



JUN 22 2012

Michael Angelo
Target Drilling
P.O. Box 20005
Bakersfield, CA 93390

Re: Notice of Preliminary Decision - Authority to Construct
Project Number: S-1114823 and 1114825

Dear Mr. Angelo:

Enclosed for your review and comment is the District's analysis of Target Drilling's application for an Authority to Construct for nine new crude oil storage tanks, at Target Drilling's Light oil Central stationary source.

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

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Ms. Dolores Gough of Permit Services at (661) 392-5609.

Sincerely,

David Warner
Director of Permit Services

DW: DG/cm

Enclosures

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

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



JUN 22 2012

Mike Tollstrup, Chief
Project Assessment Branch
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812-2815

Re: Notice of Preliminary Decision - Authority to Construct
Project Number: S-1114823 and 1114825

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Target Drilling's application for an Authority to Construct for nine new crude oil storage tanks, at Target Drilling's Light oil Central stationary source.

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JUN 22 2012

Gerardo C. Rios (AIR 3)
Chief, Permits Office
Air Division
U.S. E.P.A. - Region IX
75 Hawthorne Street
San Francisco, CA 94105

**Re: Notice of Preliminary Decision - Authority to Construct
Project Number: S-1114823 and 1114825**

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Target Drilling's application for an Authority to Construct for nine new crude oil storage tanks, at Target Drilling's Light oil Central stationary source.

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San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Fixed Roof Oil Field Production Tanks < 5000 BBLs
Small Producer, Light Oil Stationary Source & Not Connected to Vapor Control

Facility Name: Target Drilling
Mailing Address: PO Box 20005
Bakersfield, CA 93390
Contact Person: Mike Angelo
Telephone: (661) 979-1200
Application #s: S-2760-16-2, 17-0, 18-0, 19-0, 20-0, 21-0, 22-0, 23-0 and 24-0
Project #: S-1114823 and 1114825
Deemed Complete: March 22, 2012

Date: May 15, 2012
Engineer: Dolores Gough
Lead Engineer: Steve Leonard

I. Proposal

Target Drilling is applying for Authority to Construct (ATC) permits for the following:

- Cancel and replace Tank '-16;
- Routine replacement of Tanks '- 1, 2, 11, 12, 13 & 14 (new tanks are '-17 through 22)
- Install two new tanks (Tanks '-23 and 24)

Tank '-16 is a new tank which has been issued ATC S-2760-16-1. During inspection, a discrepancy in the tank size was discovered; therefore, this new ATC will cancel and replace the existing ATC.

Tanks '-17 through 22 will replace existing tanks '-1, 2, 11, 12, 13 & 14. Since the replacement tanks are smaller and there is no increase in throughputs or emissions, these new tanks can be considered routine replacements and will not be subject to BACT requirements.

In addition, on this project the existing true vapor pressure limits will be revised to reflect the corrected vapor pressure of the oil based on recent laboratory results.

Appendix A: current Permits to Operate (PTO) and Authority to Construct (ATC)

Appendix B: Laboratory Reports

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)

Rule 2520 Federally Mandated Operating Permits (06/21/01)
 Rule 4101 Visible Emissions (04/20/05)
 Rule 4102 Nuisance (12/17/92)
 Rule 4409 Components at Light Crude Oil Production Facilities, Natural Gas
 Production Facilities, and Natural Gas Processing Facilities (4/20/05)
 Rule 4623 Storage of Organic Liquids (05/19/05)
 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 tanks are located in the following quarter sections within Target Drilling's Kern County Light Oil Central Stationary Source.

Tank Locations				
S-2760-16, 17 & 18	NE 9	T 30S	R 25E	Pioneer Canal Lease
S-2760-19, 20, 21 & 22	SE 24	T 30S	R 25E	KCL 59 Lease
S-2760-23 & 24	NW 1	T 30S	R 25E	Strand Lease

The facility 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 and vessels at both leases receive production from the oil wells within Target Drilling's light oil western stationary source. The wash tanks (S-2760-16, -19 and -24) are constant level tanks that receive produced fluids from the oil wells, and separate the oil from the water. The separated oil is stored in the crude oil storage tanks prior to sales. Produced water is stored in permit-exempt clean water tanks.

V. Equipment Listing

Pre-project Equipment Description

- S-2760-1-1: 500 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH P/V VALVE (PIONEER CANAL FIELD)
- S-2760-2-1: 500 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH P/V VALVE (PIONEER CANAL FIELD)
- S-2760-11-1: 1500 BBL FIXED ROOF PETROLEUM STORAGE TANK (KCL 59 LEASE)

- S-2760-12-1: 1500 BBL FIXED ROOF PETROLEUM STORAGE TANK (KCL 59 LEASE)
- S-2760-13-1: 1000 BBL FIXED ROOF PETROLEUM STORAGE TANK (KCL 59 LEASE)
- S-2760-14-0: 1000 BBL FIXED ROOF CRUDE OIL PRODUCTION TANK WITH P/V VALVE (KCL 59 LEASE)
- Unimplemented ATC S-2760-16-1: 300 BBL FIXED ROOF PETROLEUM WASH TANK WITH P/V VALVE (PIONEER CANAL LEASE)

ATC Equipment Description

- S-2760-16-2: CANCEL AND REPLACE '-16-1
- S-2760-17-0 through '-22-0: ROUTINE REPLACEMENT
- S-2760-23-0 and '-24-0: NEW EQUIPMENT

Post-Project Equipment Description

- S-2760-16-2: 400 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE (PIONEER CANAL LEASE)
- S-2760-17-0: 300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH P/V VALVE (PIONEER CANAL LEASE) (REPLACEMENT FOR TANK '-1)
- S-2760-18-0: 300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH P/V VALVE (PIONEER CANAL LEASE) (REPLACEMENT FOR TANK '-2)
- S-2760-19-0: 400 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE (KCL 59 LEASE) (REPLACEMENT FOR TANK -11)
- S-2760-20-0: 300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH P/V VALVE (KCL 59 LEASE) (REPLACEMENT FOR TANK -12)
- S-2760-21-0: 300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH P/V VALVE (KCL 59 LEASE) (REPLACEMENT FOR TANK -13)
- S-2760-22-0: 300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH P/V VALVE (KCL 59 LEASE) (REPLACEMENT FOR TANK -14)
- S-2760-23-0: 300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH P/V VALVE (STRAND LEASE)

S-2760-24-0: 400 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE
(STRAND LEASE)

VI. Emission Control Technology Evaluation

The tanks will be equipped each 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

- Facility operates 24 hours per day, 7 days per week, and 52 weeks per year.
- The tanks emit only volatile organic compounds (VOCs),
- The tank paint conditions are good, the color is gray, and the shade is medium
- RVP of oil = 5.45 psi (Lab analysis in **Appendix B**)
- RVP of 7.1 psi will be used in TVP calculation to provide 30% margin of compliance
- Maximum storage temperature = 95° F
- Calculated TVP of oil = 6.5 psia (with 30% buffer)
- Pre and post-project crude oil throughputs are the same
- Wash tanks S-2760-16-2, 19-0 and 24-0 are constant-level tanks

B. Emission Factors

Both the daily and annual pre-project and post-project Potential to Emit (PE) for each tank are calculated using the District's Microsoft Excel spreadsheets for Tank Emissions - *Fixed Roof Crude Oil greater than 26° API* located in **Appendix C**. 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)

The pre-project emissions (PE1) for the new tanks are zero. The PE1 for the existing tanks are included for reference. They were re-calculated using the new Reid vapor pressure (RVP). The calculations are included in Appendix C and the results are summarized in the following table.

Existing Permit	VOC - PE1		New Permit	VOC- PE1	
	lb/day	lb/yr		lb/day	lb/yr
1-1	16.8	6,118	17-0	0.0	0
2-1	16.8	6,118	18-0	0.0	0
11-1	23.8	8,702	19-0	0.0	0

12-1	30.9	11,264		20-0	0.0	0
13-1	30.9	11,264		21-0	0.0	0
14-0	30.9	11,264		22-0	0.0	0
16-1	-	-		16-2	0.0	0
None	-	-		23-0	0.0	0
None	-	-		24-0	0.0	0
Total	-	43,466		-	-	-

2. Post Project Potential to Emit, (PE₂)

The PE2 calculations for the new tanks are also included in Appendix C and the results are summarized in the following table.

Existing Permit	VOC – PE2		New Permit	VOC- PE2	
	lb/day	lb/yr		lb/day	lb/yr
1	0.0	0	17-0	12.1	4,424
2	0.0	0	18-0	12.1	4,424
11	0.0	0	19-0	7.1	2,581
12	0.0	0	20-0	13.8	5,047
13	0.0	0	21-0	13.8	5,047
14	0.0	0	22-0	13.8	5,047
16-1	-	-	16-2	7.0	2,549
None	-	-	23-0	13.8	5,047
None	-	-	24-0	6.2	2,265
-	-	-	Total	-	36,431

Greenhouse Gas (GHG) Emissions:

Since Tanks ‘-17 through 22 are routine replacement tanks, no increase in GHG emissions is expected. Therefore, GHG emissions increase will be assessed only on Tanks ‘-16, 23 and 24.

