM/MONTH)			TOTAL (LBM/QTR)
QUARTER	MONTH						Ls	Lw	TOTAL (Lt)	
FIRST	JANUARY	63.30	1.96	3100	0.33	1.000	18.76	3.70	22.46	94.30
	FEBRUARY	67.50	2.14	2800	0.33	1.000	24.88	4.04	28.92	
	MARCH	71.54	2.33	3100	0.33	1.000	38.53	4.39	42.92	
SECOND	APRIL	76.59	2.57	3000	0.33	1.000	52.73	4.85	57.58	223.95
	MAY	82.17	2.87	3100	0.33	1.000	71.91	5.41	77.32	
	JUNE	86.51	3.12	3000	0.33	1.000	83.16	5.89	89.05	
THIRD	JULY	88.94	3.27	3100	0.33	1.000	90.88	6.17	97.05	248.02
	AUGUST	87.00	3.15	3100	0.33	1.000	80.11	5.94	86.05	
	SEPTEMBER	82.28	2.88	3000	0.33	1.000	59.49	5.43	64.92	
FOURTH	OCTOBER	75.71	2.53	3100	0.33	1.000	43.10	4.77	47.87	98.28
	NOVEMBER	67.78	2.16	3000	0.33	1.000	25.03	4.06	29.10	
	DECEMBER	62.82	1.94	3100	0.33	1.000	17.65	3.67	21.32	

CONTROLLED EMISSIONS (BASED ON MONTHLY CALCULATIONS)

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/QTR)	TURNOVER PER QTR.	FAC-(Kn)	VOC (LBM/QTR)		
QUARTER	MONTH						Ls	Lw	TOTAL (Lt)
FIRST	JAN-MAR	67.44	2.14	9000	1	1.000	82	12	94
SECOND	APR-JUN	81.76	2.86	9100	1	1.000	208	16	224
THIRD	JUL-SEP	86.07	3.10	9200	1	1.000	230	18	248
FOURTH	OCT-DEC	68.77	2.21	9200	1	1.000	86	12	98
QUARTERLY AVERAGE		76.01	2.58	9125			152	45	166
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							1.7	0.2	1.8
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							606	58	665

Tank Emission Calculation Spreadsheet, version 01/23/03

Input

FOR REFERENCE PAINT TABLE

PAINT COLOR	SHADE/ TYPE	PAINT FACTORS PAINT CONDITION	
		GOOD	POOR
ALUMINUM	SPECULAR	0.39	0.49
ALUMINUM	DIFFUSE	0.60	0.68
GRAY	LIGHT	0.54	0.83
GRAY	MEDIUM	0.88	0.74
RED	PRIMER	0.89	0.91
WHITE	--NONE--	0.17	0.34

LIQUID TYPE	CODE	
CRUDE OIL	0	CRUDE
MOTOR GASOLINE	1	MOTOR GAS
AVIATION GASOLINE	2	AV GAS
LIGHT NAPHTHA (RVP 9-14 PSIA)	3	LT NAPHTHA
NAPHTHA (RVP 2-8 PSIA)	4	NAPHTHA

METEOROLOGICAL DATA CODES	
AREA	CODE
BAKERSFIELD	0
FRESNO	1
STOCKTON	2

PRESS [TAB] TO SKIP TO NEXT MODIFIABLE CELL

GIVEN AND ASSUMED DATA	
USING THE CODES ABOVE, WHAT REGION PERMIT NUMBERS DO YOU WANT TO USE? (0, 1, OR 2)	0
USING THE CODES ABOVE, WHAT AREA METEOROLOGICAL DATA DO YOU WANT TO USE? (0, 1, 2, ...)	0
REID VAPOR PRESSURE (psia)	3.80
VAPOR MOLECULAR WEIGHT (Mv)	50.00
USING THE CODES ABOVE, WHAT TYPE OF ORGANIC LIQUID (0, 1, 2, ...)	0
VOC CONTROL EFFICIENCY	0.00
TANK SHELL DIAMETER (FEET)	16.50
TANK SHELL HEIGHT, H _s (FEET)	8.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.03
VENT PRESSURE (POSITIVE psig)	0.03
TANK ID	FE Smith
TANK USE	Waah
SJVUAPCD PERMIT#	S-4034-33
CONE OR DDME ROOF (C/D)	C
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	100.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	2.00
TANK RDOF PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK ROOF PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK ROOF PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M
TANK SHELL PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK SHELL PAINT COLD, SEE ABOVE (A/G/R/W)	G
TANK SHELL PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M

MODIFIABLE DATA	
	Y
	--N/R--
	3.0
CONE ROOF	
GIVEN ROOF HEIGHT OR SLOPE (H/S)	S
	0.94
TANK CONE RDOF SLOPE, S _r (DEFAULT=0.0625) (ft/ft)	0.0625
	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	Y
ENTER MAXIMUM LIQUID HEIGHT (ft)	8.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
ENTER AVERAGE LIQUID HEIGHT (ft)	6.6
IS TANK CONSTANT LEVEL? (Y/N)	Y
IF YES, NUMBER OF TURNS PER MONTH (DEF.=0.33)	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
	180

TANK ID	TANK USE	SJVUAPCD PERMIT #	TANK TYPE H OR V	SHELL DIMENSIONS		CAPACITY (BBL)	ROOF TYPE (C/D)	VENT PSIG	
				D (FT)	Hs (FT)			VAC.	PRESS.
3	Stock	Ioma Alta	VERTICAL	15.0	8.0	251.8	CONE	-0.03	0.03

TANK ROOF		PAINT FACTOR	LIQUID DATA				CONSTANT LEVEL?	VAPOR MOL. WT.	VOC CNTRL %EFF (w/w)
COND.	COLOR		TYPE	Hi=H(lx)	Kp	RVP			
GOOD	GRAY	0.68	CRUDE	6.0	0.75	3.60	NO	50.00	0.0

UNCONTROLLED EMISSIONS

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/MON)	TURNOVER PER MON.	FAC-(Kn)	VOC (LBM/MONTH)			TOTAL (LBM/QTR)
QUARTER	MONTH						Ls	Lw	TOTAL (Lt)	
FIRST	JANUARY	63.30	1.96	465	3.69	0.857	1.35	29.34	30.69	99.01
	FEBRUARY	67.50	2.14	420	3.34	0.857	1.81	28.91	30.72	
	MARCH	71.54	2.33	465	3.69	0.857	2.85	34.75	37.60	
SECOND	APRIL	76.59	2.57	450	3.57	0.857	3.98	37.21	41.19	141.33
	MAY	82.17	2.87	465	3.69	0.857	5.56	42.90	48.46	
	JUNE	86.51	3.12	450	3.57	0.857	6.55	45.14	51.69	
THIRD	JULY	88.94	3.27	465	3.69	0.857	7.24	48.85	56.10	155.71
	AUGUST	87.00	3.15	465	3.69	0.857	6.33	47.08	53.40	
	SEPTEMBER	82.28	2.88	450	3.57	0.857	4.60	41.61	46.21	
FOURTH	OCTOBER	75.71	2.53	465	3.69	0.857	3.24	37.78	41.03	104.32
	NOVEMBER	67.78	2.16	450	3.57	0.857	1.83	31.16	32.98	
	DECEMBER	62.82	1.94	465	3.69	0.857	1.26	29.05	30.31	

