



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT



**HEALTHY AIR LIVING™**

JUL 01 2013

Mr. Jason Donchin  
Chevron USA Inc  
PO Box 1392  
Bakersfield, CA 93302

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)  
District Facility # S-2010  
Project # 1132264**

Dear Mr. Donchin:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes modification of 100 bbl emergency drain tank S-2010-315 to allow for limited non-emergency operation.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authority to Construct with a Certificate of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

  
David Warner  
Director of Permit Services

DW:RE/st

Enclosures

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

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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

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

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 861-392-5500 FAX: 861-392-5585

Newspaper notice for publication in Bakersfield Californian and for posting on valleyair.org

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**NOTICE OF PRELIMINARY DECISION  
FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT AND  
THE PROPOSED SIGNIFICANT MODIFICATION OF FEDERALLY  
MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed significant modification of Chevron USA Inc at the light oil production stationary source in the Western Kern County fields, California. The project authorizes modification of 100 bbl emergency drain tank S-2010-315 to allow for limited non-emergency operation.

The District's analysis of the legal and factual basis for this proposed action, project #1132264, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and at any District office. There are no emission increases associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested, the District will hold a public hearing regarding issuance of this modification. For additional information, please contact the District at (661) 392-5500. Written comments on the proposed initial permit must be submitted by August 5, 2013 to **DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.**

**San Joaquin Valley Air Pollution Control District**  
**Authority to Construct Application Review**  
Authorize Limited Non-Emergency Use of 100 BBL Emergency Drain Tank

Facility Name: Chevron USA, Inc. Date: June 21, 2013  
Mailing Address: PO Box 1392 Engineer: Richard Edgehill  
Bakersfield, CA 93302 Lead Engineer: Dan Klevann  
Contact Person: Jason Donchin and Lance Ericksen  
Telephone: 661-654-7145 (LE), 864-5273 (LE, mobile)  
Fax: 661-654-7004  
E-Mail: [Lance.ericksen@chevron.com](mailto:Lance.ericksen@chevron.com)  
Application #(s): S-2010-315-1  
Project #: S1132264  
Deemed Complete: June 12, 2013

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**I. Proposal**

Chevron USA, Inc. (CUSA) has requested an Authority to Construct (ATC) permit for the modification of a 100 bbl emergency drain tank S-2010-315 to allow for limited non-emergency operation. Previously the emissions from the tank were not included in the Stationary Source Potential to emit and therefore were not subject to offsets pursuant to Rule 2201 Section 4.6.2. However, non-emergency emissions from the tank are subject to offsets which are required for this project. Additionally, as the project is a Federal Major Modification, BACT and public notice are also required.

Disposition of Outstanding ATCs

ATC S-2010-315-0 will be implemented prior to the proposed ATC and serves as the base document. The ATC is included in **Attachment I**.

CUSA received their Title V Permit on April 9, 2004. The project is a Federal Major Modification and therefore it is classified as a Title V Significant Modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. CUSA must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC(s) issued with this project.

## II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration (June 16, 2011)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards - Subpart Kb (4/14/99) ~ <b>Not applicable</b> ~, <i>tank &lt; 420,000 gal and stores fluids prior to custody transfer</i>
Rule 4102	Nuisance (12/17/92)
Rule 4409	Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities (04/20/95) ~ <b>Not applicable</b> ~ the 20° API gravity oil handled by this tank (max psia 1.4) is not light enough to be considered "light crude oil" as defined in this rule (crude oil with API gravity > 30 degrees and a true vapor pressure (TVP) > 1.5 psia)
Rule 4623	Storage of Organic Liquids (05/19/05)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice
Public Resources Code 21000-21177:	California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387:	CEQA Guidelines

## III. Project Location

The tank is located at the Gauge Setting #10 facility near Lost Hills, within the SW/4 of Section 04, Township 27S, Range 21E. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

A project location map is included in **Attachment II**.

## IV. Process Description

The basic function of the Gauge Setting #10 is to measure the production from individual wells. Fluids from individual wells enter flow measurement stations with automatic control at piping manifolds. Production enters the master trap prior to being sent to the Cahn 3 oil cleaning plant.

The discharge of pressure relief valves on the "master trap", pool line and test line are connected to tank S-2010-315. During emergencies, such as when the master trap valve should fail to open, as much as 16,000 bbl/day may enter the tank. When this occurs, a pump is activated and liquid is removed from the tank at essentially the same flow rate as it enters which maintains a fairly constant liquid level (6-17-13 applicant email). The fluids leaving the tank are sent to a production pipeline.

### Proposed Modification

Applicant is proposing additional use of the tank for short-term non-emergency purposes such as receiving fluid during draining of the master trap which is anticipated to occur ~ 2 times/yr. Daily and annual throughput for non-emergency use will be limited to 4 bbl/day and 480 bbl/yr.

A process diagram is included in **Attachment III**.

## **V. Equipment Listing**

### Pre-Project Equipment Description:

S-2010-315-0: 100 BBL FIXED ROOF CRUDE OIL EMERGENCY DRAIN/RELIEF TANK WITH PVRV - LOST HILLS GAUGE SETTING (GS) #10.

### Proposed Modification:

S-2010-315-1: MODIFICATION OF 100 BBL FIXED ROOF CRUDE OIL EMERGENCY DRAIN/RELIEF TANK WITH PVRV - LOST HILLS GAUGE SETTING (GS) #10: AUTHORIZE LIMITED NON-EMERGENCY OPERATION

### Post Project Equipment Description:

S-2010-315-1: 100 BBL FIXED ROOF CRUDE OIL EMERGENCY DRAIN/RELIEF TANK WITH PVRV - LOST HILLS GAUGE SETTING (GS) #10.

## **VI. Emission Control Technology Evaluation**

The 100 bbl drain tank is equipped with a pressure-vacuum (P/V) relief valve set to within 10% of the maximum allowable working pressure of the tank. The P/V valve will reduce VOC wind induced emissions from the tank vent.

The tank will be required to be kept leak-free as required by Rule 4623.

## **VII. General Calculations**

### **A. Assumptions**

- Operation, 24 hr/day, 365 days/yr
- Tank will be used for emergency and limited non-emergency purposes (proposed).
- Tank operates at constant level during emergencies and variable level during non-emergencies.

- Tank emits VOCs only.
- API gravity  $\leq 26$  for tank emissions calculations
- Maximum TVP of oil at the GS #10 setting = 1.4 psia (ATC S-2010-315-0).
- Nonemergency throughput, 4 bbl/day, 480 bbl/yr
- Emergency throughput, 16,000 bbl/day (ATC S-2010-315-0).
- As emissions from the tank are higher during non-emergency operation than during emergency operation, PE for the tank corresponds to nonemergency operation.