VOC is assumed to be 85% of total organic carbon (TOC) (AP-42 Sec. 5.2); also assume 15% of TOC is CH₄ (methane) if site specific data is not available (2009 API Compendium, E-6); and global warming potential (GWP) for CH₄ is 21 lb-CO₂e/lb-CH₄ (District Policy APR 2015):

$$\text{Therefore: CH}_4 = (\text{VOC}/0.85) \times 0.15$$

$$\text{Total CH}_4 \text{ from Tanks ‘-16, 23 and 24} = (2,549 + 5,047 + 2,265 \text{ lb/yr})/0.85 \times 0.15 = 1,740 \text{ lb/yr}$$

$$\begin{aligned} \text{CO}_2\text{e (mton/yr)} &= \text{CH}_4 \text{ (lb/yr)} \times 1\text{-mton}/2,200 \text{ lb} \times 21 \\ &= 1,804 \times 1/2,200 \times 21 \end{aligned}$$

= 17.2 mton/yr < 230 mton CO₂e/yr

In addition, there is no overall increase in VOC emissions; therefore, no increase in GHG emissions is expected. Per District Policy 2015, project specific greenhouse gas emissions less than or equal to 230 M-tons of CO₂e/yr are considered to be zero for District permitting purposes.

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

Pursuant to Section 4.9 of District Rule 2201, the pre-project stationary source Potential to Emit (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.

The SSPE1 is taken from the re-calculated PEs and from PAS and presented in the following table.

SSPE1 (lb/yr)					
	NO _x	SO _x	PM ₁₀	CO	VOC
S-2760-1-1	0	0	0	0	6,118**
S-2760-2-1	0	0	0	0	6,118**
ATC S-2760-3-2	0	0	0	0	308
S-2760-11-1	0	0	0	0	8,702**
S-2760-12-1	0	0	0	0	11,264**
S-2760-13-1	0	0	0	0	11,264**
S-2760-14-0	0	0	0	0	11,264**
S-2760-15-0	0	0	0	0	1,195
ATC S-2760-16-1	0	0	0	0	1,959**
SSPE1	0	0	0	0	56,233

** Re-calculated based on new RVP

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

Pursuant to Section 4.10 of District Rule 2201, the post-project stationary source Potential to Emit (SSPE2) is the PE from all units with valid ATCs or PTOs at the stationary source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site. The SSPE2 is presented in the following table.

SSPE2 (lb/yr)					
	NO_x	SO_x	PM₁₀	CO	VOC
ATC S-2760-3-2	0	0	0	0	308
S-2760-15-0	0	0	0	0	1,195
S-2760-16-2	0	0	0	0	2,549
S-2760-17-0	0	0	0	0	4,424
S-2760-18-0	0	0	0	0	4,424
S-2760-19-0	0	0	0	0	2,581
S-2760-20-0	0	0	0	0	5,047
S-2760-21-0	0	0	0	0	5,047
S-2760-22-0	0	0	0	0	5,047
S-2760-23-0	0	0	0	0	5,047
S-2760-24-0	0	0	0	0	2,265
SSPE2	0	0	0	0	37,934

5. Major Source Determination

Pursuant to Section 3.24 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.24.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site."

Major Source Determination (lb/year)					
	NO_x	SO_x	PM₁₀	CO	VOC
Pre-Project SSPE (SSPE1)	0	0	0	0	56,233
Post Project SSPE (SSPE2)	0	0	0	0	37,934
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	Yes

As shown in the table above, this facility is an existing major source for VOC emissions and will remain a major source for VOC emissions in this project. No change in other pollutants are proposed or expected as a result of this project.

6. Baseline Emissions (BE)

The annual BE is determined pollutant by pollutant to calculate the amount of offsets required, where necessary, when the SSPE1 is greater than the offset

threshold. For this project the annual BE will be determined to calculate quarterly Baseline Emissions (QBE)

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), calculated pursuant to Section 3.23

Since the emissions units are new, BE = PE1 = 0 for all pollutants.

7. SB288 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 VOC, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table:

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
VOC	36,431	50,000	No

8. Federal Major Modification

District Rule 2201, Section 3.17 states that Federal Major Modifications are the same as "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

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project.

The project's combined total emission increases as calculated in Section VII.C.2 and compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO _x *	0	0	No
VOC*	36,431	0	Yes
PM ₁₀	0	30,000	No
PM _{2.5}	0	20,000	No
SO _x	0	80,000	No

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

Since there is an increase in VOC emissions, this project constitutes a Federal Major Modification, and no further analysis is required.

9. Quarterly Net Emissions Change (QNEC)

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

$$\text{QNEC (lb/qtr)} = (\text{PE2} - \text{PE1}) \div 4 \text{ quarters per year}$$

Using the values determined above, the QNEC is calculated for each permit unit and for each pollutant in the following table.

QNEC			
Permit Unit	PE2 (lb/yr)	PE1 (lb/yr)	QNEC (lb/qtr)
S-2760-16-2	2,549	0	637
S-2760-17-0	4,424	0	1,106
S-2760-18-0	4,424	0	1,106
S-2760-19-0	2,581	0	645
S-2760-20-0	5,047	0	1,262
S-2760-21-0	5,047	0	1,262
S-2760-22-0	5,047	0	1,262
S-2760-23-0	5,047	0	1,262
S-2760-24-0	2,265	0	566

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 for the following:

- 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, and/or
- c) Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day*.
- d) When a Major Modification is triggered for a modification project at a facility that is a Major Source.

*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 nine new tanks, six of which are routine replacements and will not be subject to BACT pursuant to Section 4.2.6 of Rule 2201. The other three tanks (16, 23 & 24) have daily VOC emissions greater than 2.0 lb/day; therefore, BACT is triggered for these three tanks.

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

There are no emissions units being relocated from one stationary source to another. Therefore, BACT is not triggered for relocation purposes.

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

The applicant is proposing to install new tanks; therefore, BACT is not triggered for modification purposes.

d. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does constitute a Federal Major Modification for VOC emissions; therefore, BACT is triggered for VOC for federal major modification purposes.

2. BACT Guideline

BACT Guideline 7.3.1, applies to Petroleum and Petrochemical Production – Fixed Roof Organic Liquid Storage or Processing Tank, <5,000 bbl Tank capacity (**Appendix D**).

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.

Pursuant to the attached Top-Down BACT Analysis (see **Appendix D**), BACT has been satisfied with the following:

VOC: PV-vent set to within 10% of maximum allowable pressure

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis if the SSPE2 equals to or exceeds the offset threshold levels shown in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Threshold			
Pollutant	SSPE2 (lb/year)	Offset Threshold (lb/year)	Offsets Triggered?
VOC	37,934	20,000	Yes

2. Quantity of Offsets Required

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

Per Sections 4.7.1 and 4.7.3, the quantity of offsets in pounds per year for 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) = $(\sum[PE2 - BE] + ICCE) \times DOR$, 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 new emissions units, six of which are routine replacements. The Baseline Emissions for the routine replacements are the pre-project (tanks to be replaced) and zero for the new non-replacement tanks.

Offsets Required (lb/year) = $([\Sigma PE_2 - \Sigma BE] + ICCE) \times DOR$

$$\begin{aligned}\Sigma PE_{2\text{total}} (\text{VOC}) &= 37,934 \text{ lb/year} \\ \Sigma BE_{\text{total}} (\text{VOC}) &= 43,466 \text{ lb/year} \\ ICCE &= 0 \text{ lb/year}\end{aligned}$$

The project is a Federal Major Modification and therefore the correct offset ratio for VOCs is 1.5:1. Assuming an offset ratio of 1.5:1, the amount of VOC ERCs required is:

$$\begin{aligned}\text{Offsets Required (lb/year)} &= ([37,934 - 43,466] + 0) \times 1.5 \\ &= 0 \text{ lb-VOC/yr}\end{aligned}$$

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major modifications, and SB288 Major Modifications;
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- d. Any project which results in the offset thresholds being surpassed, and/or
- e. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

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

As demonstrated in VII.C.7, this project is 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.

d. 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	56,233	37,934	20,000 lb/year	No

As detailed above, there were no offset thresholds surpassed with this project; therefore, public noticing is not required for offset purposes.

e. 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:

SSIPE Public Notice Thresholds (lb/year)					
Pollutant	SSPE1	SSPE2	SSIPE	SSIPE Thresholds	Public Notice Required?
VOC	56,233	37,934	-18,299	20,000	No

Since the SSIPE does not exceed the public notice thresholds above, public noticing for SSIPE purposes is not required.

2. Public Notice Action

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

D. Daily Emissions Limits (DEL)

Daily Emission Limits, DELs, are required by Rule 2201 Section 5.7.2.

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.

The following conditions will be listed on the respective permits to ensure compliance.

- Crude oil throughput shall not exceed XX (40 or 50) bbl/day. [District Rules 2201 and 4623]
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 6.5 psia under all storage conditions. [District Rule 2201]

E. Compliance Assurance

1. Source Testing

The permittee will be required to perform periodic TVP and API gravity testing for each tank in this project. Therefore, the following conditions will be listed on the permits to ensure compliance.

- 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]
- The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
- The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]

- The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]

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 be listed on the permits to ensure compliance.

- 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 Rules 2201 and 4623]
- 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, 2530 and 4623]

4. Reporting

The permittee will be required to submit the aforementioned TVP and API Gravity records to the District. Therefore, the following condition will be listed on each permit to ensure compliance.

- 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]

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. Only VOCs are the pollutant of concern and VOCs are not a pollutant that is reviewed as part of the AAQA process. Therefore, no AAQA was required or performed.

G. Compliance Certification

Pursuant to Section 4.15.2, the owner of the proposed new major source or federal major modification shall demonstrate to the satisfaction of the APCO that all major stationary sources owned or operated by such person (or 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 limitations and standards. Target Drilling provided verification that all major Stationary Sources owned or operated by Target Drilling in California are in compliance or on a schedule for compliance with all applicable emission limitations and standards (**Appendix H**).

H. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to install nine new crude oil tanks, six of which are replacement tanks. The tanks are used in oil production for an existing oilfield operation; therefore, 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 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. Pursuant to Rule 2520 Section 5.1, and as required by permit condition, the facility will have up to 12 months from the date of ATC issuance to either submit a Title V Application or comply with District Rule 2530 *Federally Enforceable Potential to Emit*.