CONTROLLED EMISSIONS (BASED ON MONTHLY CALCULATIONS)

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/QTR)	TURNOVER PER QTR.	FAC-(Kn)	VOC (LBM/QTR)		
QUARTER	MONTH						Ls	Lw	TOTAL (Lt)
FIRST	JAN-MAR	67.44	2.14	1350	11	0.857	6	93	99
SECOND	APR-JUN	81.76	2.86	1365	11	0.857	16	125	141
THIRD	JUL-SEP	86.07	3.10	1380	11	0.857	18	138	156
FOURTH	OCT-DEC	68.77	2.21	1380	11	0.857	6	98	104
QUARTERLY AVERAGE		76.01	2.58	1369			12	113	125
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							0.1	1.2	1.4
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							47	454	500

Tank Emission Calculation Spreadsheet, version 01/23/03

Input

FOR REFERENCE PAINT TABLE

PAINT COLOR	SHADE/ TYPE	PAINT FACTORS PAINT CONDITION	
		GOOD	POOR
ALUMINUM	SPECULAR	0.39	0.49
ALUMINUM	DIFFUSE	0.60	0.68
GRAY	LIGHT	0.54	0.63
GRAY	MEDIUM	0.68	0.74
RED	PRIMER	0.89	0.91
WHITE	--NONE--	0.17	0.34

LIQUID TYPE	CODE	
CRUDE OIL	0	CRUDE
MOTOR GASOLINE	1	MOTOR GAS
AVIATION GASOLINE	2	AV GAS
LIGHT NAPHTHA (RVP 9-14 PSIA)	3	LT NAPHTHA
NAPHTHA (RVP 2-8 PSIA)	4	NAPHTHA

METEOROLOGICAL DATA CODES	
AREA	CODE
BAKERSFIELD	0
FRESNO	1
STOCKTON	2

PRESS [TAB] TO SKIP TO NEXT MODIFIABLE CELL

GIVEN AND ASSUMED DATA	
USING THE CODES ABOVE, WHAT REGION PERMIT NUMBERS DO YOU WANT TO USE? (0, 1, OR 2)	0
USING THE CODES ABOVE, WHAT AREA METEOROLOGICAL DATA DO YOU WANT TO USE? (0, 1, 2, ...)	0
REID VAPOR PRESSURE (psia)	3.60
VAPOR MOLECULAR WEIGHT (Mv)	50.00
USING THE CODES ABOVE, WHAT TYPE OF ORGANIC LIQUID (0, 1, 2, ...)	0
VOC CONTROL EFFICIENCY	0.00
TANK SHELL DIAMETER (FEET)	15.00
TANK SHELL HEIGHT, H _s (FEET)	8.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.03
VENT PRESSURE (POSITIVE psig)	0.03
TANK ID	S4034-34
TANK USE	Stock
SJVUAPCD PERMIT#	forma Alla
CONE OR DOME ROOF (C/D)	C
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	15.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	2.00
TANK ROOF PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK ROOF PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK ROOF PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M
TANK SHELL PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK SHELL PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK SHELL PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M

MODIFIABLE DATA	
	Y
	--N/R--
CONE ROOF	
GIVEN ROOF HEIGHT OR SLOPE (H/S)	S
	0.94
TANK CONE ROOF SLOPE, S _r (DEFAULT=0.0825) (I/I)	0.0825
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	Y
ENTER MAXIMUM LIQUID HEIGHT (ft)	8.00
	6.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
ENTER AVERAGE LIQUID HEIGHT (ft)	6.0
IS TANK CONSTANT LEVEL? (Y/N)	N
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N

TANK ID	TANK USE	SJVUAPCD PERMIT #	TANK TYPE H OR V	SHELL DIMENSIONS		CAPACITY (BBL)	ROOF TYPE (C/D)	VENT PSIG	
				D (FT)	Hs (FT)			VAC.	PRESS.
3	Wash	S-4034-35	VERTICAL	15.0	14.9	469.0	CONE	0.03	0.03

TANK ROOF		PAINT FACTOR	LIQUID DATA				CONSTANT LEVEL?	VAPOR MOL. WT.	VOC CNTRL %EFF (w/w)
COND.	COLOR		TYPE	HT=H(lx)	Kp	RVP			
GOOD	GRAY	0.68	CRUDE	12.9	0.75	3.60	YES	50.00	0.0

UNCONTROLLED EMISSIONS

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/MON)	TURNOVER PER MON.	FAC-(Kn)	VOC (LBM/MONTH)			TOTAL (LBM/QTR)
QUARTER	MONTH						Ls	Lw	TOTAL (Lt)	
FIRST	JANUARY	63.30	1.96	465	0.33	1.000	16.22	0.00	16.22	70.06
	FEBRUARY	67.50	2.14	420	0.33	1.000	21.24	0.00	21.24	
	MARCH	71.54	2.33	465	0.33	1.000	32.60	0.00	32.60	
SECOND	APRIL	76.59	2.57	450	0.33	1.000	44.33	0.00	44.33	174.12
	MAY	82.17	2.87	465	0.33	1.000	60.24	0.00	60.24	
	JUNE	86.51	3.12	450	0.33	1.000	69.55	0.00	69.55	
THIRD	JULY	88.94	3.27	465	0.33	1.000	76.00	0.00	76.00	193.09
	AUGUST	87.00	3.15	465	0.33	1.000	67.09	0.00	67.09	
	SEPTEMBER	82.28	2.88	450	0.33	1.000	50.00	0.00	50.00	
FOURTH	OCTOBER	75.71	2.53	465	0.33	1.000	36.43	0.00	36.43	73.16
	NOVEMBER	67.78	2.16	450	0.33	1.000	21.42	0.00	21.42	
	DECEMBER	62.82	1.94	465	0.33	1.000	15.30	0.00	15.30	

CONTROLLED EMISSIONS (BASED ON MONTHLY CALCULATIONS)

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/QTR)	TURNOVER PER QTR.	FAC-(Kn)	VOC (LBM/QTR)		
QUARTER	MONTH						Ls	Lw	TOTAL (Lt)
FIRST	JAN-MAR	67.44	2.14	1350	1	1.000	70	0	70
SECOND	APR-JUN	81.76	2.86	1365	1	1.000	174	0	174
THIRD	JUL-SEP	86.07	3.10	1380	1	1.000	193	0	193
FOURTH	OCT-DEC	68.77	2.21	1380	1	1.000	73	0	73
QUARTERLY AVERAGE		76.01	2.58	1369			128	0	128
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							1.4	0.0	1.4
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							510	0	510

Tank Emission Calculation Spreadsheet, version 01/23/03

Input

FOR REFERENCE PAINT TABLE

PAINT COLOR	SHADE/ TYPE	PAINT FACTORS PAINT CONDITION	
		GOOD	POOR
ALUMINUM	SPECULAR	0.39	0.49
ALUMINUM	DIFFUSE	0.60	0.66
GRAY	LIGHT	0.54	0.63
GRAY	MEDIUM	0.68	0.74
RED	PRIMER	0.89	0.91
WHITE	-NONE-	0.17	0.34

LIQUID TYPE	CODE	
CRUDE OIL	0	CRUDE
MOTDR GASOLINE	1	MOTOR GAS
AVIATION GASOLINE	2	AV GAS
LIGHT NAPHTHA (RVP 9-14 PSIA)	3	LT NAPHTHA
NAPHTHA (RVP 2-8 PSIA)	4	NAPHTHA