## B. Emission Factors

Both the daily and annual PE's for this storage tank will be based on the results from the District's Microsoft Excel spreadsheets for Tank Emissions - Fixed Roof Crude Oil less than 26° API (**Attachment IV**).

## C. Calculations

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

ATC S-2010-315-0

PE1		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO <sub>x</sub>	0	0
SO <sub>x</sub>	0	0
PM <sub>10</sub>	0	0
CO	0	0
VOC	0.9	329*

\* used in determining BACT applicability and public noticing requirements only, not offsets

### 2. Post Project Potential to Emit (PE2)

ATC S-2010-315-1

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO <sub>x</sub>	0	0
SO <sub>x</sub>	0	0
PM <sub>10</sub>	0	0
CO	0	0
VOC	1.7	472

**Greenhouse Gas (GHG) Emissions**

The emissions from the tank, even if 100% methane, do not exceed 230 mtons/yr CO<sub>2</sub>e.

The emissions profile is included in **Attachment V**.

**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 that have occurred at the source, and which have not been used on-site. The facility has no ERCs for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, or VOCs.

<b>Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)</b>					
<b>Permit Unit/ERC</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>CO</b>	<b>VOC</b>
SSPE Calculator*	17,893	2,468	4,341	26,171	154,333
ATC S-2010-274-0	6329	2122	2383	13775	4095
ATC S-2010-275-0	6329	2122	2383	13775	4095
ATC S-2010-276-0	6329	2122	2383	13775	4095
ATC S-2010-277-0	6329	2122	2383	13775	4095
ATC S-2010-278-0	6329	2122	2383	13775	4095
ATC S-2010-279-0	6329	2122	2383	13775	4095
ATC S-2010-280-0	6329	2122	2383	13775	4095
ATC S-2010-281-0	6329	2122	2383	13775	4095
ATC S-2010-282-0	6329	2122	2383	13775	4095
ATC S-2010-283-0	6329	2122	2383	13775	4095
ATC S-2010-284-0	4380	1560	1752	10,129	3011
ATC S-2010-288-1	4380	1560	1752	10,129	3011
ATC S-2010-289	4380	1560	4161	9,691	3011
ATC S-2010-290	4380	1560	4161	9,691	3011
ATC S-2010-316	18,779	50,000	9882	12,209	712
Tank and TEOR ATCs	0	0	0	0	>20,000
<b>Pre-Project SSPE (SSPE<sub>1total</sub>)</b>	<b>117,482</b>	<b>29,928</b>	<b>49,879</b>	<b>189,599</b>	<b>&gt;208,039</b>

\* calculation done 6-14-13

**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 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 that have occurred at the source, and which have not been used on-site. The facility has no ERCs for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, or VOCs.

<b>Post-Project Stationary Source Potential to Emit [SSPE2] (lb/year)</b>					
Permit Unit/ERC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
SSPE Calculator	17,893	2,468	4,341	26,171	154,333
ATC S-2010-274-0	6329	2122	2383	13775	4095
ATC S-2010-275-0	6329	2122	2383	13775	4095
ATC S-2010-276-0	6329	2122	2383	13775	4095
ATC S-2010-277-0	6329	2122	2383	13775	4095
ATC S-2010-278-0	6329	2122	2383	13775	4095
ATC S-2010-279-0	6329	2122	2383	13775	4095
ATC S-2010-280-0	6329	2122	2383	13775	4095
ATC S-2010-281-0	6329	2122	2383	13775	4095
ATC S-2010-282-0	6329	2122	2383	13775	4095
ATC S-2010-283-0	6329	2122	2383	13775	4095
ATC S-2010-284-0	4380	1560	1752	10,129	3011
ATC S-2010-288-1	4380	1560	1752	10,129	3011
ATC S-2010-289	4380	1560	4161	9,691	3011
ATC S-2010-290	4380	1560	4161	9,691	3011
ATC S-2010-316	18,779	50,000	9882	12,209	712
Tank and TEOR ATCs	0	0	0	0	>20,000
ATC S-2010-315-1	0	0	0	0	472
Post-Project SSPE (SSPE <sub>2total</sub> )	117,482	29,928	49,879	189,599	>208,511

## 5. Major Source Determination

### Rule 2201 Major Source Determination:

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

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

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

**Rule 2410 Major Source Determination:**

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Estimated Facility PE before Project Increase	58.7	>100 < 250	12.5	94.8	24.9	24.4	>100,000*
PSD Major Source Thresholds	250	250	250	250	250	250	100,000
PSD Major Source ? (Y/N)	N	N	N	N	N	N	Y

\*Emissions from several combustion devices including 10 x 85 MMBtu/hr SGs

As shown above, the facility is an existing major source for PSD for at least one pollutant. Therefore the facility is an existing major source for PSD.

**6. Baseline Emissions (BE)**

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

Pursuant to District Rule 2201, BE = PE1 for:

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

Otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

BE = 0 for nonemergency operation.

## 7. SB 288 Major Modification

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 in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
VOC	472	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

## 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 are calculated in 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?
VOC*	472	0	yes

\*Nonemergency emissions of VOC are considered as new emissions with PE2 equal to the emissions increase.

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

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

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO<sub>2</sub> (as a primary pollutant)
- SO<sub>2</sub> (as a primary pollutant)
- CO
- PM
- PM<sub>10</sub>
- Greenhouse gases (GHG): CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, HFCs, PFCs, and SF<sub>6</sub>

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

In the case the facility is new source, the second step of the PSD evaluation is to determine if this new facility will become a new PSD major Source as a result of the project and if so, to determine which pollutant will result in a PSD significant increase.

### **I. Potential to Emit for New or Modified Emission Units vs PSD Major Source Thresholds**

As a screening tool, the project potential to emit from all new and modified units is compared to the PSD major source threshold, and if total project potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

<b>PSD Major Source Determination: Potential to Emit (tons/year)</b>							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Total PE from New and Modified Units	0	0.24	0	0	0	0	0
PSD Major Source threshold	250	250	250	250	250	250	100,000
New PSD Major Source?	N	N	N	N	N	N	N

As shown in the table above, the project potential to emit, by itself, does not exceed any of the PSD major source thresholds. Therefore Rule 2410 is not applicable and no further discussion is required.