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. Per Section 6.1 of Rule 2530, 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: ½ 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 6.1.1 and 6.1.6 of Rule 2530.

The following conditions will be on the permits to ensure compliance with this rule:

- The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530] N

- The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. This record shall be kept on site and made available to the District upon request. [District Rule 2530] N

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. The following condition will be listed on the permits to ensure compliance.

- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CH&SC 41700 - California Health and Safety Code

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 (**Appendix E**), 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.

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District's thresholds for triggering T-BACT requirements; therefore, compliance with the District's Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a

cancer risk greater than the District's significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 10 in a million). As outlined by the HRA Summary in **Appendix E** of this report, the emissions increases for this project was determined to be less than significant.

Rule 4409 - Components At Light Crude Oil Production Facilities, Natural Gas Production Facilities And Natural Gas Processing Facilities

The purpose of this rule is to limit VOC emission from leaking components at light crude oil production facilities, natural gas production facilities and natural gas processing facilities.

The rule establishes definitions for leaking components and requirements for inspection, identification, maintenance and repair of leaking components. Administrative and recordkeeping requirements are specified, including submission of an operator's management plan for each applicable facility.

The facility is expected to comply with all the applicable operating, inspection, re-inspection, maintenance, recordkeeping, and notification requirements of this rule in accordance with their Operator Management Plan. The following conditions will be placed on the ATCs to ensure compliance:

- The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409] N
- By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409] N
- Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]

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.

According to the information provided by the applicant, Target Drilling produces on average less than 6,000 barrels per day of crude oil from all operations within the county and does not engage in refining, transportation, or marketing of refined petroleum products. Therefore, under Section 3.29 of this rule and District Rule 1020, Section 3.45, this facility is a small producer.

According to Section 4.3, except for complying with Sections 6.3.4 and 7.2, a small producer's tank with a throughput of 50 barrels of crude oil per day or less is exempt from the requirements of this rule.

Therefore, the following conditions will be listed on the permits to ensure compliance.

- Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rules 2201 & 4623]
- 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, 2530 & 4623]

The following condition will be listed on tank permits S-2760-17-0 and 18-0:

- Crude oil throughput shall not exceed 40 barrels per day based on a monthly average. [District Rules 2201 & 4623]

The following condition will be listed on permit S-2760-16-2, 19-0, 20-0, 21-0, 22-0, 23-0 and -24-0:

- Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rules 2201 & 4623]

Compliance with the requirements of this rule is expected.

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

All three leases in this project 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.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project. The District’s engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

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

Issue Authorities to Construct subject to the permit conditions on the attached draft ATCs (**Appendix F**).

X. Billing Information

Permit Number	Fee Schedule	Fee Description	Annual Fee
S-2760-16-2	3020-5S-B	16,800 gallons	\$44
S-2760-17-0	3020-5S-B	12,600 gallons	\$44
S-2760-18-0	3020-5S-B	12,600 gallons	\$44
S-2760-19-0	3020-5S-B	16,800 gallons	\$44
S-2760-20-0	3020-5S-B	12,600 gallons	\$44
S-2760-21-0	3020-5S-B	12,600 gallons	\$44
S-2760-20-0	3020-5S-B	12,600 gallons	\$44
S-2760-22-0	3020-5S-B	12,600 gallons	\$44
S-2760-23-0	3020-5S-B	12,600 gallons	\$44
S-2760-24-0	3020-5S-C	16,800 gallons	\$44

Appendices:

- Appendix A: Current PTOs
- Appendix B: Oil Lab Analysis Reports
- Appendix C: Emissions Calculations
- Appendix D: BACT Guideline and Top-Down Analysis
- Appendix E: Risk Management Review
- Appendix F: Draft ATCs
- Appendix G: Emissions Profile
- Appendix H: Compliance Certification

APPENDIX A

Current PTOs

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2760-1-1

EXPIRATION DATE: 05/31/2014

SECTION: NE9 **TOWNSHIP:** 30S **RANGE:** 25E

EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH P/V VALVE (PIONEER CANAL FIELD)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
4. Crude oil throughput shall not exceed 40 barrels per day based on a monthly average day. [District Rules 2201 and 4623]
5. 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 gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
6. VOC emission rate from the tank shall not exceed 4.4 lb/day. [District Rule 2201]
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 4.4 psia under all storage conditions. [District Rule 2201]
8. 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]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
10. The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]
11. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
12. 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]
13. 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]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. 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]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2760-2-1

EXPIRATION DATE: 05/31/2014

SECTION: NE9 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH P/V VALVE (PIONEER CANAL FIELD)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
4. Crude oil throughput shall not exceed 40 barrels per day based on a monthly average day. [District Rules 2201 and 4623]
5. 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 gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
6. VOC emission rate from the tank shall not exceed 4.4 lb/day. [District Rule 2201]
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 4.4 psia under all storage conditions. [District Rule 2201]
8. 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]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
10. The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]
11. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
12. 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]
13. 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]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. 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]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2760-11-1

EXPIRATION DATE: 05/31/2014

SECTION: SE 24 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:

1500 BBL FIXED ROOF PETROLEUM STORAGE TANK (KCL 59 LEASE)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 1020]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [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 2.6 psia under all storage conditions. [District Rule 2201]
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank within 60 days of startup to verify tvp permit limit and 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]
6. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 2201]
7. 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 ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting RVP to TVP at the tanks maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range greater than 26 degrees up to 30 degrees so may be determined by using other equivalent test methods approved by APCO, ARB, and US EPA. [District Rule 2201]
8. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
9. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
10. Permittee shall submit the records of TVP and API gravity testing to the APCO within 30 days of startup tvp 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]
11. 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 & 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2760-12-1

EXPIRATION DATE: 05/31/2014

SECTION: SE 24 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK (KCL 59 LEASE)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 1020]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [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 2.6 psia under all storage conditions. [District Rule 2201]
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank within 60 days of startup to verify tvp permit limit and 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]
6. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 2201]
7. 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 ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting RVP to TVP at the tanks maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range greater than 26 degrees up to 30 degrees so may be determined by using other equivalent test methods approved by APCO, ARB, and US EPA. [District Rule 2201]
8. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
9. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
10. Permittee shall submit the records of TVP and API gravity testing to the APCO within 30 days of startup tvp 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]
11. 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 & 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2760-13-1

EXPIRATION DATE: 05/31/2014

SECTION: SE 24 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK (KCL 59 LEASE)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 1020]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [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 2.6 psia under all storage conditions. [District Rule 2201]
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank within 60 days of startup to verify tvp permit limit and 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]
6. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 2201]
7. 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 ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting RVP to TVP at the tanks maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range greater than 26 degrees up to 30 degrees so may be determined by using other equivalent test methods approved by APCO, ARB, and US EPA. [District Rule 2201]
8. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
9. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
10. Permittee shall submit the records of TVP and API gravity testing to the APCO within 30 days of startup tvp 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]
11. 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 & 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2760-14-0

EXPIRATION DATE: 05/31/2014

SECTION: 24 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL PRODUCTION TANK WITH P/V VALVE (KCL 59 LEASE)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623]
4. VOC emission rate from the tank shall not exceed 3.3 lb/day. [District Rule 2201]
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
6. 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]
7. 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 4623]
8. 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 4623]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2760-15-0

EXPIRATION DATE: 05/31/2014

SECTION: 24 **TOWNSHIP:** 30S **RANGE:** 25E

EQUIPMENT DESCRIPTION:

1000 BBL FIXED ROOF CRUDE OIL PRODUCTION TANK WITH P/V VALVE (KCL 59 LEASE)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623]
4. VOC emission rate from the tank shall not exceed 3.3 lb/day. [District Rule 2201]
5. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
6. 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]
7. 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 4623]
8. 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 4623]

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

Appendix B

Oil Lab Analysis Reports



ZALCO LABORATORIES, INC.

Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

RECEIVED

MAR 21 2012

SJVAPCD
Southern Region

(661) 395-0539
FAX (661) 395-3069

Target Drilling P. O. Box 20005 Bakersfield, CA 93390	Project: Master Project #: Attention: Mike Angelo	Work Order No.: 1203007 Reported: 03/07/2012 Received: 03/01/2012 14:00
---	---	---

Lab Sample ID: 1203007-01 Client Sample ID: Pioneer Canal Sec 9 3025	<i>T30S, RLSE</i>	Collected By: Ron O'Boyle Date Collected: 3/1/2012 1:00:00PM
---	-------------------	---

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Petroleum Chemistry								
Reid Vapor Pressure, RVP	5.45	0.05	psi		ASTM D 323	3/2/12	3/2/12	JAH

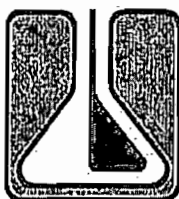
max storage temp 95°F

for permit include 30% buffer

Quality Control data is available upon request.

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTL: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-6°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.



ZALCO LABORATORIES, INC.
 Analytical & Consulting Services
 4309 Armour Avenue
 Bakersfield, California 93308

RECEIVED

MAR 21 2012

SJVAPCD
 Southern Region

(661) 395-0539
 FAX (661) 395-3069

Target Drilling P. O. Box 20005 Bakersfield, CA 93390	Project: Master Project #: Attention: Mike Angelo	Work Order No.: 1203294 Reported: 03/20/2012 Received: 03/20/2012 08:40
---	---	---

Lab Sample ID: 1203294-01 Client Sample ID: Strand Sec 30 25	<i>Sec 1, T30S, R2SE</i>	Collected By: Date Collected: 3/20/2012 8:40:00AM
---	--------------------------	--

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Petroleum Chemistry								
Reid Vapor Pressure, RVP	5.01	0.05	psi		ASTM D 323	3/20/12	3/20/12	JAH

max storage temp 95°F

for permit include 30% buffer

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTL: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level * See Case Narrative
 The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-6°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.