METEOROLOGICAL DATA CODES	
AREA	CODE
BAKERSFIELD	0
FRESNO	1
STOCKTON	2

PRESS [TAB] TO SKIP TO NEXT MODIFIABLE CELL

GIVEN AND ASSUMED DATA	
USING THE CODES ABOVE, WHAT REGION PERMIT	---
NUMBERS DO YOU WANT TO USE? (0, 1, DR 2)	0
USING THE CODES ABOVE, WHAT AREA METEOROLOGICAL	---
DATA DO YOU WANT TO USE? (0, 1, 2, ...)	0
REID VAPOR PRESSURE (psia)	3.60
VAPOR MOLECULAR WEIGHT (Mv)	50.00
USING THE CODES ABOVE, WHAT	---
TYPE OF ORGANIC LIQUID (0, 1, 2, ...)	0
VOC CONTROL EFFICIENCY	0.00
TANK SHELL DIAMETER (FEET)	15.00
TANK SHELL HEIGHT, H _s (FEET)	14.90
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	0.03
VENT PRESSURE (POSITIVE psig)	0.03
TANK ID	Anderson
TANK USE	Wash
SJVUAPCD PERMIT#	S-4034-35
CONE OR DOME ROOF (C/D)	C
MAXIMUM TOTAL DAILY THROUGHPUT (BBU/DAY)	15.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	12.90
TANK ROOF PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK ROOF PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK ROOF PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M
TANK SHELL PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK SHELL PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK SHELL PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M

MODIFIABLE DATA	
---	---
---	Y
---	NR
---	3.0
CONE ROOF	---
GIVEN ROOF HEIGHT OR SLOPE (H/S)	S
---	0.94
TANK CONE ROOF SLOPE, S _r (DEFAULT=0.0625) (F/I)	0.0625
---	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	Y
ENTER MAXIMUM LIQUID HEIGHT (ft)	12.80
---	12.90
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
---	12.9
ENTER AVERAGE LIQUID HEIGHT (ft)	---
IS TANK CONSTANT LEVEL? (Y/N)	Y
IF YES, NUMBER OF TURNS PER MONTH (DEF.=0.33)	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
---	---

TANK ID	TANK USE	SJVUAPCD PERMIT #	TANK TYPE H OR V	SHELL DIMENSIONS		CAPACITY (BBL)	ROOF TYPE (C/D)	VENT PSIG	
				D (FT)	Hs (FT)			VAC.	PRESS.
3	Stock	S-4034-36	VERTICAL	15.0	14.9	469.0	CONE	0.03	0.03

TANK ROOF		PAINT FACTOR	LIQUID DATA				CONSTANT LEVEL?	VAPOR MOL. WT.	VOC CNTRL %EFF (w/w)
COND.	COLOR		TYPE	Ht=H(lx)	Kp	RVP			
GOOD	GRAY	0.68	CRUDE	12.9	0.75	3.60	NO	50.00	0.0

UNCONTROLLED EMISSIONS

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/MON)	TURNOVER PER MON.	FAC-(Kn)	VOC (LBM/MONTH)			TOTAL (LBM/QTR)
QUARTER	MONTH						Ls	Lw	TOTAL (L)	
FIRST	JANUARY	63.30	1.96	775	2.26	1.000	30.51	57.10	87.61	310.47
	FEBRUARY	67.50	2.14	700	2.04	1.000	39.38	56.25	95.63	
	MARCH	71.54	2.33	775	2.26	1.000	59.61	67.62	127.23	
SECOND	APRIL	76.59	2.57	750	2.19	1.000	79.61	72.40	152.01	549.82
	MAY	82.17	2.87	775	2.26	1.000	106.03	83.48	189.51	
	JUNE	86.51	3.12	750	2.19	1.000	120.47	87.83	208.30	
THIRD	JULY	88.94	3.27	775	2.26	1.000	130.46	95.06	225.53	602.07
	AUGUST	87.00	3.15	775	2.26	1.000	116.01	91.60	207.61	
	SEPTEMBER	82.28	2.88	750	2.19	1.000	87.97	80.96	168.93	
FOURTH	OCTOBER	75.71	2.53	775	2.26	1.000	65.64	73.52	139.16	324.83
	NOVEMBER	67.78	2.16	750	2.19	1.000	39.68	60.62	100.31	
	DECEMBER	62.82	1.94	775	2.26	1.000	28.84	56.52	85.36	

CONTROLLED EMISSIONS (BASED ON MONTHLY CALCULATIONS)

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/QTR)	TURNOVER PER QTR.	FAC-(Kn)	VOC (LBM/QTR)		
QUARTER	MONTH						Ls	Lw	TOTAL (L)
FIRST	JAN-MAR	67.44	2.14	2250	7	1.000	130	181	310
SECOND	APR-JUN	81.76	2.86	2275	7	1.000	306	244	550
THIRD	JUL-SEP	86.07	3.10	2300	7	1.000	334	268	602
FOURTH	OCT-DEC	68.77	2.21	2300	7	1.000	134	191	325
QUARTERLY AVERAGE		76.01	2.58	2281			226	221	447
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							2.5	2.4	4.9
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							904	883	1787

Tank Emission Calculation Spreadsheet, version 01/23/03

Input

FOR REFERENCE PAINT TABLE

PAINT COLOR	SHADE/ TYPE	PAINT FACTORS PAINT CONDITION	
		GOOD	POOR
ALUMINUM	SPECULAR	0.39	0.49
ALUMINUM	DIFFUSE	0.60	0.66
GRAY	LIGHT	0.54	0.63
GRAY	MEDIUM	0.68	0.74
RED	PRIMER	0.89	0.91
WHITE	--NONE--	0.17	0.34

LIQUID TYPE	CODE	
CRUDE OIL	0	CRUDE
MOTOR GASOLINE	1	MOTOR GAS
AVIATION GASOLINE	2	AV GAS
LIGHT NAPHTHA (RVP 9-14 PSIA)	3	LT NAPHTHA
NAPHTHA (RVP 2-9 PSIA)	4	NAPHTHA

METEOROLOGICAL DATA CODES	
AREA	CODE
BAKERSFIELD	0
FRESNO	1
STOCKTON	2

PREBS [TAB] TO SKIP TO NEXT MODIFIABLE CELL

GIVEN AND ASSUMED DATA	
USING THE CODES ABOVE, WHAT REGION PERMIT NUMBERS DO YOU WANT TO USE? (0, 1, OR 2)	0
USING THE CODES ABOVE, WHAT AREA METEOROLOGICAL DATA DO YOU WANT TO USE? (0, 1, 2, ...)	0
REID VAPOR PRESSURE (psia)	3.80
VAPOR MOLECULAR WEIGHT (Mw)	50.00
USING THE CODES ABOVE, WHAT TYPE OF ORGANIC LIQUID (0, 1, 2, ...)	0
VOC CONTROL EFFICIENCY	0.00
TANK SHELL DIAMETER (FEET)	15.00
TANK SHELL HEIGHT, Hs (FEET)	14.90
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	0.03
VENT PRESSURE (POSITIVE psig)	0.03
TANK ID	Anderson
TANK USE	Stock
SJVUAPCD PERMIT#	S-4034-38
CONE OR DOME ROOF (C/D)	C
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	25.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	2.00
TANK ROOF PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK ROOF PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK ROOF PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M
TANK SHELL PAINT CONDITION, GOOD OR PDDR (G/P)	G
TANK SHELL PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK SHELL PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M