### 10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. The QNEC for the new emissions unit was calculated for each pollutant by dividing annual emissions by 4 quarters/year.

$$\text{QNEC for VOCs} = 472/4 = 118 \text{ lb/qtr}$$

## VIII. Compliance

### Rule 2201 New and Modified Stationary Source Review Rule

#### A. Best Available Control Technology (BACT)

##### 1. BACT Applicability

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

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

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

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

As discussed in Section I above, there are no new emissions units associated with this project. Therefore BACT for new units with PE > 2 lb/day purposes is not triggered.

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

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

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

$$\text{AIPE} = \text{PE2} - \text{HAPE}$$

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)

PE2 = Post-Project Potential to Emit, (lb/day)

HAPE = Historically Adjusted Potential to Emit, (lb/day)

$$\text{HAPE} = \text{PE1} \times (\text{EF2}/\text{EF1})$$

Where,

PE1 = The emissions unit's PE prior to modification or relocation, (lb/day)

EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1

EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

$$\text{AIPE} = \text{PE2} - (\text{PE1} * (\text{EF2} / \text{EF1}))$$

$$\text{EF2} = \text{EF1}$$

$$\begin{aligned} \text{AIPE} &= 1.7 - (0.9 * (1)) \\ &= 0.8 \text{ lb/day} \end{aligned}$$

AIPE is less than 2 lb/day and therefore BACT is not triggered for modification purposes.

**d. SB 288/Federal Major Modification**

As discussed in Section VII.C.7 above, this project constitutes a Federal Major Modification for VOC emissions. Therefore BACT is triggered for VOCs for Federal Major Modification purposes.

## 2. BACT Guideline

BACT Guideline 7.3.1, applies to the fixed roof organic liquid storage or processing tanks < 5,000 bbl in capacity. (See **Attachment VI**)

## 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 **Attachment VII**), BACT has been satisfied with the following:

VOC: P/V relief valve set to within 10% of maximum allowable pressure.

## B. Offsets

### 1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

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

Offset Determination (lb/year)					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
SSPE2	117,482	29,928	49,879	189,599	>208,511
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets calculations required?	Yes	No	Yes	No	Yes

### 2. Quantity of Offsets Required

The quantity of offsets in pounds per year for VOC (the only criterion pollutant emitted from the tank) is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

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

Where,

PE2 = Post Project Potential to Emit, (lb/year)

BE = Baseline Emissions, (lb/year)

ICCE = Increase in Cargo Carrier Emissions, (lb/year)  
DOR = Distance Offset Ratio, determined pursuant to Section 4.8  
BE = PE1 for:

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

otherwise,

BE = HAE

BE from this unit is considered 0 lb/yr for nonemergency purposes.

Also, there is only one emissions unit associated with this project and there are no increases in cargo carrier emissions. Therefore offsets can be determined as follows:

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

PE2 (VOC) = 472 lb/year  
BE (NO<sub>x</sub>) = 0 lb/year  
ICCE = 0 lb/year

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([472 - 0] + 0) \times 1.5 \\ &= 708 \text{ lb VOCs/year} \end{aligned}$$

Calculating the appropriate quarterly emissions to be offset is as follows:

<u>1<sup>st</sup> Quarter</u>	<u>2<sup>nd</sup> Quarter</u>	<u>3<sup>rd</sup> Quarter</u>	<u>4<sup>th</sup> Quarter</u>
177	177	177	177

The applicant has stated that the facility plans to use ERC certificate S-2458-1 to offset the increases in VOC emissions associated with this project. The following ERCs have been reserved for the project:

	<u>1<sup>st</sup> Quarter</u>	<u>2<sup>nd</sup> Quarter</u>	<u>3<sup>rd</sup> Quarter</u>	<u>4<sup>th</sup> Quarter</u>
ERC #S-2458-1	177	177	177	177

**Proposed Rule 2201 (offset) Conditions:**

Prior to operating equipment under this Authority to Construct, permittee shall surrender NO<sub>x</sub> emission reduction credits for the following quantity of emissions: 1st quarter - 177 lb, 2nd quarter - 177 lb, 3rd quarter - 177 lb, and fourth quarter - 177 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

ERC Certificate Number S-2458-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

## **C. Public Notification**

### **1. Applicability**

Public noticing is required for:

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

#### **a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications**

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

As demonstrated in VII.C.7, this project constitutes a Federal Major Modification; therefore, public noticing for Federal Major Modification purposes is required.

#### **b. PE > 100 lb/day**

Applications which include a new emissions unit with a PE 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, therefore public noticing for PE > 100 lb/day purposes is not required.

#### **c. Offset Threshold**

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO <sub>x</sub>	117,482	117,482	20,000 lb/year	No
SO <sub>x</sub>	29,928	29,928	54,750 lb/year	No
PM <sub>10</sub>	49,879	49,879	29,200 lb/year	No
CO	189,599	189,599	200,000 lb/year	No
VOC	>208,039	>208,511	20,000 lb/year	No

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

**d. SSIPE > 20,000 lb/year**

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO <sub>x</sub>	117,482	117,482	0	20,000 lb/year	No
SO <sub>x</sub>	29,928	29,928	0	20,000 lb/year	No
PM <sub>10</sub>	49,879	49,879	0	20,000 lb/year	No
CO	189,599	189,599	0	20,000 lb/year	No
VOC	>208,511	>208,039	472	20,000 lb/year	No

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

**2. Public Notice Action**

As discussed above, this project is a Federal Major Modification. Therefore, public notice will be required for this project.

**D. Daily Emission Limits (DELs)**

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

**Proposed Rule 2201 (DEL) Conditions:**

This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of no greater than 1.4 psia under all storage conditions. [District Rule 2201] Y

Crude oil throughput during nonemergency use shall not exceed 4 barrels per day nor 480 barrels per year. [District Rule 2201] Y

Crude oil throughput shall not exceed 16,000 barrels per emergency event. [District Rule 2201] Y

An emergency is defined as an unforeseeable failure or malfunction of operating equipment that 1) is not due to neglect or disregard of air pollution laws or rules; 2) is not intentional or the result of negligence; 3) is not due to improper maintenance; 4) does not constitute a nuisance; and 5) results in the use of equipment exempted from offsets by Rule 2201 to prevent or ameliorate an unsafe situation. [District Rule 2201]

**E. Compliance Assurance**

**1. Source Testing**

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

**2. Monitoring**

**1. Source Testing**

The permittee will be required to perform periodic TVP testing as stated in the following ATC condition:

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] Y

**2. Monitoring**

Monitoring is not required for compliance with Rule 2201.