Appendix C

Emissions Calculations

****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

Pre-project
Tks 1 & 2

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)	7.10
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)	14.00
TANK SHELL HEIGHT, Hs (FEET)	16.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.06
VENT PRESSURE (POSITIVE psig)	0.06
TANK ID	
TANK USE	Storage
SJVUAPCD PERMIT#	Tanks 1-1, 2-1
CONE OR DOME ROOF (C/D)	c.
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	40.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	0.00
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, Sr (DEFAULT=0.0625) (ft/ft)	0.0625
-----	----
-----	12.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
-----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2.0 FT)	14.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
-----	----
ENTER AVERAGE LIQUID HEIGHT (ft)	8.0
IS TANK CONSTANT LEVEL? (Y/N)	N
-----	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
-----	87

output

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.
0	Storage	Tanks 1-1, 2-1	VERTICAL	14.0	16.0	438.7	CONE	-0.06	0.06

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	14.0	0.75	7.10	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	4.94	1240	3.23	0.955	89.71	219.51	309.21	1076.12
	FEBRUARY	67.50	5.32	1120	2.92	0.955	118.08	213.55	331.63	
	MARCH	71.54	5.71	1240	3.23	0.955	181.59	253.69	435.28	
SECOND	APRIL	76.59	6.23	1200	3.13	0.955	247.16	267.67	514.83	1864.33
	MAY	82.17	6.84	1240	3.23	0.955	337.22	303.76	640.98	
	JUNE	86.51	7.34	1200	3.13	0.955	392.76	315.76	708.52	
THIRD	JULY	88.94	7.64	1240	3.23	0.955	432.29	339.47	771.76	2052.49
	AUGUST	87.00	7.40	1240	3.23	0.955	378.64	328.88	707.51	
	SEPTEMBER	82.28	6.85	1200	3.13	0.955	278.69	294.52	573.21	
FOURTH	OCTOBER	75.71	6.13	1240	3.23	0.955	201.78	272.51	474.29	1124.91
	NOVEMBER	67.78	5.35	1200	3.13	0.955	118.55	229.97	348.52	
	DECEMBER	62.82	4.90	1240	3.23	0.955	84.47	217.63	302.10	

****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	5.32	3600	9	0.955	389	687	1076
SECOND	APR-JUN	81.76	6.80	3640	9	0.955	977	887	1864
THIRD	JUL-SEP	86.07	7.30	3680	10	0.955	1090	963	2052
FOURTH	OCT-DEC	68.77	5.46	3680	10	0.955	405	720	1125
QUARTERLY AVERAGE		76.01	6.22	3650			715	814	1529
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							7.8	8.9	16.8
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							2861	3257	6118

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

Replacement tanks for 1 & 2 (#17, 18)

LIQUID TYPE	CODE	CRUDE
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)	7.10
VAPOR MOLECULAR WEIGHT (Mv)	50.00
USING THE CODES ABOVE, WHAT TYPE OF ORGANIC LIQUID (0, 1, 2, ...)	0
VO _C CONTROL EFFICIENCY	0.00
TANK SHELL DIAMETER (FEET)	12.00
TANK SHELL HEIGHT, H _s (FEET)	15.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.06
VENT PRESSURE (POSITIVE psig)	0.06
TANK ID	
TANK USE	Storage
SJVUAPCD PERMIT#	Tanks 17,18
CONE OR DOME ROOF (C/D)	d
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	40.00
MIN LIQUID HEIGHT (USE 0,0 FT FOR DEFAULT)	0.00
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) (ft/ft)	0.0625
DOME ROOF	----
TANK DOME RADIUS, R _r , ie ((0.8 thru 1.2)*D) (ft)	12.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
-----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2.0 FT)	13.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
-----	----
ENTER AVERAGE LIQUID HEIGHT (ft)	8.0
IS TANK CONSTANT LEVEL? (Y/N)	N
-----	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
-----	87

output

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.
0	Storage	Tanks 17,18	VERTICAL	12.0	15.0	302.2	DOME	-0.06	0.06

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	13.0	0.75	7.10	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	4.94	1240	4.74	0.705	62.83	161.92	224.75	780.07
	FEBRUARY	67.50	5.32	1120	4.28	0.705	82.90	157.53	240.42	
	MARCH	71.54	5.71	1240	4.74	0.705	127.76	187.13	314.89	
SECOND	APRIL	76.59	6.23	1200	4.58	0.705	174.34	197.45	371.78	1345.59
	MAY	82.17	6.84	1240	4.74	0.705	238.50	224.07	462.57	
	JUNE	86.51	7.34	1200	4.58	0.705	278.32	232.92	511.24	
THIRD	JULY	88.94	7.64	1240	4.74	0.705	306.66	250.41	557.07	1482.41
	AUGUST	87.00	7.40	1240	4.74	0.705	268.37	242.60	510.97	
	SEPTEMBER	82.28	6.85	1200	4.58	0.705	197.11	217.25	414.37	
FOURTH	OCTOBER	75.71	6.13	1240	4.74	0.705	142.27	201.02	343.28	815.84
	NOVEMBER	67.78	5.35	1200	4.58	0.705	83.24	169.64	252.88	
	DECEMBER	62.82	4.90	1240	4.74	0.705	59.15	160.53	219.68	

****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	5.32	3600	14	0.705	273	507	780
SECOND	APR-JUN	81.76	6.80	3640	14	0.705	691	654	1346
THIRD	JUL-SEP	86.07	7.30	3680	14	0.705	772	710	1482
FOURTH	OCT-DEC	68.77	5.46	3680	14	0.705	285	531	816
QUARTERLY AVERAGE		76.01	6.22	3650			505	601	1106
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							5.5	6.6	12.1
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							2021	2402	4424

Tank Emission Calculation Spreadsheet, version 01/23/03

input

Pre-project
TK #11

****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)	7.10
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)	21.50
TANK SHELL HEIGHT, Hs (FEET)	24.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.06
VENT PRESSURE (POSITIVE psig)	0.06
TANK ID	
TANK USE	wash
SJVUAPCD PERMIT#	S-2760-11-1
CONE OR DOME ROOF (C/D)	c
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	100.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	0.00
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, Sr (DEFAULT=0.0625) (ft/ft)	0.0625
-----	----
-----	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
-----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2.0 FT)	22.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
-----	----
ENTER AVERAGE LIQUID HEIGHT (ft)	12.0
IS TANK CONSTANT LEVEL? (Y/N)	Y
IF YES, NUMBER OF TURNOVERS PER MONTH (DEF.=0.33)	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
-----	90

output

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.
0	wash	S-2760-11-1	VERTICAL	21.5	24.0	1551.9	CONE	-0.06	0.06

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	22.0	0.75	7.10	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	4.94	3100	0.33	1.000	236.78	86.98	323.76	1301.70
	FEBRUARY	67.50	5.32	2800	0.33	1.000	309.82	93.69	403.51	
	MARCH	71.54	5.71	3100	0.33	1.000	473.90	100.53	574.43	
SECOND	APRIL	76.59	6.23	3000	0.33	1.000	640.89	109.60	750.49	2875.62
	MAY	82.17	6.84	3100	0.33	1.000	868.64	120.37	989.01	
	JUNE	86.51	7.34	3000	0.33	1.000	1006.82	129.29	1136.12	
THIRD	JULY	88.94	7.64	3100	0.33	1.000	1105.29	134.52	1239.81	3178.63
	AUGUST	87.00	7.40	3100	0.33	1.000	970.11	130.32	1100.44	
	SEPTEMBER	82.28	6.85	3000	0.33	1.000	717.78	120.60	838.38	
FOURTH	OCTOBER	75.71	6.13	3100	0.33	1.000	523.79	107.98	631.77	1346.23
	NOVEMBER	67.78	5.35	3000	0.33	1.000	310.95	94.16	405.11	
	DECEMBER	62.82	4.90	3100	0.33	1.000	223.11	86.24	309.35	

****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	5.32	9000	1	1.000	1020	281	1302
SECOND	APR-JUN	81.76	6.80	9100	1	1.000	2516	359	2876
THIRD	JUL-SEP	86.07	7.30	9200	1	1.000	2793	385	3179
FOURTH	OCT-DEC	68.77	5.46	9200	1	1.000	1058	288	1346
QUARTERLY AVERAGE		76.01	6.22	9125			1847	329	2176
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							20.2	3.6	23.8
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							7388	1314	8702

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

Replacement
for #11 (19)

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)	7.10
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)	12.00
TANK SHELL HEIGHT, Hs (FEET)	20.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.06
VENT PRESSURE (POSITIVE psig)	0.06
TANK ID	
TANK USE	wash
SJVUAPCD PERMIT#	S-2760-19-0
CONE OR DOME ROOF (C/D)	D
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	100.00
MIN LIQUID HEIGHT (USE 0,0 FT FOR DEFAULT)	0.00
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, Sr (DEFAULT=0.0625) (R/ft)	0.0625
DOME ROOF	----
TANK DOME RADIUS, Rr, ie [(0,8 thru 1.2)*D] (ft)	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
-----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2,0 FT)	18.00
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)	Y
IF YES, NUMBER OF TURNS PER MONTH (DEF.=0.33)	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
-----	90

output

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.
0	wash	S-2760-19-0	VERTICAL	12.0	20.0	402.9	DOME	-0.06	0.06