MODIFIABLE DATA	
	Y
	--NR--
	3.0
CONE ROOF	
GIVEN ROOF HEIGHT OR SLOPE (H/S)	S
	0.94
TANK CONE ROOF SLOPE, Sr (DEFAULT=0.0625) (H/R)	0.0625
	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	y
ENTER MAXIMUM LIQUID HEIGHT (ft)	12.90
	12.90
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
ENTER AVERAGE LIQUID HEIGHT (ft)	10.0
IS TANK CONSTANT LEVEL? (Y/N)	N
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N

TANK ID	TANK USE	SJVUAPCD PERMIT #	TANK TYPE H OR V	SHELL DIMENSIONS		CAPACITY (BBL)	ROOF TYPE (C/D)	VENT PSIG	
				D (FT)	Hs (FT)			VAC.	PRESS.
3	Stock	S-4034-37	VERTICAL	15.0	14.9	469.0	CONE	-0.03	0.03

TANK ROOF		PAINT FACTOR	LIQUID DATA				CONSTANT LEVEL?	VAPOR MOL. WT.	VOC CNTRL %EFF (w/w)
COND.	COLOR		TYPE	Ht=H(lx)	Kp	RVP			
GOOD	GRAY	0.68	CRUDE	12.0	0.75	3.60	NO	50.00	0.0

UNCONTROLLED EMISSIONS

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/MON)	TURNOVER PER MON.	FAC-(Kn)	VOC (LBM/MONTH)			TOTAL (LBM/QTR)
QUARTER	MONTH						Ls	Lw	TOTAL (Lb)	
FIRST	JANUARY	63.30	1.96	775	2.46	1.000	35.60	57.10	92.69	
	FEBRUARY	67.50	2.14	700	2.22	1.000	46.24	56.25	102.49	
	MARCH	71.54	2.33	775	2.46	1.000	70.14	67.62	137.76	332.94
SECOND	APRIL	76.59	2.57	750	2.38	1.000	93.51	72.40	165.91	
	MAY	82.17	2.87	775	2.46	1.000	123.86	83.48	207.34	
	JUNE	86.51	3.12	750	2.38	1.000	140.02	87.83	227.85	601.10
THIRD	JULY	88.94	3.27	775	2.46	1.000	151.09	95.06	246.15	
	AUGUST	87.00	3.15	775	2.46	1.000	134.54	91.60	226.15	
	SEPTEMBER	82.28	2.88	750	2.38	1.000	102.41	80.96	183.38	655.68
FOURTH	OCTOBER	75.71	2.53	775	2.46	1.000	76.78	73.52	150.30	
	NOVEMBER	67.78	2.16	750	2.38	1.000	46.45	60.62	107.08	
	DECEMBER	62.82	1.94	775	2.46	1.000	33.58	56.52	90.10	347.48

CONTROLLED EMISSIONS (BASED ON MONTHLY CALCULATIONS)

CALENDAR		SURFACE T(la) F	CALC TVP @ T(la)	RATE (BBL/QTR)	TURNOVER PER QTR.	FAC-(Kn)	VOC (LBM/QTR)		
QUARTER	MONTH						Ls	Lw	TOTAL (Lb)
FIRST	JAN-MAR	67.44	2.14	2250	7	1.000	152	181	333
SECOND	APR-JUN	81.76	2.86	2275	7	1.000	357	244	601
THIRD	JUL-SEP	86.07	3.10	2300	7	1.000	388	268	656
FOURTH	OCT-DEC	68.77	2.21	2300	7	1.000	157	191	347
QUARTERLY AVERAGE		76.01	2.58	2281			264	221	484
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							2.9	2.4	5.3
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							1054	883	1937

Tank Emission Calculation Spreadsheet, version 01/23/03

FOR REFERENCE PAINT TABLE

PAINT COLOR	SHADE/ TYPE	PAINT FACTORS	
		PAINT CONDITION	
		GOOD	POOR
ALUMINUM	SPECULAR	0.59	0.49
ALUMINUM	DIFFUSE	0.60	0.68
GRAY	LIGHT	0.54	0.63
GRAY	MEDIUM	0.68	0.74
RED	PRIMER	0.89	0.91
WHITE	--NONE--	0.17	0.34

LIQUID TYPE	CODE	
CRUDE OIL	0	CRUDE
MOTOR GASOLINE	1	MOTOR GAS
AVIATION GASOLINE	2	AV GAS
LIGHT NAPHTHA (RVP 9-14 PSIA)	3	LT NAPHTHA
NAPHTHA (RVP 2-8 PSIA)	4	NAPHTHA

METEOROLOGICAL DATA CODES	
AREA	CODE
BAKERSFIELD	0
FRESNO	1
STOCKTON	2

PRESS (TAB) TO SKIP TO NEXT MODIFIABLE CELL

GIVEN AND ASSUMED DATA	
USING THE CODES ABOVE, WHAT REGION PERMIT NUMBERS DO YOU WANT TO USE? (0, 1, OR 2)	0
USING THE CODES ABOVE, WHAT AREA METEOROLOGICAL DATA DO YOU WANT TO USE? (0, 1, 2, ...)	0
REID VAPOR PRESSURE (psia)	3.60
VAPOR MOLECULAR WEIGHT (Mv)	50.00
USING THE CODES ABOVE, WHAT TYPE OF ORGANIC LIQUID (0, 1, 2, ...)	0
VOC CONTROL EFFICIENCY	0.00
TANK SHELL DIAMETER (FEET)	15.00
TANK SHELL HEIGHT, H _s (FEET)	14.90
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.03
VENT PRESSURE (POSITIVE psig)	0.03
TANK ID	Anderson
TANK USE	Stock
SJVUAPCD PERMIT#	S-4034-37
CONE OR DOME ROOF (C/D)	C
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	25.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	2.00
TANK ROOF PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK ROOF PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK ROOF PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M
TANK SHELL PAINT CONDITION, GOOD OR POOR (G/P)	G
TANK SHELL PAINT COLOR, SEE ABOVE (A/G/R/W)	G
TANK SHELL PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M

MODIFIABLE DATA	
Y	
--N/R--	
3.0	
CONE ROOF	
GIVEN ROOF HEIGHT OR SLOPE (H/S)	S
0.94	
TANK CONE ROOF SLOPE, S _r (DEFAULT=0.0625) (H/R)	0.0625
1.00	
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	Y
ENTER MAXIMUM LIQUID HEIGHT (ft)	12.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
ENTER AVERAGE LIQUID HEIGHT (ft)	9.0
IS TANK CONSTANT LEVEL? (Y/N)	N
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N

Attachment B
BACT Guideline

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 7.3.1*

Last Update 10/1/2002

**Petroleum and Petrochemical Production - Fixed Roof Organic
Liquid Storage or Processing Tank, < 5,000 bbl Tank capacity ****

Pollutant	Achieved In Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	PV-vent set to within 10% of maximum allowable pressure	99% control (Waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; transfer of noncondensable vapors to gas pipeline; reinjection to formation (if appropriate wells are available); or equal).	