**3. Record Keeping**

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

For non-emergency use, 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] Y

For emergency use, permittee shall maintain records showing: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a

description of each emergency event; and 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rules 1070 and 2201] Y

All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Y

#### **4. Reporting**

The following reporting requirement is required to demonstrate compliance with Rule 2201:

The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event; 5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; 6) a specific statement of the reason or cause for the occurrence; and 7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 2201] Y

#### **F. Ambient Air Quality Analysis (AAQA)**

An AAQA shall 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. The project emissions are VOCs which does not have a Federal or State Air Quality standard. AAQA is not required.

#### **G. Compliance Certification**

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed above, the project is a Federal Major Modification, therefore this requirement is applicable. Included in **Attachment VIII** is CUSA's Statewide Compliance Certification document.

#### **H. Alternate Siting Analysis**

The current project occurs at an existing facility. The applicant proposes to authorize a tank. Since the project is at the current facility location, 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**

This facility is subject to this Rule, and has received their Title V Operating Permit. Section 3.29 defines a significant permit modification as a “permit amendment that does not qualify as a minor permit modification or administrative amendment.”

The project is Federal Major Modification and therefore is also a Title V Significant Modification. As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Included in **Attachment IX** is CUSA’s Compliance Certification form. Continued compliance with this rule is expected.

**Rule 4102 Nuisance**

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of this emergency drain/relief tank, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

**California Health & Safety Code 41700 (Health Risk Assessment)**

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

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (**Attachment X**), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
S-2010-315-1	0.826 per million	No

**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.

## Rule 4623 Storage of Organic Liquids

The purpose of this rule is to limit volatile organic compound (VOC) emissions from the storage of organic liquids. This rule applies to any tank with a design capacity of 1,100 gallons (26.2 bbl) or greater used to store organic liquid with a true vapor pressure (TVP) of 0.5 psia or greater. The subject tank is 100 bbl (4,200 gallons) in capacity and will store oil with a maximum TVP of 1.4 psia.

### 5.0 Requirements:

Section 5.1.1 requires that an operator shall not place, hold, or store organic liquid in any tank unless such tank is equipped with a VOC control system identified in Table 1.

Table 1: General VOC Control System Requirements			
Tank Capacity (gal)	True Vapor Pressure (TVP) of Organic Liquid		
	0.5 psia to < 1.5 psia	1.5 psia to < 11 psia	≥11.0 psia
(Group A) 1,100 to 19,800	Pressure-vacuum relief valve, or internal floating roof, or external floating roof, or vapor recovery system	Pressure-vacuum relief valve, or internal floating roof, or external floating roof, or vapor recovery system	Pressure vessel or vapor recovery system

For tanks with a capacity of 1,100-19,800 gallons storing fluid < 1.5 psia, a tank equipped with a PV vent is required. This tank is both under 19,800 gallons and expected to store fluids with a TVP < 1.5 psia.

Therefore the following condition will apply:

This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623]

The Rule also requires leak-free operation since the tank is uncontrolled, equipped with a PV relief valve, and will store liquid with tvp > 0.5 psia. Therefore the following conditions are included on the ATC:

The tank and all piping, valves, and fittings and vapor control system shall be maintained in a leak-free condition. [District Rule 4623] N

A leak-free condition is a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak or a liquid leak is a violation of this permit and Rule 4623. [District Rule 4623] N

Compliance with the requirements of this rule is expected.

### **California Health & Safety Code 42301.6 (School Notice)**

The site is 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)**

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 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; and
- 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 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. Recommendation**

Compliance with all applicable rules and regulations is expected. Issue ATC S-2010-315-1 subject to the permit conditions on the attached draft ATC in **Attachment XI**.

**X. Billing Information**

Reference Rule 3020 and list the specific fee schedule for each permit unit for the project.

<b>Annual Permit Fees</b>			
<b>Permit Number</b>	<b>Fee Schedule</b>	<b>Fee Description</b>	<b>Annual Fee</b>
S-2010-315-1	3020-05-A	4,200 gallons	\$75.00

**Attachments**

- I: ATC S-2010-315-0
- II: Location Map
- III: Process Diagram
- IV: Tank Emissions Calculations
- V: Emissions Profile
- VI: BACT Guideline
- VII: BACT Analysis
- VIII: Statewide Compliance Form
- IX: Title V Compliance Certification Form
- X: HRA
- XI: Draft ATC

ATTACHMENT I  
ATC S-2010-315-0

# AUTHORITY TO CONSTRUCT

PERMIT NO: S-2010-315-0

ISSUANCE DATE: 02/20/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC  
MAILING ADDRESS: PO BOX 1392  
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE  
CA

SECTION: SW04 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:  
100 BBL FIXED ROOF CRUDE OIL EMERGENCY DRAIN/RELIEF TANK WITH PVRV - LOST HILLS GAUGE SETTING  
(GS) #10

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201] Federally Enforceable Through Title V Permit
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that: 1) is not due to neglect or disregard of air pollution laws or rules; 2) is not intentional or the result of negligence; 3) is not due to improper maintenance; and 4) is necessary to prevent or control an unsafe situation. [District Rule 2201] Federally Enforceable Through Title V Permit

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.