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	18.0	0.75	7.10	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	4.94	3100	0.33	1.000	71.56	22.17	93.73	380.69
	FEBRUARY	67.50	5.32	2800	0.33	1.000	93.79	23.88	117.67	
	MARCH	71.54	5.71	3100	0.33	1.000	143.67	25.62	169.29	
SECOND	APRIL	76.59	6.23	3000	0.33	1.000	194.64	27.94	222.58	857.26
	MAY	82.17	6.84	3100	0.33	1.000	264.30	30.68	294.98	
	JUNE	86.51	7.34	3000	0.33	1.000	306.75	32.95	339.71	
THIRD	JULY	88.94	7.64	3100	0.33	1.000	336.99	34.29	371.28	949.25
	AUGUST	87.00	7.40	3100	0.33	1.000	295.61	33.22	328.83	
	SEPTEMBER	82.28	6.85	3000	0.33	1.000	218.41	30.74	249.14	
FOURTH	OCTOBER	75.71	6.13	3100	0.33	1.000	159.03	27.52	186.56	394.09
	NOVEMBER	67.78	5.35	3000	0.33	1.000	94.14	24.00	118.14	
	DECEMBER	62.82	4.90	3100	0.33	1.000	67.41	21.98	89.39	

****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	5.32	9000	1	1.000	309	72	381
SECOND	APR-JUN	81.76	6.80	9100	1	1.000	766	92	857
THIRD	JUL-SEP	86.07	7.30	9200	1	1.000	851	98	949
FOURTH	OCT-DEC	68.77	5.46	9200	1	1.000	321	74	394
QUARTERLY AVERAGE		76.01	6.22	9125			562	84	645
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							6.2	0.9	7.1
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							2246	335	2581

Tank Emission Calculation Spreadsheet, version 01/23/03

FOR REFERENCE PAINT TABLE

PAINT COLOR	SHADE/ TYPE	PAINT FACTORS PAINT CONDITION	
		GOOD	POOR
ALUMINUM	SPECULAR	0.39	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

Pre-project
12, 13, 14

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)	7.10
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)	21.50
TANK SHELL HEIGHT, Hs (FEET)	16.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.06
VENT PRESSURE (POSITIVE psig)	0.06
TANK ID	
TANK USE	Storage
SJVUAPCD PERMIT#	S-2760-12,13,14-0
CONE OR DOME ROOF (C/D)	D
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	50.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	0.00
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, Sr (DEFAULT=0.0625) (R/R)	0.0625
DOME ROOF	----
TANK DOME RADIUS, Rr, ie [(0.8 thru 1.2)*D] (ft)	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
-----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2.0 FT)	14.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
-----	----
ENTER AVERAGE LIQUID HEIGHT (ft)	8.0
IS TANK CONSTANT LEVEL? (Y/N)	N
-----	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
-----	90

output

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.
0	Storage	-2760-12,13,14	VERTICAL	21.5	16.0	1034.6	DOME	-0.06	0.06

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	14.0	0.75	7.10	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	4.94	1550	1.71	1.000	221.48	287.20	508.68	1857.18
	FEBRUARY	67.50	5.32	1400	1.55	1.000	290.85	279.40	570.25	
	MARCH	71.54	5.71	1550	1.71	1.000	446.34	331.91	778.26	
SECOND	APRIL	76.59	6.23	1500	1.66	1.000	605.95	350.21	956.16	3549.82
	MAY	82.17	6.84	1550	1.71	1.000	824.58	397.43	1222.01	
	JUNE	86.51	7.34	1500	1.66	1.000	958.52	413.13	1371.65	
THIRD	JULY	88.94	7.64	1550	1.71	1.000	1053.90	444.15	1498.06	3918.97
	AUGUST	87.00	7.40	1550	1.71	1.000	923.86	430.29	1354.16	
	SEPTEMBER	82.28	6.85	1500	1.66	1.000	681.42	385.34	1066.76	
FOURTH	OCTOBER	75.71	6.13	1550	1.71	1.000	494.92	356.54	851.46	1937.66
	NOVEMBER	67.78	5.35	1500	1.66	1.000	291.97	300.88	592.86	
	DECEMBER	62.82	4.90	1550	1.71	1.000	208.61	284.74	493.34	

****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	5.32	4500	5	1.000	959	899	1857
SECOND	APR-JUN	81.76	6.80	4550	5	1.000	2389	1161	3550
THIRD	JUL-SEP	86.07	7.30	4600	5	1.000	2659	1260	3919
FOURTH	OCT-DEC	68.77	5.46	4600	5	1.000	995	942	1938
QUARTERLY AVERAGE		76.01	6.22	4563			1751	1065	2816
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							19.2	11.7	30.9
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							7002	4261	11264

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

Replacement to
12, 13, 14 (20, 21, 22)
= 23

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)	7.10
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)	12.00
TANK SHELL HEIGHT, Hs (FEET)	15.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.06
VENT PRESSURE (POSITIVE psig)	0.06
TANK ID	
TANK USE	Storage
SJVUAPCD PERMIT#	S-2760-20,21,22-0
CONE OR DOME ROOF (C/D)	D
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	50.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	0.00
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, Sr (DEFAULT=0.0625) (ft/ft)	0.0625
DOME ROOF	----
TANK DOME RADIUS, Rr, ie [(0.8 thru 1.2)*D] (ft)	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
-----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2.0 FT)	16.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
-----	----
ENTER AVERAGE LIQUID HEIGHT (ft)	8.0
IS TANK CONSTANT LEVEL? (Y/N)	N
-----	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
-----	90

output

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.
0	Storage	2760-20,21,22	VERTICAL	12.0	15.0	302.2	DOME	-0.06	0.06

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	16.0	0.75	7.10	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	4.94	1550	4.81	0.696	65.05	200.02	265.07	908.36
	FEBRUARY	67.50	5.32	1400	4.34	0.696	85.68	194.59	280.27	
	MARCH	71.54	5.71	1550	4.81	0.696	131.85	231.17	363.01	
SECOND	APRIL	76.59	6.23	1500	4.65	0.696	179.58	243.91	423.49	1518.94
	MAY	82.17	6.84	1550	4.81	0.696	245.20	276.80	521.99	
	JUNE	86.51	7.34	1500	4.65	0.696	285.73	287.73	573.46	
THIRD	JULY	88.94	7.64	1550	4.81	0.696	314.58	309.34	623.92	1670.09
	AUGUST	87.00	7.40	1550	4.81	0.696	275.47	299.69	575.16	
	SEPTEMBER	82.28	6.85	1500	4.65	0.696	202.64	268.37	471.02	
FOURTH	OCTOBER	75.71	6.13	1550	4.81	0.696	146.59	248.32	394.91	950.05
	NOVEMBER	67.78	5.35	1500	4.65	0.696	86.03	209.55	295.58	
	DECEMBER	62.82	4.90	1550	4.81	0.696	61.25	198.31	259.56	

****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	5.32	4500	14	0.696	283	626	908
SECOND	APR-JUN	81.76	6.80	4550	14	0.696	711	808	1519
THIRD	JUL-SEP	86.07	7.30	4600	14	0.696	793	877	1670
FOURTH	OCT-DEC	68.77	5.46	4600	14	0.696	294	656	950
QUARTERLY AVERAGE		76.01	6.22	4563			520	742	1262
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							5.7	8.1	13.8
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							2080	2968	5047

Tank Emission Calculation Spreadsheet, version 01/23/03

input

Project 1110037

16-1

****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
MOTOR GASOLINE	1
AVIATION GASOLINE	2
LIGHT NAPHTHA (RVP 9-14 PSIA)	3
NAPHTHA (RVP 2-8 PSIA)	4

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)	2.95
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)	10.00
TANK SHELL HEIGHT, Hs (FEET)	24.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.06
VENT PRESSURE (POSITIVE psig)	0.06
TANK ID	Pioneer Canal
TANK USE	Wash
SJVUAPCD PERMIT#	S-2760-17-0
CONE OR DOME ROOF (C/D)	C
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	80.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	0.00
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

7.1

MODIFIABLE DATA	
-----	---
-----	---
-----	Y
-----	--N/R--
-----	3.0
CONE ROOF	---
GIVEN ROOF HEIGHT OR SLOPE (H/S)	S
-----	0.94
TANK CONE ROOF SLOPE, Sr (DEFAULT=0.0625) (ft/ft)	0.0625
-----	---
-----	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
-----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2.0 FT)	22.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
-----	---
ENTER AVERAGE LIQUID HEIGHT (ft)	8.0
IS TANK CONSTANT LEVEL? (Y/N)	Y
IF YES, NUMBER OF TURNOVERS PER MONTH (DEF.=0.33)	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
-----	90

5.4
195g

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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.
Pioneer Canal	Wash	S-2760-17-0	VERTICAL	10.0	24.0	335.7	CONE	-0.06	0.06

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	22.0	0.75	2.95	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	1.50	2480	0.33	1.000	17.57	5.71	23.28	93.63
	FEBRUARY	67.50	1.64	2240	0.33	1.000	22.83	6.25	29.08	
	MARCH	71.54	1.79	2480	0.33	1.000	34.45	6.81	41.26	
SECOND	APRIL	76.59	1.99	2400	0.33	1.000	45.38	7.57	52.95	195.48
	MAY	82.17	2.23	2480	0.33	1.000	59.05	8.48	67.53	
	JUNE	86.51	2.43	2400	0.33	1.000	65.74	9.26	75.00	
THIRD	JULY	88.94	2.55	2480	0.33	1.000	70.26	9.71	79.97	209.36
	AUGUST	87.00	2.45	2480	0.33	1.000	62.93	9.35	72.28	
	SEPTEMBER	82.28	2.23	2400	0.33	1.000	48.61	8.50	57.11	
FOURTH	OCTOBER	75.71	1.95	2480	0.33	1.000	37.14	7.43	44.57	95.90
	NOVEMBER	67.78	1.65	2400	0.33	1.000	22.84	6.29	29.13	
	DECEMBER	62.82	1.48	2480	0.33	1.000	16.55	5.65	22.20	