** Converted from Determinations 7.1.11 (10/01/02).

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

Attachment C

Top Down BACT Analysis

Top Down BACT Analysis (S-4034-33-0, '-34-0, '-36-0, and '-37-0)

VOC emissions may occur when the produced fluids from the crude oil production wells enter the oil storage tanks.

Step 1 - Identify All Possible Control Technologies

BACT Guideline 7.3.1 lists the controls that are considered potentially applicable to fixed-roof organic liquid storage or processing tank <5,000 bbl tank capacity. The VOC control measures are summarized below.

Technologically feasible:

99% control (Waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program,

Achieved in Practice:

PV vent set to within 10% of maximum allowable pressure.

Step 2 - Eliminate Technologically Infeasible Options

All of the above identified control options are technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. Waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program at 99% control, or
2. PV vent set to within 10% of maximum allowable pressure.

Step 4 - Cost Effectiveness Analysis

Applicant has provided a quote of \$110,715 for the installation of a vapor control (see below).

The annualized capital cost is

$AP = (P) \{[(i) (1 + i)^n] / [(1 + i)^n - 1]\}$, where

AP = Equivalent Annual Capital Cost of Control Equip.
 P = Present value of the control equipment, including installation cost.
 \$110,715
 i = interest rate (use 10% per policy)
 n = equipment life (assume 10 years per policy)

$$AP = (P) \cdot \{[(0.1) (1 + 0.1)^{10}] / [(1 + 0.1)^{10} - 1]\}$$

$$AP = (P) \cdot (0.16274) = (\$110,715) (0.1627) = \$18,013/\text{year}$$

For calculation of the amount of VOCs removed from each tank (emissions unit) with the vapor control system, 99% control is assumed. The VOCs removed annually are

$$1973 \text{ lb/year} \times 99\% = 1953 \text{ lb-VOC/year}$$

$$\text{Tons/yr} = 1953 \text{ lb/yr} / 2000 \text{ lb/ton} = 0.98 \text{ tons/yr}$$

$$\text{Annualized cost} = \$18,013 \text{ yr} / 0.98 \text{ tons/yr}$$

$$= \$18,381/\text{ton}$$

This exceeds the cost effectiveness threshold for VOCs of \$17,500/ton. Therefore the vapor control system is not cost effective.

Step 5 - Select BACT

PV vent set to within 10% of maximum allowable pressure.

Attachment D
Health Risk Analysis

San Joaquin Valley Air Pollution Control District

Revised Risk Management Review

To: Steve Davidson – Permit Services

From: Leland Villalvazo – Air Quality Specialist

Date: August 15, 2014

Facility Name: E&B Natural Resources

Location: Various Specified Locations
S4034-33-0: NE/4 Sec:23, T30S/R21E (FE Lease)
S4034-34-0: NW/4 Sec: 32 T30S/R21E (Loma Alta lease)
S4034-35-0: NE/4 Sec: 23 T30S/R21E (Anderson Lease)
S4034-36-0: NE/4 Sec: 23 T30S/R21E (Anderson Lease)
S4034-37-0: SW/4 Sec: 14 T30S/R21E (PML Lease)

Application #(s): S-4034-33-0, 34-0, 35-0, 36-0, 37-0

Project #: S-1143284

A. RMR SUMMARY

RMR Summary			
Categories	Fugitive Emissions from Oilfield Tanks (Units 33-0, 34-0, 35-0, 36-0, and 37-0)	Project Totals	Facility Totals
Prioritization Score	0.1*	0.1	0.5
Acute Hazard Index	N/A	N/A	N/A
Chronic Hazard Index	N/A	N/A	N/A
Maximum Individual Cancer Risk	N/A	N/A	N/A
T-BACT Required?	No		
Special Permit Conditions?	No		

*The project passed on prioritization with a score less than 1; therefore, no further analysis was required.

1. Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Units #: 33-0, 34-0, 35-0, 36-0, 37-0

No special conditions are required.

B. RMR REPORT

I. Project Description

Technical Services received a request on August 12, 2014 to perform a Risk Management Review and AAQA for the proposed installation of five oilfield tanks.

II. Analysis

Toxic emissions from the project were calculated using "Oilfield Equipment Fugitives Heavy Crude Oil", along with VOC fugitive emission rates calculated and supplied by the processing engineer. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the proposed project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEART's database. The prioritization score for the proposed project was less than 1.0 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

Unit 33-0			
Fugitive VOC emissions (lbs/hr)	0.08	Fugitive VOC emissions (lbs/yr)	665
Closest Receptor (m)	305		

Unit 34-0			
Fugitive VOC emissions (lbs/hr)	0.06	Fugitive VOC emissions (lbs/yr)	500
Closest Receptor (m)	305		

Unit 35-0			
Fugitive VOC emissions (lbs/hr)	0.06	Fugitive VOC emissions (lbs/yr)	500
Closest Receptor (m)	305		

Unit 36-0			
Fugitive VOC emissions (lbs/hr)	0.20	Fugitive VOC emissions (lbs/yr)	1787
Closest Receptor (m)	305		

Unit 37-0			
Fugitive VOC emissions (lbs/hr)	0.22	Fugitive VOC emissions (lbs/yr)	1937
Closest Receptor (m)	305		

An AAQA for the project was requested. Since VOCs are the only criteria pollutant associated with the project and VOCs are not evaluated in an AAQA, no further review was performed.

III. Conclusion

The prioritization score is less than 1.0. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on page 1 of this report must be included for this proposed unit.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change

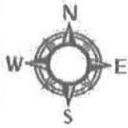
Attachments:

- A. RMR Request
- B. Prioritization Score
- C. Toxic Emissions Summary
- D. Facility Summary

Attachment E

Facility Diagrams

E&B Natural Resources, Inc.



FACILITY IDENTIFICATION: S-4034

SCALE: NONE

DATE: 02/2013

FE Smith Facility Diagram S23/T30S/R21E

E
G
R
E
S
S

Field Production

Blue Line Distances
- 500 Feet NW

Direction of Flow

Highway 58

Wash Tank
250 bbl
22ftX9ft
O.O.S.

Wash Tank
300 bbls
S-4034-XX

To Gas Plant

~~Stock Tank
1,000 bbls
S-4034-20
#T-KGM43
Move to CWOD Lease~~

Stock Tank
300 bbls
S-4034-31

Oil and Water

E&B Natural Resources, Inc.