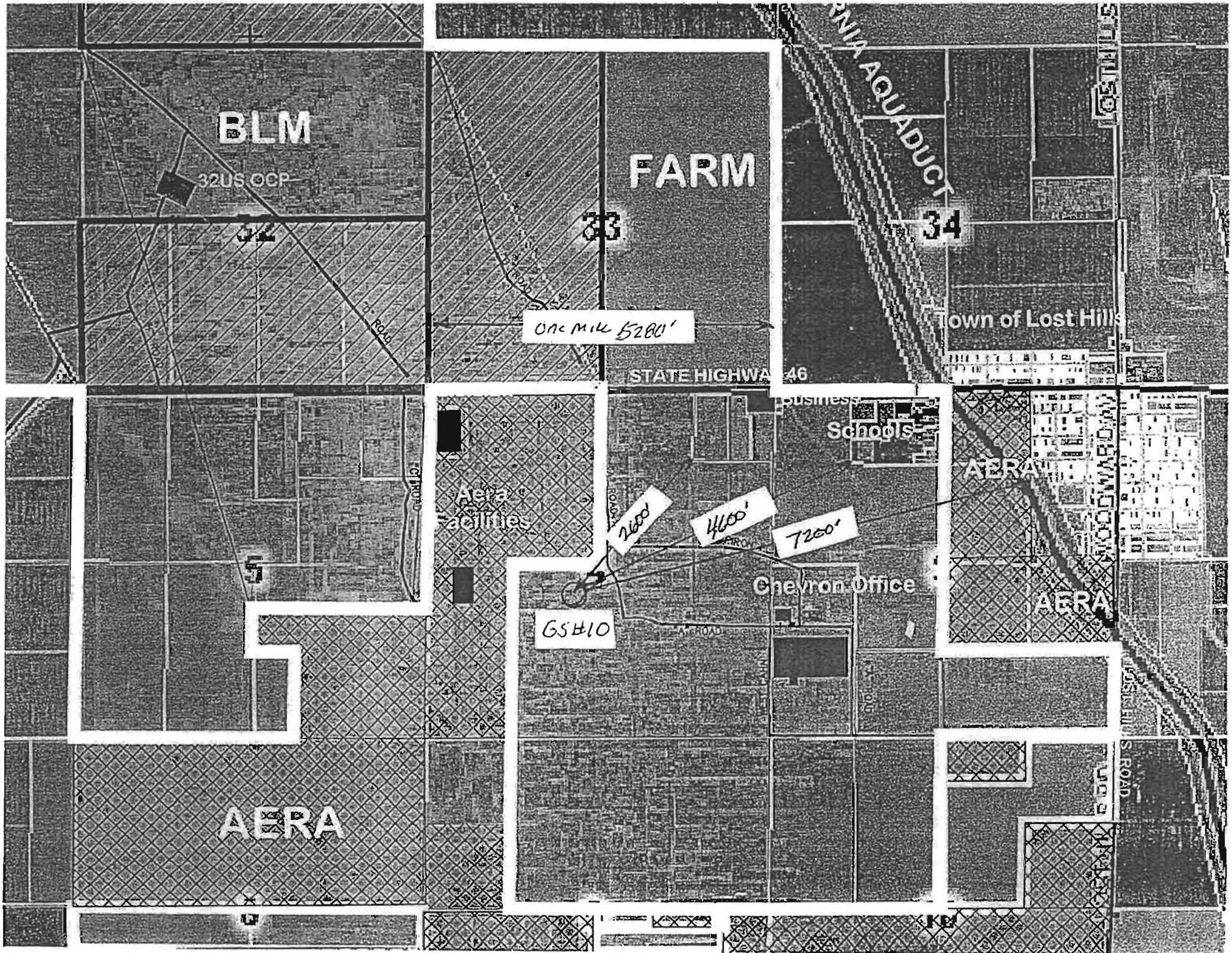
Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services  
S-2010-315-0: Jun 18 2013 12:40PM -- EDGEHLR : Jdnt Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

6. The owner or operator shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
8. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of no greater than 1.4 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Crude oil throughput shall not exceed 16,000 barrels per emergency event. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event; 5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; 6) a specific statement of the reason or cause for the occurrence; and 7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records showing: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; and 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
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 Rule 2201] Federally Enforceable Through Title V Permit