****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	1.64	7200	1	1.000	75	19	94
SECOND	APR-JUN	81.76	2.21	7280	1	1.000	170	25	195
THIRD	JUL-SEP	86.07	2.41	7360	1	1.000	182	28	209
FOURTH	OCT-DEC	68.77	1.70	7360	1	1.000	77	19	96
QUARTERLY AVERAGE		76.01	1.99	7300			126	23	149
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							1.4	0.2	1.6
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							503	91	594

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

Revised '16-2

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)	7 10
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)	12 00
TANK SHELL HEIGHT, Hs (FEET)	20 00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0 06
VENT PRESSURE (POSITIVE psig)	0 06
TANK ID	
TANK USE	wash
SJVUAPCD PERMIT#	S-2760-16-1
CONE OR DOME ROOF (C/D)	c
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	80 00
MIN LIQUID HEIGHT (USE 0,0 FT FOR DEFAULT)	0 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, Sr (DEFAULT=0,0625) (ft/ft)	0 0625
----	1 00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2.0 FT)	18 00
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)	Y
IF YES, NUMBER OF TURNOVERS PER MONTH (DEF.=0.33)	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
----	90

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.
0	wash	S-2760-16-1	VERTICAL	12.0	20.0	402.9	CONE	-0.06	0.06

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	18.0	0.75	7.10	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	4.94	2480	0.33	1.000	70.29	22.17	92.46	375.57
	FEBRUARY	67.50	5.32	2240	0.33	1.000	92.22	23.88	116.10	
	MARCH	71.54	5.71	2480	0.33	1.000	141.39	25.62	167.01	
SECOND	APRIL	76.59	6.23	2400	0.33	1.000	191.75	27.94	219.69	846.72
	MAY	82.17	6.84	2480	0.33	1.000	260.65	30.68	291.33	
	JUNE	86.51	7.34	2400	0.33	1.000	302.75	32.95	335.70	
THIRD	JULY	88.94	7.64	2480	0.33	1.000	332.73	34.29	367.02	938.14
	AUGUST	87.00	7.40	2480	0.33	1.000	291.77	33.22	324.99	
	SEPTEMBER	82.28	6.85	2400	0.33	1.000	215.39	30.74	246.13	
FOURTH	OCTOBER	75.71	6.13	2480	0.33	1.000	156.64	27.52	184.17	388.93
	NOVEMBER	67.78	5.35	2400	0.33	1.000	92.57	24.00	116.57	
	DECEMBER	62.82	4.90	2480	0.33	1.000	66.21	21.98	88.19	

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	5.32	7200	1	1.000	304	72	376
SECOND	APR-JUN	81.76	6.80	7280	1	1.000	755	92	847
THIRD	JUL-SEP	86.07	7.30	7360	1	1.000	840	98	938
FOURTH	OCT-DEC	68.77	5.46	7360	1	1.000	315	74	389
QUARTERLY AVERAGE		76.01	6.22	7300			554	84	637
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							6.1	0.9	7.0
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							2214	335	2549

Tank Emission Calculation Spreadsheet, version 01/23/03

1-24-0

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)	7.10
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)	12.00
TANK SHELL HEIGHT, Hs (FEET)	20.00
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.06
VENT PRESSURE (POSITIVE psig)	0.06
TANK ID	
TANK USE	Storage Wash
SJVUAPCD PERMIT#	Tank 24-W
CONE OR DOME ROOF (C/D)	d
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	150.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	0.00
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, Sr (DEFAULT=0.0625) (ft/ft)	0.0625
DOME ROOF	----
TANK DOME RADIUS, Rr, Ie [(0.8 thru 1.2)*D] (ft)	12.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	N
-----	22.00
DEFAULT MAX LIQUID HEIGHT (SHELL HT - 2.0 FT)	18.00
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	Y
-----	----
ENTER AVERAGE LIQUID HEIGHT (ft)	14.0
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
-----	67

output

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.
0	Storage	Tank 24-W	VERTICAL	12.0	20.0	402.9	DOME	-0.06	0.06

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	18.0	0.75	7.10	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	4.94	4650	0.33	1.000	59.39	22.17	81.56	331.01
	FEBRUARY	67.50	5.32	4200	0.33	1.000	78.56	23.88	102.44	
	MARCH	71.54	5.71	4650	0.33	1.000	121.38	25.62	147.00	
SECOND	APRIL	76.59	6.23	4500	0.33	1.000	166.11	27.94	194.05	752.21
	MAY	82.17	6.84	4650	0.33	1.000	227.94	30.68	258.62	
	JUNE	86.51	7.34	4500	0.33	1.000	266.59	32.95	299.55	
THIRD	JULY	88.94	7.64	4650	0.33	1.000	294.09	34.29	328.38	837.85
	AUGUST	87.00	7.40	4650	0.33	1.000	257.12	33.22	290.34	
	SEPTEMBER	82.28	6.85	4500	0.33	1.000	188.40	30.74	219.13	
FOURTH	OCTOBER	75.71	6.13	4650	0.33	1.000	135.49	27.52	163.01	343.79
	NOVEMBER	67.78	5.35	4500	0.33	1.000	78.91	24.00	102.91	
	DECEMBER	62.82	4.90	4650	0.33	1.000	55.89	21.98	77.87	

****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	5.32	13500	1	1.000	259	72	331
SECOND	APR-JUN	81.76	6.80	13650	1	1.000	661	92	752
THIRD	JUL-SEP	86.07	7.30	13800	1	1.000	740	98	838
FOURTH	OCT-DEC	68.77	5.46	13800	1	1.000	270	74	344
QUARTERLY AVERAGE		76.01	6.22	13688			482	84	566
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							5.3	0.9	6.2
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							1930	335	2265

Tank Emission Calculation Spreadsheet, version 01/23/03

Appendix D

BACT Guideline and Top Down Analysis

Per » B A C T » Bact Guideline.asp?category_Level1=7&category_Level2=3&category_Level3=1&last Update=10 » 1 :

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**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 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 s 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. For background information, see Permit Specific BACT Determinations on Details Page.

Top-Down BACT Analysis for VOC

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; transfer of uncondensed vapors to gas pipeline or reinjection to formation (if appropriate wells are available).

Achieved in Practice:

PV relief valve 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. 99% control (waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; transfer of uncondensed vapors to gas pipeline or reinjection to formation (if appropriate wells are available).
2. PV relief valve set to within 10% of maximum allowable pressure.

Step 4 - Cost Effectiveness Analysis

The following cost information on a vapor control system to address the technologically feasible control option was taken from Project S-1120238 and S-1114894. The cost information was submitted to the District in January and February of 2012.

The capital costs are:

Vapor Recovery Unit	\$48,654
Installation	15,000
Welding	13,875 (\$18,500 quote for wash tank and 3 stock tanks)
Piping	<u>392,660</u> (approx. 2.5 miles between the leases)
Total	\$470,189

The annualized capital cost is:

$AP = (P) \left\{ \frac{i(1+i)^n}{(1+i)^n - 1} \right\}$, where

AP = Equivalent Annual Capital Cost of Control Equip.

P = Present value of the control equipment, including installation cost.
\$375,189

i = interest rate (use 10% per policy)

n = equipment life (assume 10 years per policy)

$AP = (P) \left\{ \frac{0.1(1+0.1)^{10}}{(1+0.1)^{10} - 1} \right\}$

$AP = (P) \times (0.16274) = (\$470,189) (0.1627) = \$76,500/\text{year}$

Maintenance Cost:

\$12,000 (\$1000/mo contract)

\$4,800 (VRU Electric Cost)

\$2,000 (annual seal replacement)

\$18,800 (Total)

Total annualized cost = \$95,300/yr

For calculation of the amount of VOCs removed from the emissions units (16 – Pioneer Canal Lease; 23 & 24 - Strand Lease) with the vapor control system, 100% control is assumed. The VOCs removed annually are:

$(2,549 + 5,409 + 2,265) \text{ lb/yr} \div 2000 \text{ lb/ton} = 4.9 \text{ ton/yr}$

Annualized cost = $\$95,300/\text{yr} \div 4.9 \text{ tons/yr}$
= \$19,450/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 relief valve set to within 10% of maximum allowable pressure of the tank

Project S-1114894

BAKERSFIELD PIPE AND SUPPLY INC
2903 PATTON WAY
BAKERSFIELD, CA 93308-5752
661-589-9141 Fax 661-589-3739

Quotation

QUOTE DATE	QUOTE NUMBER
01/27/12	S1760416
ORDER TO: BAKERSFIELD PIPE AND SUPPLY IN 2903 PATTON WAY BAKERSFIELD, CA 93308-5752	PAGE NO. 1

QUOTE TO:
CMO, INC.
 4900 CALIFORNIA AVE STE B210
 CRUDE CORPORATION
 BAKERSFIELD, CA 93309-7080

SHIP TO:
CMO, INC
 19100 7TH STANDARD RD
 CRUDE CORP
 MCKITTRICK, CA 93251-9744

CUSTOMER NUMBER	CUSTOMER ORDER NUMBER	ORDERED BY	SALESPERSON	
17309	TDR	WALTER BERGLUND	MARK MARGRAVE	
WRITER	SHIP VIA	TERMS	SHIP DATE	FREIGHT
JOSH EVANS	OUR TRUCK	NET 30 DAYS	01/27/12	No
ORDER QTY	DESCRIPTION	UNIT PRICE	NET AMOUNT	
780ft	14 .375W STD A53B PIPE ERW DRL I	32.772/ft	25562.16	
8ea	14 STD LR 90 WELD ELL ** A234WPB .375W	159.904/ea	1279.23	
8ea	14 STD LR 45 WELD ELL ** A234WPB .375W	100.600/ea	804.80	
5ea	8 150 RF WN FLANGE STD BORE ** A105 .322W	43.742/ea	218.71	
5ea	8 STD LR 90 WELD ELL ** A234WPB .322W	37.592/ea	187.96	
5ea	^14 WAFER BFV 316 SS STEMS SS DISC BUNA SEAT WITH GEAR OP	907.493/ea	4537.47	
5ea	14 STD WELD TEE ** A234WPB .375W	278.374/ea	1391.87	
1600ft	12 .375W STD A53B PIPE ERW DRL I ***** MATERIAL IS STOCK BAKERFIELD QUOTE VALID 30 DAYS SUBJECT TO PRIOR SALE FOB BAKERSFIELD CA ANY QUESTIONS PLEASE CALL THANKS, JOSH EVANS	29.766/ft	47625.60 *	
		TAXES NOT INCLUDED		

THIS IS A QUOTATION
 All material is subject to prior sale
 Prices are valid for 7 days unless otherwise specified
APPLICABLE TAXES EXTRA!