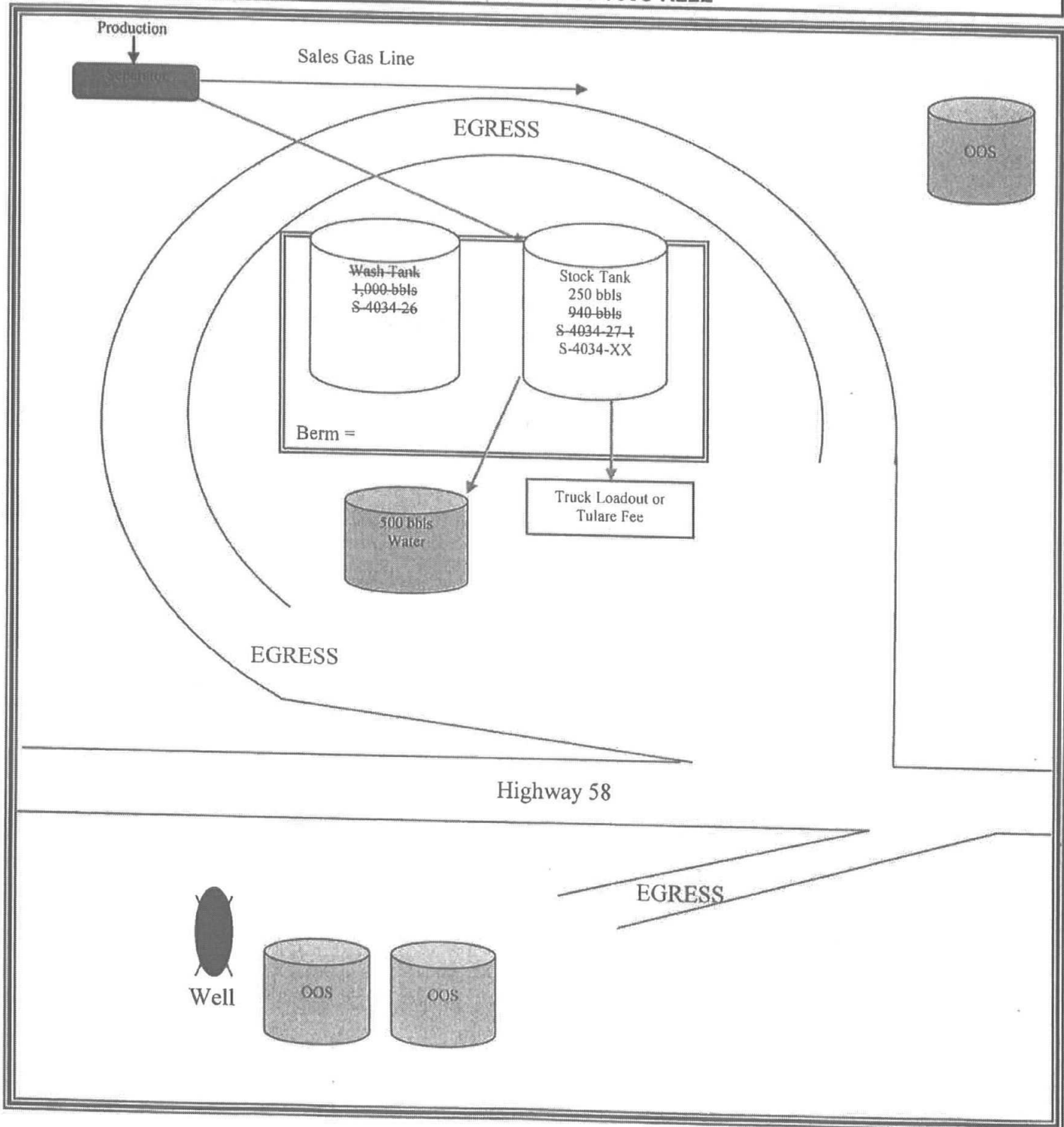


FACILITY IDENTIFICATION: S-4034

SCALE: NONE

DATE: 02/2013

Loma Alta Facility Diagram Section 30 T30S R22E



E&B Natural Resources, Inc.

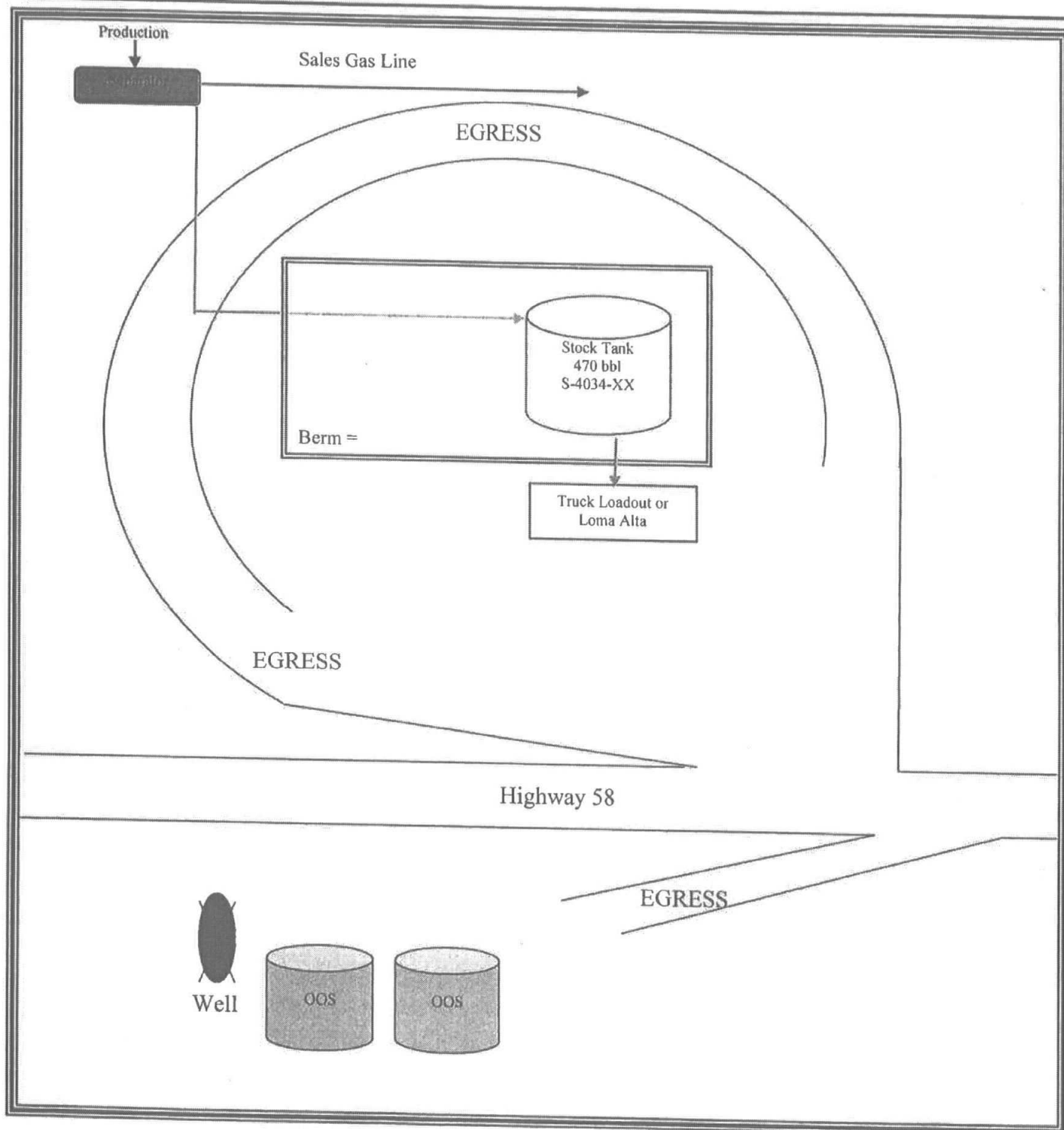


FACILITY IDENTIFICATION: S-4034

SCALE: NONE

DATE: 02/2013

PML Facility Diagram



E&B Natural Resources, Inc.