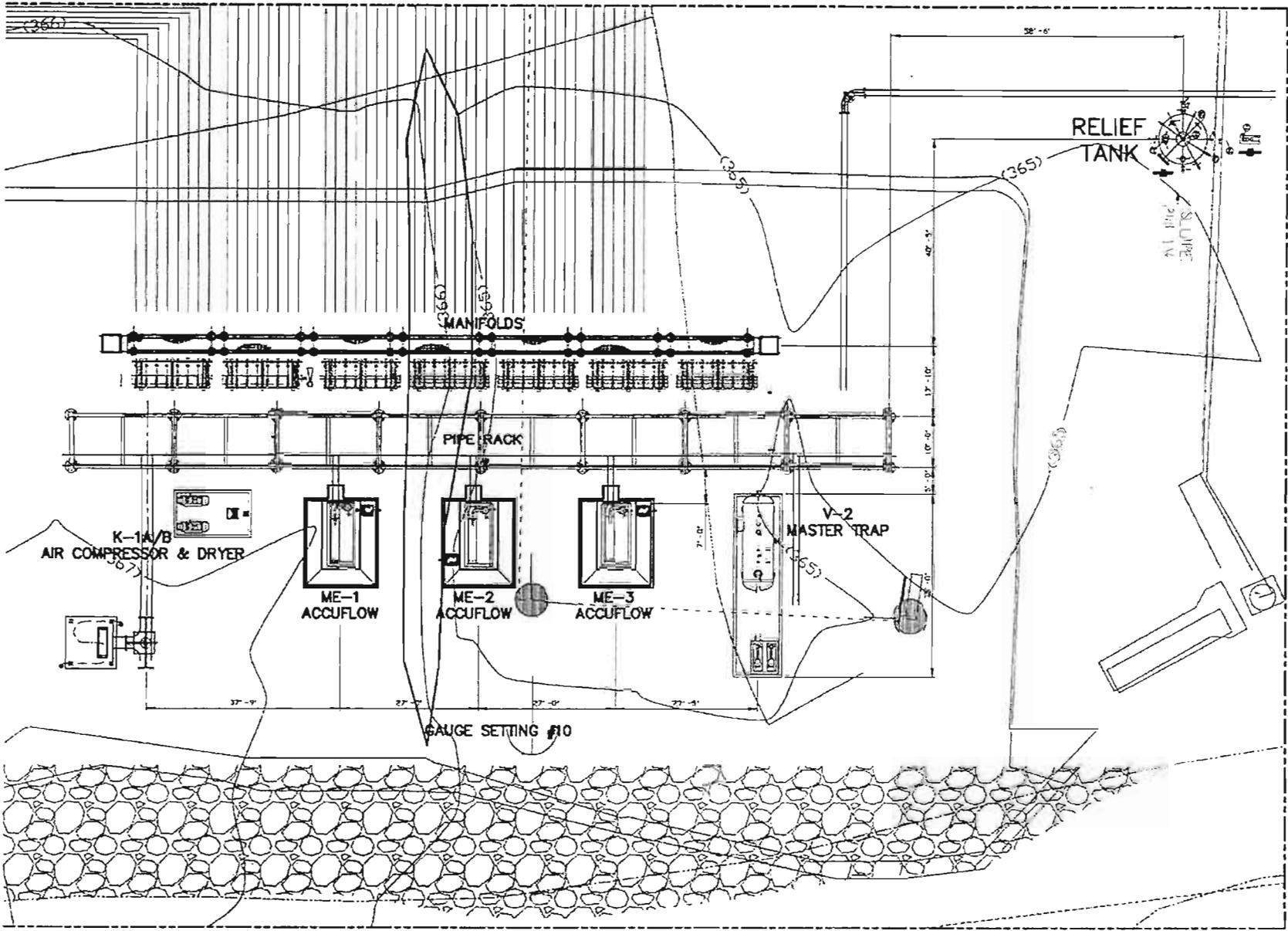
## ATTACHMENT II Location Map



## ATTACHMENT III Process Diagram

A B C D E F G H I

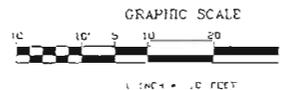
DRAWING LIMITS



- NOTES**
1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE PRIOR TO THE START OF CONSTRUCTION REPRESENTATIVE.
  2. ALL WORK SHALL COMPLY WITH ALL APPLICABLE REGULATIONS AND SPECIFICATIONS AND TO ALL APPLICABLE PERMITS AND ORDINANCES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO COMMENCING WORK.
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  4. SANITARIAN SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL SANITARIAN AND ALL SANITARIAN SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL SANITARIAN AND ALL SANITARIAN SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL SANITARIAN.
  5. NO WORK SHALL BE PERMITTED WITHOUT THE APPROVAL OF THE CHECKER DEPARTMENT.
  6. ALL WORK SHALL COMPLY WITH ALL APPLICABLE REGULATIONS AND SPECIFICATIONS AND TO ALL APPLICABLE PERMITS AND ORDINANCES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO COMMENCING WORK.

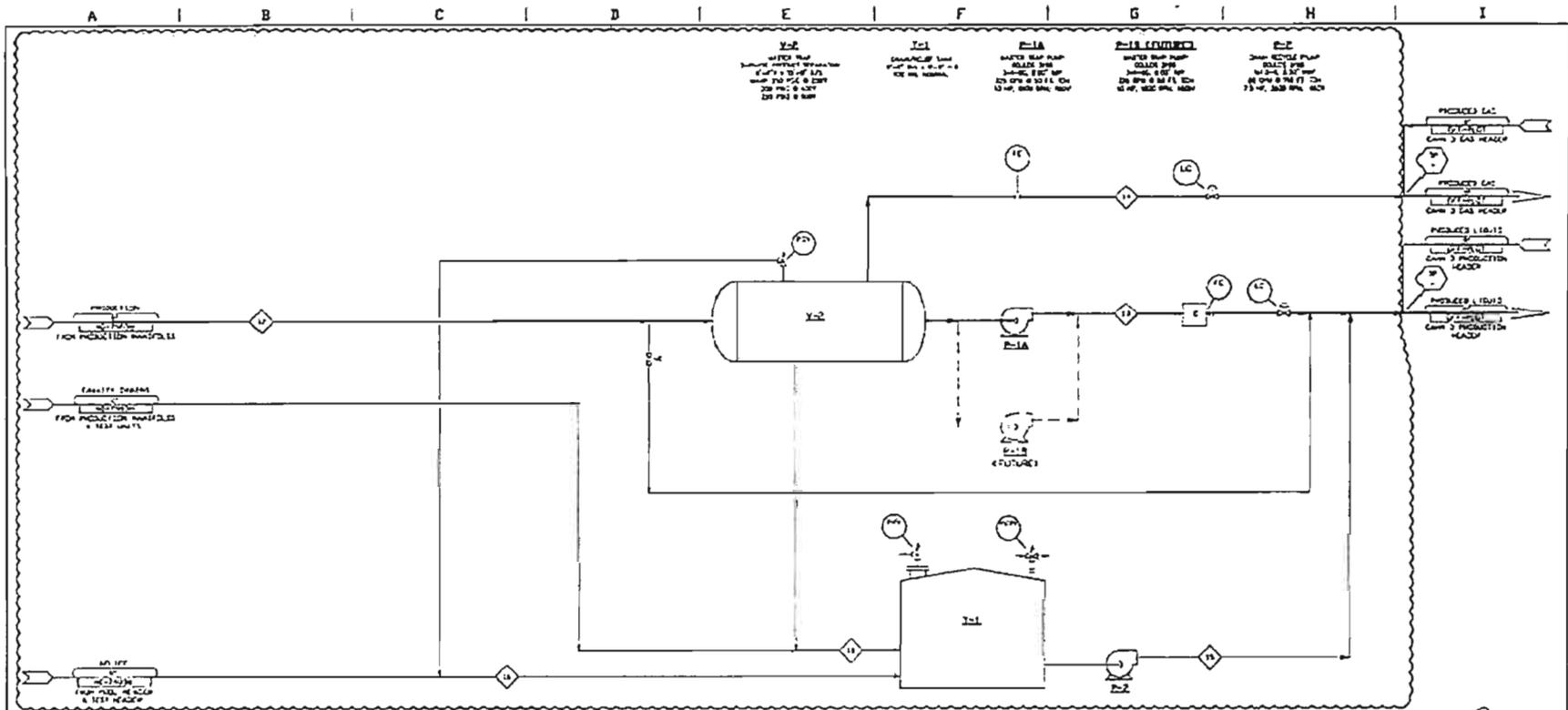
DRAWING LIMITS

PRELIMINARY  
NOT FOR CONSTRUCTION



DRAWING LIMITS

<p>REFERENCE DRAWINGS IT &amp; DRAWING INDEX - MECHANICAL ND-79863</p>	<p><b>TJCROSS</b> ENGINEERS</p>	<p>ISSUED FOR REVIEW</p> <p>09/28/12</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">NO</td> <td style="width: 10%;">DATE</td> <td style="width: 10%;">BY</td> <td style="width: 10%;">DESCRIPTION</td> </tr> <tr> <td>030</td> <td>LFC</td> <td>LLM</td> <td></td> </tr> </table>	NO	DATE	BY	DESCRIPTION	030	LFC	LLM		<p>SAN JOAQUIN VALLEY BUSINESS UNIT</p>	<p>PL/BJ PLAN LN ADT 2012 SEC 4 WATERLOOD NEW GAUGE S LDST HILLS SECTION 4 GAUGE SETTING #1 LDST HILLS 7265-275/21E SECTION</p>
NO	DATE	BY	DESCRIPTION										
030	LFC	LLM											
<p>SCALE: 1"=10'-0" FILE: 12/22/11/2012 PLOT AT: 1=1 CHANGED BY: GRS T.C. ENGINEER: LFC LAST CHANGED: 09/28/12</p>				<p>SCALE: 1"=10'-0" DATE STARTED: 12/22/11 DR: LFC/LLM DR. APP: ENGR: GRS</p>	<p>APPROVED</p> <p>A C.C. ND-79866 C.D.</p>								