Subtotal	81607.80
S&H CHGS	0.00
Amount Due	81607.80

Project S1120238



4201 Armour Avenue
Bakersfield, CA 93308-4551
Office (661) 322-0153
Fax (661) 322-6469

2/06/12

E B Resources Natural Resources
34740 Merced Ave.
Bakersfield, CA 93308
Subject: Vapor Recovery Units
Att: Greg Youngblood

Dear Mr. Youngblood,

Thank you for the opportunity to supply pricing on your VRU project.

We are offering skid mounted units with 40 HP, compressors, motors, belt drives, oilers, separator, pumps complete as your existing units, except with a second compressor & motor mounted on skid for full back up protection.

Price: One complete unit \$ 48,654.00 plus frt.

If you need additional information, please contact us.

Respectfully

A handwritten signature in black ink, appearing to read "Doug Schofield". The signature is written in a cursive, flowing style.

Doug Schofield. Sales



12422 JOMANI RD
 BAKERSFIELD, CA 93312
 LICENSE #764356
 OFFICE (661)750-1517
 FAX (661) 829-1866

Date: February 10, 2012

Submitted To:

Work To Be Performed At:

Greg Youngblood
E&B Natural Resources

Vapor Recovery Unit

We hereby propose to furnish the materials and perform the labor necessary for the completion of:

Panel, disconnect, underground and labor for the vapor recovery unit

All material is guaranteed to be as specified, and the above work to be performed in accordance with the drawings and specifications submitted for above work, and completed in a substantial workmanlike manner for the sum of **Fifteen thousand thousand dollars (\$ 15,000.00)** with payments to be made as follows: **progress payments**

Respectfully Submitted,

Gold Coast Electric, Inc.

Michael C. Heinemann
President

Any alteration or deviation from above specifications involving extra costs will be executed only upon written order, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents, or delays beyond our control.

Acceptance of Proposal

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payments will be made as outlined above.

Date

Signature

Note – This proposal may be withdrawn by us if not accepted within 30 days

Appendix E

Health Risk Assessment

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Dolores Gough, AQE – Permit Services
 From: John Gallup, AQS – Technical Services
 Date: 4/17/2012
 Facility Name: Target Drilling Company
 Location: Light Oil Central,
 Kern County, CA
 Application #(s): S-2760-16-2, -17-0, -18-0, -19-0,
 -20-0, -21-0, -22-0
 Project #s: S-1114823 & S-1114825

RECEIVED
APR 18
 SJVAPCD
 Southern Region

A. RMR SUMMARY

RMR Summary				
Categories	400 bbl Light Crude Oil Wash Tank (Unit 16-2)	300 bbl Light Crude Oil Storage Tanks (Units 17-0 and 18-0)	400 bbl Light Crude Oil Wash Tank (Unit 19-0)	300 bbl Light Crude Oil Storage Tanks (Units 20-0, 21-0, and 22-0)
Prioritization Score	0.001	0.001 (each)	0.001	0.002 (each)
Acute Hazard Index	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Chronic Hazard Index	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Maximum Individual Cancer Risk (10⁻⁶)	N/A ¹	N/A ¹	N/A ¹	N/A ¹
T-BACT Required?	No	No	No	No
Special Permit Conditions?	No	No	No	No

¹Acute and Chronic Hazard Indices and Maximum Individual Cancer Risk were not calculated since the total facility prioritization score was less than 1.0.

RMR Summary				
Categories	400 bbl Light Crude Oil Storage Tank (Unit 23-0)	500 bbl Light Crude Oil Wash Tank (Unit 24-0)	Project(s) Totals	Facility Totals
Prioritization Score	0.002	0.001	0.011	0.088
Acute Hazard Index	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Chronic Hazard Index	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Maximum Individual Cancer Risk (10⁻⁶)	N/A ¹	N/A ¹	N/A ¹	N/A ¹
T-BACT Required?	No	No		
Special Permit Conditions?	No	No		

¹Acute and Chronic Hazard Indices and Maximum Individual Cancer Risk were not calculated since the total facility prioritization score was less than 1.0.

Proposed Permit Conditions

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

Unit # 16-2 thru Unit # 24-0

No special conditions are required.

B. RMR REPORT

I. Project Description

Technical Services received a request on April 16, 2012, to perform a Risk Management Review for a proposed modification to a light crude oil wash and storage facility. The modification consists of canceling and replacing one light crude oil wash tank (-16-2), the routine replacement of 5 light crude oil storage tanks (-17-0, -18-0, -20-0, -21-0, and -22-0), the routine replacement of 1 light crude oil wash tank (-19-0), and the installation of one new light crude oil storage tank (-23-0) and one light crude oil wash tank (24-0).

II. Analysis

Toxic emissions for this proposed unit were calculated using the District's emission factors for Light Crude Oil Oilfield Equipment Fugitives. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for this proposed unit was less than 1.0 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

Analysis Parameters Unit 16-2			
VOC Emissions (lbs/yr)	2,549	Max Hours per Year	8760
Closest Receptor (m)	1609.3		

Analysis Parameters Units 17-0 and 18-0			
VOC Emissions (lbs/yr)	4,424	Max Hours per Year	8760
Closest Receptor (m)	1609.3		

Analysis Parameters Unit 19-0			
VOC Emissions (lbs/yr)	2,581	Max Hours per Year	8760
Closest Receptor (m)	1609.3		

Analysis Parameters Units 20-0, 21-0, and 22-0			
VOC Emissions (lbs/yr)	5,047	Max Hours per Year	8760
Closest Receptor (m)	1609.3		

Analysis Parameters Unit 23-0			
VOC Emissions (lbs/yr)	5,409	Max Hours per Year	8760
Closest Receptor (m)	1609.3		

Analysis Parameters Unit 24-0			
VOC Emissions (lbs/yr)	2,265	Max Hours per Year	8760
Closest Receptor (m)	1609.3		

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.

IV. Attachments

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Toxic emissions summary
- D. Prioritization score
- E. Facility Summary

Appendix F

Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2760-16-2

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: NE 9 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 300 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE (PIONEER CANAL LEASE):
REVISE TANK CAPACITY TO 400 BBL AND CORRECT TVP (CANCEL AND REPLACE '16-1)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 1020]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [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 6.5 psia under all storage conditions. [District Rule 2201]
5. Tank shall only operate at constant level. [District Rule 2201]
6. 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]
7. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services

S-2760-16-2 : May 25 2012 12:05PM - GOUGHD : 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 ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting RVP to TVP at the tanks maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range greater than 26 degrees up to 30 degrees so may be determined by using other equivalent test methods approved by APCO, ARB, and US EPA. [District Rule 2201]
9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 4623]
17. 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, 2530 and 4623]
18. This ATC cancels and replaces ATC S-2760-16-1. [District Rule 2201]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2760-17-0

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: NE9 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:
300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH PV VALVE (PIONEER CANAL LEASE)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. Crude oil throughput shall not exceed 40 barrels per day based on a monthly average day. [District Rules 2201 and 4623]
4. 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 gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
5. VOC emission rate from the tank shall not exceed 12.1 lb/day. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 6.5 psia under all storage conditions. [District Rule 2201]
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]

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

DAVID WARNER, Director of Permit Services

S-2760-17-0 : May 25 2012 12:05PM - GOUGHD : Joint Inspection NOT Required

8. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
9. The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 4623]
17. 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, 2530 and 4623]
18. Permit to Operate S-2760-1 shall be cancelled upon implementation of this ATC. [District Rule 2201]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-2760-18-0

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: NE9 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:
300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH PV VALVE (PIONEER CANAL LEASE)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. Crude oil throughput shall not exceed 40 barrels per day based on a monthly average day. [District Rules 2201 and 4623]
4. 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 gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
5. VOC emission rate from the tank shall not exceed 12.1 lb/day. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 6.5 psia under all storage conditions. [District Rule 2201]
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]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services

S-2760-18-0 : May 25 2012 12:05PM - GOUGHD : Joint Inspection NOT Required

8. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
9. The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 46231]
17. 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, 2530 and 4623]
18. Permit to Operate S-2760-2 shall be cancelled upon implementation of this ATC. [District Rule 2201]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2760-19-0