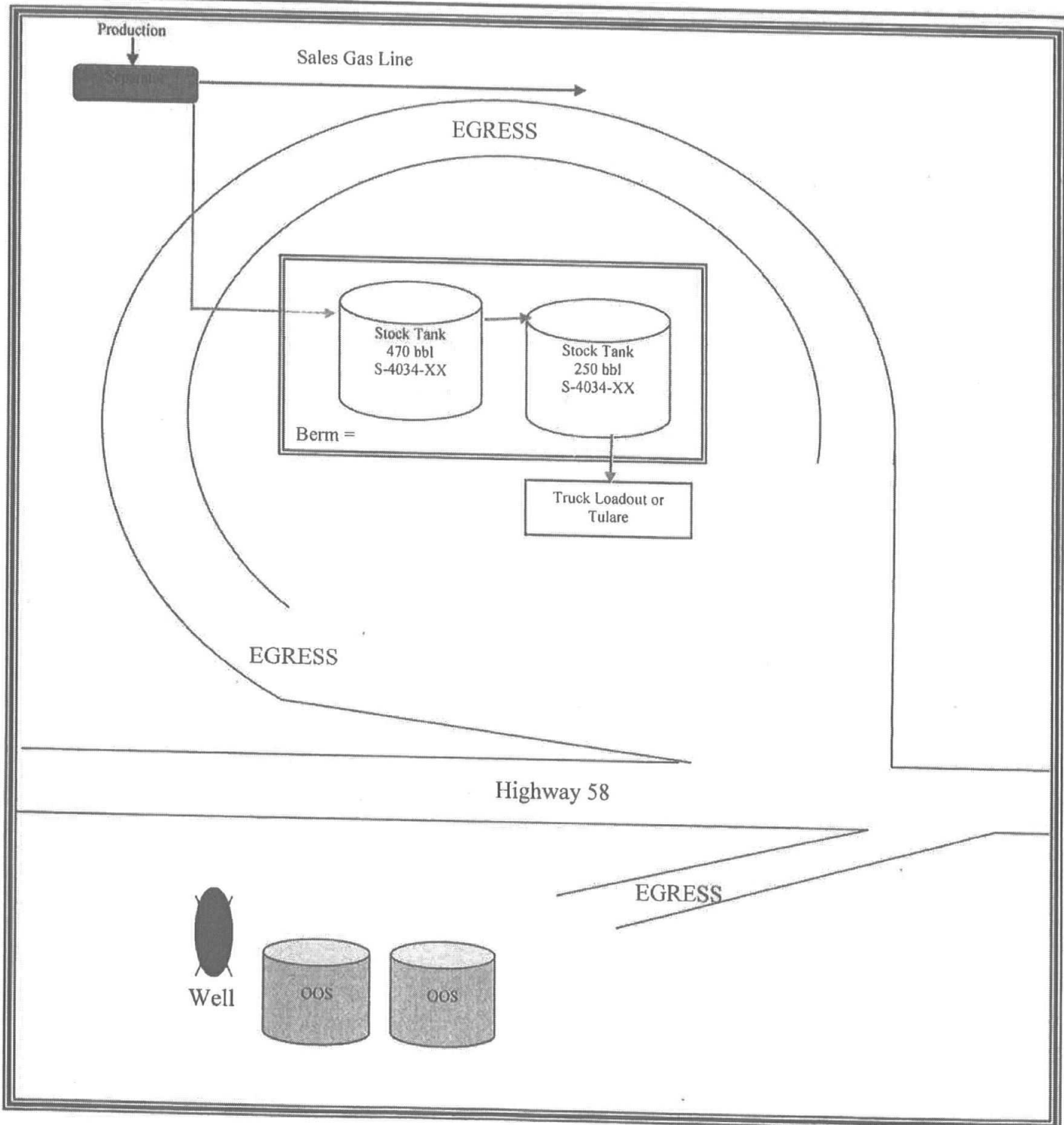


FACILITY IDENTIFICATION: S-4034

SCALE: NONE

DATE: 02/2013

Anderson Lease Facility Diagram



Attachment F
Compliance Certification

August 21, 2014

RECEIVED

AUG 21 2014

SJVAPCD
Southern Region

Mr. Leonard Scandura
Manager of Permit Services
San Joaquin Valley Unified APCD
34946 Flyover Court
Bakersfield, CA 93308

Subject: Project Number 1143284 – (S-4034) Five New Crude Oil Production Tanks – Antelope Hills

Dear Mr. Scandura:

I hereby certify that all major Stationary Sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in California, which are subject to emission limitations, are in compliance or on a schedule for compliance with all applicable emission limitations and standards.

Alternative siting analysis is required for any project, which constitutes a New Major Source or a Federal Major Modification.

The current project occurs at existing facilities. The applicant proposes to install five new crude oil production tanks in areas that currently have operating wells.

Since the project will be used at the same location as existing wells or tank batteries, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.



Signature

HSE SUPERVISOR

Title

Attachment G

QNEC

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

$QNEC = PE2 - PE1$, where:

- QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
- PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
- PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$PE2_{quarterly} = PE2_{annual} \div 4 \text{ quarters/year}$

$PE1_{quarterly} = PE1_{annual} \div 4 \text{ quarters/year}$

S-4034-33-0: Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
VOC	166	0	166

S-4034-34-0: Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
VOC	125	0	125

S-4034-35-0: Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
VOC	128	0	128

S-4034-36-0: Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
VOC	447	0	447

S-4034-37-0: Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
VOC	484	0	484

Attachment H
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-4034-33-0

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES

MAILING ADDRESS: ATT: SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD, CA 93308

LOCATION: LIGHT OIL WESTERN

SECTION: NE/23 TOWNSHIP: 30S RANGE: 21E

EQUIPMENT DESCRIPTION:

300 BBL FIXED ROOF CRUDE OIL WASH TANK WITH PV VALVE (FE SMITH)

CONDITIONS

1. Permit S-4034-27 shall be canceled prior to or concurrent with this ATC. [District Rule 2201]
2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623]
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 3.27 psia under all storage conditions. [District Rules 2201 and 4623]
5. VOC emission rate from the tank shall not exceed 1.8 lb/day [District Rule 2201]
6. This tank shall be in a leak-free condition. 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. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 [District Rules 2201 and 4623]
7. 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 and 4623]

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

Arnaud Marjolle, Director of Permit Services

S-4034-33-0 - Sep 30 2014 10:56AM - DAVIDSON - Joint Inspection NOT Required

8. For crude oil with an API gravity of greater than 26 degrees, the TVP shall be determined by measuring the Reid Vapor Pressure (RVP) using the latest version of ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products) and converting the RVP to TVP at the maximum liquid storage temperature using the procedures in Rule 4623, Appendix B. [District Rules 1081 and 4623]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [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 4623]
11. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623]
12. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623]
13. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623]
14. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings; date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623]
15. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule [District Rule 4623]
16. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623]
17. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623]
18. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623]
19. Permittee shall notify the APCO in writing at least three (3) days prior to performing interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
20. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 4623]
21. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]
22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]

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CONDITIONS CONTINUE ON NEXT PAGE

23. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]
24. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]
25. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule]
26. 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 4623]
27. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity [District Rule 2201]
28. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT
ISSUANCE DATE: DRAFT

PERMIT NO: S-4034-34-0

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES

MAILING ADDRESS: ATT: SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD, CA 93308