STREAM DESCRIPTION	14	15	16	17	18	19
PROCESS DESCRIPTION	PRODUCTION FROM PRODUCTION MANIFOLDS	PRODUCTION FROM PRODUCTION MANIFOLDS	PROCESSED GAS TO GAS HEADS	WATER RECYCLE FROM T-1	WATER RELIEF	GAS-LIFT WATER FROM T-1
AVERAGE OIL FLOW (BOPD)	2,421	2,421	0	-	-	-
AVERAGE WATER FLOW (BOPD)	13,793	13,793	0	-	-	-
AVERAGE TOTAL FLOW (BOPD)	16,214	16,214	0	-	-	-
AVERAGE GAS FLOW (MSCFD)	24	0	24	-	-	-
MAXIMUM OIL FLOW (BOPD)	-	3,343	-	-	2,421	-
MAXIMUM WATER FLOW (BOPD)	-	16,343	-	-	13,793	-
MAXIMUM TOTAL FLOW (BOPD)	-	22,786	-	2,742	16,754	-
MAXIMUM GAS FLOW (MSCFD)	1,343	0	6,340	-	30	-
AVERAGE PRESSURE (PSIG)	49	45	75	45	-	-
AVERAGE TEMPERATURE (°F)	800	180	800	-	-	-

PRELIMINARY  
 NOT FOR CONSTRUCTION

<p>DATE: 11/11/83          DRAWN BY: J. W. HARRIS          CHECKED BY: J. W. HARRIS          SCALE: AS SHOWN          SHEET NO. 1 OF 1          T.C. ENGINEERING</p>		<p>ISSUES FOR P&amp;ID          (PAGE 3 RECYCLED)</p> <p>ISSUES FOR DESIGN          (PAGE 3 RECYCLED)</p>	<p><b>Chevron</b>          SAN JOAQUIN VALLEY          BUSINESS UNIT</p>	<p>PROCESS FLOW DIAGRAM          SECTION 4 WATERFLOOD EXPANSION - PHASE A          CHANGE SETTING 810          LODGE HILLS AREA - T. 21S/R. 4E. SEC. 4</p> <p>SCALE: 1" = 10' (AS SHOWN)          DATE: 11/11/83          SHEET NO. 1 OF 1</p>	<p>PROJECT NO. ND-79839-1</p>
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## ATTACHMENT IV Tank Emissions Calculations

permit number (S-xxxx-xx-xx)	S2010-315
facility tank I.D.	T-1
nearest city {1: Bakersfield, 2: Fresno, 3: Stockton}	1
tank ROC vapor pressure (psia)	1.4
liquid bulk storage temperature, Tb (°F)	130
is this a constant-level tank? {yes, no}	no
will flashing losses occur in this tank (only if first-line tank)? {yes, no}	no
breather vent pressure setting range (psi)	0.06
diameter of tank (feet)	9.5
capacity of tank (bbl)	100
conical or dome roof? {c, d}	c
shell height of tank (feet)	8
average liquid height (feet)	2
are the roof and shell the same color? {yes,no}	yes
For roof:	
color {1:Spec Al, 2:Diff Al, 3:Light, 4:Med, 5:Red, 6:White}	4
condition {1: Good, 2: Poor}	1
-----This row only used if shell is different color from roof-----	3
-----This row only used if shell is different color from roof-----	1

maximum daily fluid throughput (bbl)		4
maximum annual fluid throughput (bbl)	480	480
-----This row only used if flashing losses occur in this tank-----		
-----This row only used if flashing losses occur in this tank-----	0	-
molecular weight, Mw (lb/lb-mol)		100

Calculated Values	A	B
daily maximum ambient temperature, T <sub>ax</sub> (°F)		77.65
daily minimum ambient temperature, T <sub>an</sub> (°F)		53.15
daily total solar insolation factor, I (Btu/ft <sup>2</sup> -day)		1648.9
atmospheric pressure, P <sub>a</sub> (psia)		14.47
water vapor pressure at daily maximum liquid surface temperature (T <sub>lx</sub> ), P <sub>vx</sub> (psia)	115.8	1.5201
water vapor pressure at daily minimum liquid surface temperature (T <sub>ln</sub> ), P <sub>vn</sub> (psia)	105.0	1.1149
water vapor pressure at average liquid surface temperature (T <sub>la</sub> ), P <sub>va</sub> (psia)	110.4	1.2946
roof outage, H <sub>ro</sub> (feet)		0.0990
vapor space volume, V <sub>v</sub> (cubic feet)		432.31
paint factor, alpha		0.68
vapor density, W <sub>v</sub> (lb/cubic foot)		0.0229
daily vapor temperature range, delta T <sub>v</sub> (degrees Rankine)		49.04
vapor space expansion factor, K <sub>e</sub>		0.1122

Results	lb/year	lb/day
Standing Storage Loss	405	1.11
Working Loss	67	0.56
Flashing Loss	N/A	N/A
<b>Total Uncontrolled Tank VOC Emissions</b>	<b>472</b>	<b>1.7</b>

<b>Summary Table</b>	
<b>Permit Number</b>	<b>S2010-315</b>
<b>Facility Tank I.D.</b>	<b>T-1</b>
<b>Tank capacity (bbl)</b>	<b>100</b>
<b>Tank diameter (ft)</b>	<b>9.5</b>
<b>Tank shell height (ft)</b>	<b>8</b>
<b>Conical or Dome Roof</b>	<b>Conical</b>
<b>Maximum Daily Fluid Throughput (bbl/day)</b>	<b>4</b>
<b>Maximum Annual Fluid Throughput (bbl/year)</b>	<b>480</b>
<b>Maximum Daily Oil Throughput (bbl/day)</b>	<b>N/A</b>
<b>Maximum Annual Oil Throughput (bbl/year)</b>	<b>N/A</b>
<b>Total Uncontrolled Daily Tank VOC Emissions (lb/day)</b>	<b>1.7</b>
<b>Total Uncontrolled Annual Tank VOC Emissions (lb/year)</b>	<b>472</b>

# ATTACHMENT V Emissions Profile

Permit #: S-2010-315-1	Last Updated
Facility: CHEVRON USA INC	06/14/2013 EDGEHILR

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	472.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	1.7
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	118.0
Q2:	0.0	0.0	0.0	0.0	118.0
Q3:	0.0	0.0	0.0	0.0	118.0
Q4:	0.0	0.0	0.0	0.0	118.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

## ATTACHMENT VI BACT Guideline

San Joaquin Valley  
Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 7.3.1\***

Last Update 10/1/2002

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

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

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

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

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

## ATTACHMENT V BACT Analysis

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

### **Step 1 - Identify All Possible Control Technologies**

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

#### *Technologically feasible:*

99% control (waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; 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 (detailed costs follow)**