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: SE24 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:
400 BBL FIXED ROOF CRUDE OIL WASH TANK WITH PV VALVE (KCL 59 LEASE)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 1020]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [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 6.5 psia under all storage conditions. [District Rule 2201]
5. Tank shall only operate at constant level. [District Rule 2201]
6. 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]
7. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services

S-2760-19-0 : May 25 2012 12:05PM - SOUGHD - 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 ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting RVP to TVP at the tanks maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range greater than 26 degrees up to 30 degrees so may be determined by using other equivalent test methods approved by APCO, ARB, and US EPA. [District Rule 2201]
9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 4623]
17. 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, 2530 and 4623]
18. Permit to Operate S-2760-11 shall be cancelled upon implementation of this ATC. [District Rule 2201]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2760-20-0

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: SE24 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:
300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH PV VALVE (KCL 59 LEASE)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average day. [District Rules 2201 and 4623]
4. 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 gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
5. VOC emission rate from the tank shall not exceed 13.8 lb/day. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 6.5 psia under all storage conditions. [District Rule 2201]
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]

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

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DAVID WARNER, Director of Permit Services

S-2760-20-0 : May 25 2012 12 05PM - GOUGHD : Joint Inspection NOT Required

8. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
9. The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 4623]
17. 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, 2530 and 4623]
18. Permit to Operate S-2760-12 shall be cancelled upon implementation of this ATC. [District Rule 2201]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2760-21-0

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: SE24 **TOWNSHIP:** 30S **RANGE:** 25E

EQUIPMENT DESCRIPTION:
300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH PV VALVE (KCL 59 LEASE)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average day. [District Rules 2201 and 4623]
4. 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 gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
5. VOC emission rate from the tank shall not exceed 13.8 lb/day. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 6.5 psia under all storage conditions. [District Rule 2201]
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]

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

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DAVID WARNER, Director of Permit Services

S-2760-21-0 : May 25 2012 12:05PM - GOUGHD : Joint Inspection NOT Required

8. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
9. The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 46231]
17. 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, 2530 and 4623]
18. Permit to Operate S-2760-13 shall be cancelled upon implementation of this ATC. [District Rule 2201]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2760-22-0

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: SE24 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:

300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH PV VALVE (KCL 59 LEASE) (REPLACEMENT FOR TANK - 14)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average day. [District Rules 2201 and 4623]
4. 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 gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
5. VOC emission rate from the tank shall not exceed 13.8 lb/day. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 6.5 psia under all storage conditions. [District Rule 2201]
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]

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

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DAVID WARNER, Director of Permit Services

S-2760-22-0 : May 25 2012 12:05PM - GOUGHD : Joint Inspection NOT Required

8. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
9. The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 46231]
17. 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, 2530 and 4623]
18. Permit to Operate S-2760-14 shall be cancelled upon implementation of this ATC. [District Rule 2201]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2760-23-0

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: NW1 **TOWNSHIP:** 30S **RANGE:** 25E

EQUIPMENT DESCRIPTION:
300 BBL FIXED ROOF CRUDE OIL STORAGE TANK WITH P/V VALVE (STRAND LEASE)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average day. [District Rules 2201 and 4623]
4. 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 gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
5. VOC emission rate from the tank shall not exceed 13.8 lb/day. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 6.5 psia under all storage conditions. [District Rule 2201]
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]

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

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DAVID WARNER, Director of Permit Services

S-2760-23-0 - May 25 2012 1:03PM - GOLUGHD - Joint Inspection NOT Required

8. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 2201]
9. The TVP of the organic liquid shall be determined by measuring 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 maximum organic liquid storage temperature. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 46231]
17. 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, 2530 and 4623]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-2760-24-0

LEGAL OWNER OR OPERATOR: TARGET DRILLING COMPANY
MAILING ADDRESS: PO BOX 20005
BAKERSFIELD, CA 93390

LOCATION: LIGHT OIL CENTRAL
CA

SECTION: NW1 TOWNSHIP: 30S RANGE: 25E

EQUIPMENT DESCRIPTION:
500 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE (STRAND LEASE)

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 1020]
3. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [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 6.5 psia under all storage conditions. [District Rule 2201]
5. Tank shall only operate at constant level. [District Rule 2201]
6. 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]
7. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services

S-2760-24-0 May 25 2012 1:03PM - GOUJHD : 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 ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting RVP to TVP at the tanks maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range greater than 26 degrees up to 30 degrees so may be determined by using other equivalent test methods approved by APCO, ARB, and US EPA. [District Rule 2201]
9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201]
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 2201]
11. Permittee shall comply with all applicable requirements of Rule 4409. [District Rule 4409]
12. The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4409]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4409]
14. The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530]
15. The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. [District Rule 2530]
16. 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 Rules 2201 and 4623]
17. 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, 2530 and 4623]

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Appendix G
Emissions Profile

Permit #: S-2760-16-2	Last Updated
Facility: TARGET DRILLING COMPANY	04/24/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	2549.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	7.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	638.0
Q2:	0.0	0.0	0.0	0.0	638.0
Q3:	0.0	0.0	0.0	0.0	638.0
Q4:	0.0	0.0	0.0	0.0	638.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-2760-17-0	Last Updated
Facility: TARGET DRILLING COMPANY	04/24/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	4424.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	12.1
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	1106.0
Q2:	0.0	0.0	0.0	0.0	1106.0
Q3:	0.0	0.0	0.0	0.0	1106.0
Q4:	0.0	0.0	0.0	0.0	1106.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-2760-18-0	Last Updated
Facility: TARGET DRILLING COMPANY	04/24/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	4424.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	12.1
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	1106.0
Q2:	0.0	0.0	0.0	0.0	1106.0
Q3:	0.0	0.0	0.0	0.0	1106.0
Q4:	0.0	0.0	0.0	0.0	1106.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-2760-19-0	Last Updated
Facility: TARGET DRILLING COMPANY	04/24/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	2581.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	7.1
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	645.0
Q2:	0.0	0.0	0.0	0.0	645.0
Q3:	0.0	0.0	0.0	0.0	645.0
Q4:	0.0	0.0	0.0	0.0	645.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Application Emissions

Permit #: S-2760-20-0	Last Updated
Facility: TARGET DRILLING COMPANY	04/30/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	5047.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	13.8
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	1261.0
Q2:	0.0	0.0	0.0	0.0	1262.0
Q3:	0.0	0.0	0.0	0.0	1262.0
Q4:	0.0	0.0	0.0	0.0	1262.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-2760-21-0	Last Updated
Facility: TARGET DRILLING COMPANY	04/30/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	5047.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	13.8
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	1262.0
Q2:	0.0	0.0	0.0	0.0	1262.0
Q3:	0.0	0.0	0.0	0.0	1262.0
Q4:	0.0	0.0	0.0	0.0	1262.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-2760-22-0	Last Updated
Facility: TARGET DRILLING COMPANY	04/30/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	5047.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	13.8
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	1262.0
Q2:	0.0	0.0	0.0	0.0	1262.0
Q3:	0.0	0.0	0.0	0.0	1262.0
Q4:	0.0	0.0	0.0	0.0	1262.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Application Emissions

Permit #: S-2760-23-0	Last Updated
Facility: TARGET DRILLING COMPANY	05/14/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	5047.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	13.8
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	1262.0
Q2:	0.0	0.0	0.0	0.0	1262.0
Q3:	0.0	0.0	0.0	0.0	1262.0
Q4:	0.0	0.0	0.0	0.0	1262.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-2760-24-0	Last Updated
Facility: TARGET DRILLING COMPANY	04/30/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	2265.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	6.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	566.0
Q2:	0.0	0.0	0.0	0.0	566.0
Q3:	0.0	0.0	0.0	0.0	566.0
Q4:	0.0	0.0	0.0	0.0	566.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Appendix H

Compliance Certification

TARGET DRILLING
P.O. BOX 20005
BAKERSFIELD, CA 93390
661-979-1200

SJVAPCD
Southern Region
APR 27 2012
RECEIVED
RECEIVED
APR 27 2012
SJVAPCD
Southern Region

April 26, 2012

Ms. Dolores Gough
San Joaquin Valley Unified APCD
34946 Flyover Court
Bakersfield, CA 93308

Ms. Gough:

Target Drilling is the owner of the proposed major modification. For the purposes of this ATC, the facility is not challenging the major modification classification. As such, Target Drilling is verifying that all major Stationary Sources owned or operated by Target Drilling in California are in compliance or on a schedule for compliance with all applicable emission limitations and standards.

Sincerely,



Mike Angelo
Target Drilling



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Customer Information

Customer Name	SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT	Master Id	72243
Address	1990 E. GETTYSBERG AVE.	Phone	5592306038
City	FRESNO	Fax	5592306061
State - Zip	CA - 93726		

Product Information

Legal GOVERNMENT - GOVT PUBLIC NOTICE

Order Information

Attention Name	Cristina Montoya	Billing Reference No.	32
Ad Description	Pre Target Drilling S-1114823CM	Sale/Hrg/Bid Date	06/26/2012
Special Instructions	Please email a copy of the notice to Cristina.Montoya@valleyair.org		

Orders Created

Order No.	Newspaper Name	Publishing Dates	Ad	Price	Ad Status
2336835	THE BAKERSFIELD CALIFORNIAN, CA	06/26/2012	Depth : 3.30" Lines : 41	Pricing will be done by DJC	Sent

Order No.	Newspaper	View
2336835	THE BAKERSFIELD CALIFORNIAN	View Ad In PDF

NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED ISSUANCE OF AN AUTHORITY TO CONSTRUCT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Authority to Construct to Target Drilling for nine new crude oil storage tanks, at Target Drilling's Light oil Central stationary source.

The analysis of the regulatory basis for this proposed action, Project #S-1114823 and 1114825, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.