LOCATION: LIGHT OIL WESTERN

SECTION: NW/23 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

470 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE (LOMA ALTA LEASE)

CONDITIONS

1. Permit S-4034-27 shall be canceled prior to or concurrent with this ATC. [District Rule 2201]
2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623]
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 3.27 psia under all storage conditions. [District Rules 2201 and 4623]
5. VOC emission rate from the tank shall not exceed 1.4 lb/day [District Rule 2201]
6. This tank shall be in a leak-free condition. 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. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 [District Rules 2201 and 4623]
7. 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 and 4623]

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

Arnaud Marjollet, Director of Permit Services

S-4034-34-0 : Sep 26 2014 10:55AM : DAVIDSON : Joint Inspection NOT Required

8. For crude oil with an API gravity of greater than 26 degrees, the TVP shall be determined by measuring the Reid Vapor Pressure (RVP) using the latest version of ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products) and converting the RVP to TVP at the maximum liquid storage temperature using the procedures in Rule 4623, Appendix B. [District Rules 1081 and 4623]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 2201]
10. Crude oil throughput shall not exceed 15 barrels per day based on a monthly average. [District Rules 2201 and 4623]
11. 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 4623]
12. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623]
13. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623]
14. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623]
15. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623]
16. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule [District Rule 4623]
17. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623]
18. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623]
19. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623]
20. The permittee shall conduct an API gravity testing upon initial start-up. [District Rule 2201]
21. 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]
22. 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]

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CONDITIONS CONTINUE ON NEXT PAGE

23. Permittee shall notify the APCO in writing at least three (3) days prior to performing interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
24. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 4623]
25. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]
26. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]
27. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]
28. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]
29. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule]
30. 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 4623]
31. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity [District Rule 2201]
32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-4034-35-0

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES

MAILING ADDRESS: ATT: SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD, CA 93308

LOCATION: LIGHT OIL WESTERN

SECTION: NE/23 TOWNSHIP: 30S RANGE: 21E

EQUIPMENT DESCRIPTION:

470 BBL FIXED ROOF CRUDE OIL WASH TANK WITH PV VALVE (ANDERSON LEASE)

CONDITIONS

1. Permit S-4034-27 shall be canceled prior to or concurrent with this ATC. [District Rule 2201]
2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623]
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 3.27 psia under all storage conditions. [District Rules 2201 and 4623]
5. VOC emission rate from the tank shall not exceed 1.4 lb/day [District Rule 2201]
6. This tank shall be in a leak-free condition. 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. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 [District Rules 2201 and 4623]
7. 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 and 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (861) 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

Arnaud Marjolle, Director of Permit Services

S-4034-35-0: Sep 30 2014 10:55AM - DAVIDSOB - Joint Inspection NOT Required

8. For crude oil with an API gravity of greater than 26 degrees, the TVP shall be determined by measuring the Reid Vapor Pressure (RVP) using the latest version of ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products) and converting the RVP to TVP at the maximum liquid storage temperature using the procedures in Rule 4623, Appendix B. [District Rules 1081 and 4623]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [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 4623]
11. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623]
12. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623]
13. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623]
14. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623]
15. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule [District Rule 4623]
16. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623]
17. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623]
18. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623]
19. The permittee shall conduct an API gravity testing upon initial start-up. [District Rule 2201]
20. 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]
21. 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]

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CONDITIONS CONTINUE ON NEXT PAGE

22. Permittee shall notify the APCO in writing at least three (3) days prior to performing interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
23. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 4623]
24. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]
25. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]
26. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]
27. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]
28. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule]
29. 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 4623]
30. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity [District Rule 2201]
31. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-4034-36-0

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES

MAILING ADDRESS: ATT: SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD, CA 93308

LOCATION: LIGHT OIL WESTERN

SECTION: NE/23 TOWNSHIP: 30S RANGE: 21E

EQUIPMENT DESCRIPTION:

250 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE (ANDERSON LEASE)

CONDITIONS

1. Permit S-4034-27 shall be canceled prior to or concurrent with this ATC. [District Rule 2201]
2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623]
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 3.27 psia under all storage conditions. [District Rules 2201 and 4623]
5. VOC emission rate from the tank shall not exceed 4.9 lb/day [District Rule 2201]
6. This tank shall be in a leak-free condition. 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. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 [District Rules 2201 and 4623]
7. 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 and 4623]

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

Amaud Marjolei, Director of Permit Services

S-4034-36-0: Sep 30 2014 10:55AM - DAVIDSON - Joint Inspection NOT Required

8. For crude oil with an API gravity of greater than 26 degrees, the TVP shall be determined by measuring the Reid Vapor Pressure (RVP) using the latest version of ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products) and converting the RVP to TVP at the maximum liquid storage temperature using the procedures in Rule 4623, Appendix B. [District Rules 1081 and 4623]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 2201]
10. Crude oil throughput shall not exceed 25 barrels per day based on a monthly average. [District Rules 2201 and 4623]
11. 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 4623]
12. Operator shall visually inspect tank shell, hatches, seals, seams, cable soals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623]
13. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623]
14. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623]
15. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623]
16. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule [District Rule 4623]
17. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623]
18. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623]
19. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623]
20. The permittee shall conduct an API gravity testing upon initial start-up. [District Rule 2201]
21. 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]
22. 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]

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CONDITIONS CONTINUE ON NEXT PAGE

23. Permittee shall notify the APCO in writing at least three (3) days prior to performing interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank 2) the date and time that tank cleaning activities will begin, 3) the method to be used to clean the tank, including any solvents to be used, and 4) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
24. This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 4623]
25. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]
26. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]
27. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]
28. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]
29. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule]
30. 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 4623]
31. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity [District Rule 2201]
32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-4034-37-0

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES

MAILING ADDRESS: ATT: SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD, CA 93308

LOCATION: LIGHT OIL WESTERN

SECTION: SW/14 TOWNSHIP: 30S RANGE: 21E

EQUIPMENT DESCRIPTION:

470 BBL FIXED ROOF CRUDE OIL TANK WITH PV VALVE (PML LEASE)

CONDITIONS

1. Permit S-4034-27 shall be canceled prior to or concurrent with this ATC. [District Rule 2201]
2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623]
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 3.27 psia under all storage conditions. [District Rules 2201 and 4623]
5. VOC emission rate from the tank shall not exceed 5.3lb/day [District Rule 2201]
6. This tank shall be in a leak-free condition. 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. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 [District Rules 2201 and 4623]
7. 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 and 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director, APCO

Arnaud Marjolle, Director of Permit Services

S-4034-37-0: Sep 30 2014 10:55AM - DAVIDS06 : Joint Inspection NOT Required

8. For crude oil with an API gravity of greater than 26 degrees, the TVP shall be determined by measuring the Reid Vapor Pressure (RVP) using the latest version of ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products) and converting the RVP to TVP at the maximum liquid storage temperature using the procedures in Rule 4623, Appendix B. [District Rules 1081 and 4623]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 2201]
10. Crude oil throughput shall not exceed 25 barrels per day based on a monthly average. [District Rules 2201 and 4623]
11. 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 4623]
12. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623]
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CONDITIONS CONTINUE ON NEXT PAGE

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26. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]
27. If the crude oil stored in the tank has a TVP of 1.5 psia or greater, during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]
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