Applicant has provided a detailed installation and annual operating cost for a vapor control system with 99% vapor control efficiency, \$285,411/yr. The cost effectiveness is

$$\$285,411/\text{yr}/[0.99 \times 472 \text{ lb/yr}/2000 \text{ lb/ton}] = \$1,221,584/\text{ton}.$$

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

**Step 5 - Select BACT**

PV relief valve set to within 10% of maximum allowable pressure of the tank

## ELECTRICAL COMPRESSOR CAPITAL & OPERATING COSTS

### Direct Costs

	Footnotes	Unit Cost	Amount
<i>Purchased Equipment Costs</i>			
Electrical Compressor Cost (A) <sup>1</sup>	(1)	see next	\$359,520
Instrumentation & Controls (22%) <sup>2</sup>	(2)	0.22 A	\$79,094
Sales Tax & Freight (9%)	(2)	0.09 A	\$32,357
<b>Purchased Equipment Cost, PEC (Total = B)</b>		<b>Total = 1.31 A</b>	<b>\$470,971</b>
<i>Direct Installation Costs</i>			
Foundation/Supports, Civil/Structural (25%)	(2)	0.25 A	\$89,880
Handling/Erection, Equipment Install (10%)	(2)	0.10 A	\$35,952
Electrical (15%)	(2)	0.15 A	\$53,928
Piping (50%)	(2)	0.50 A	\$179,760
<b>Direct Installation Cost</b>		<b>Total = 1.00 A</b>	<b>\$359,520</b>
<i>Indirect Installation Costs</i>			
Engineering & Supervision (14%)	(2)	0.14 A	\$50,333
Contractor Fees, FEL Engr. Services (9%)	(2)	0.09 A	\$32,357
Contingency (71%)	(2)	0.71 A	\$265,259
<b>Total Indirect Cost, IC</b>		<b>Total = 0.94 A</b>	<b>\$337,949</b>
<b>TOTAL EQUIPMENT CAPITAL COSTS (TECC) =</b>			<b>\$1,168,440</b>
<b>ANNUALIZED CAPITAL COST (@ I = 10% &amp; N = 10 years) =</b>			<b>\$180,105</b>

### ANNUAL MAINTENANCE & OPERATING COSTS

Description	Suggested Factor	Unit Cost	Cost
<i>Direct Annual Costs, DC</i>			
Op & Main Labor (330 man-hours/year)	(3) & (4)	\$25.0/hr	\$15,750
Supervisor (15% of Operator)	(4)		\$2,363
Materials (100% of Maintenance Labor)	(4)		\$15,750
Energy (7.5 kW * \$0.08/kWh * 8760 hrs/yr)	(5)	\$0.8/kWh-hr <sup>4</sup>	\$5,256
<i>Indirect Annual Costs, DC</i>			
Overhead (60% of O&M Labor)	(4)		\$9,450
Admin Charges (2% of TECC)	(4)		\$23,369
Property Taxes & Ins (2% of TECC)	(4)		\$23,369
<b>TOTAL ANNUAL MAINTENANCE &amp; OPERATING COSTS</b>			<b>\$95,306</b>

**TOTAL EQUIVALENT ANNUAL OPERATING COSTS = \$285,411**

#### References:

- (1) Electrical compressor cost provided on March 18, 2009 by TJ Cross Engineers Inc. and reflects a quote for two (small) 50,000 scf/day capacity reciprocating compressors each at \$179,760.
- (2) Cost factors used by TJ Cross Engineers Inc. and referenced from "Plant Design and Economics for Chemical Engineers" by Peters and Timmerhaus, Third Edition.
- (3) Hourly labor/maintenance rates typically assumed in BACT analyses.
- (4) Direct/indirect installation costs and hourly labor/maintenance costs are estimated based on procedure OAQPS Control Cost Manual (EPA452/B-02-001), Section 3.2, Chapter 1.
- (5) Electrical cost of \$0.08/kWh is consistent with past BACT reviews and is used to estimate annual energy cost to operate one compressor on full-time basis.

# ATTACHMENT VIII

## Statewide Compliance Form

}



**Donald Puckett**  
General Manager - Operations

**San Joaquin Valley SBU**  
Chevron North America  
Exploration and Production  
P. O. Box 1392

March 4, 2013

Mr. Seyed Sadredin  
San Joaquin Valley Air Pollution Control District  
34946 Flyover Court  
Bakersfield, CA 93308

**RE: Statewide Compliance Certification**

Dear Mr. Sadredin:

As required under District Rule 2201, Subsection 4.15.2 and Section 173(a)(3) of the Clean Air Act, 42 U.S.C. Section 7503, Chevron U.S.A. Inc. hereby submits this letter of certification regarding statewide compliance as of this date.

Based on reasonable inquiry and to the best of my knowledge and belief, the major stationary sources, as defined in the jurisdiction where the facilities are located, that are owned or operated by Chevron U.S.A. Inc. in the State of California as listed below are subject to emission limitations and are in compliance or on a schedule for compliance with all applicable emission limitations and standards under the Clean Air Act:

- El Segundo Refinery
- Richmond Refinery
- Banta Marketing Terminal
- Huntington Beach Marketing Terminal
- Montebello Marketing Terminal
- Sacramento Marketing Terminal
- Van Nuys Marketing Terminal
- Cross Valley Cameras Gas Compressor Facility in Kern County
- Kettleman City Pump Station in Kings County
- 27G Pump Station in Kern County
  
- San Joaquin Valley Business Unit:
  - Fresno County Heavy Oil Source (Coalinga)
  - Fresno County Natural Gas Source (Coalinga)
  - Kern County Central Heavy Oil Source (Kern River)
  - Kern County Western Heavy Oil Source (Midway Sunset & Cymric)
  - Kern County Western Light Oil Source (Midway Sunset, Cymric & Lost Hills)
  - Kern County Western Gas Source (Cymric & Lost Hills)
  - San Ardo (Monterey County)

Mr. Seyed Sadredin  
Statewide Compliance Certification  
March 4, 2013  
Page 2

- **Global Power (Joint Venture Facilities):**
  - **Coalinga Cogeneration Company in Fresno County**
  - **Kern River Cogeneration Company in Kern County**
  - **Mid-Set Cogeneration Company in Kern County**
  - **Salinas River Cogeneration Company in Monterey County**
  - **Sargent Canyon Cogeneration Company in Monterey County**
  - **Sunrise Power Company LLC in Kern County**
  - **Sycamore Cogeneration Company in Kern County**

Please telephone Martin Lundy at (661) 654-7142 if there are questions.

Sincerely,



**Donald Puckett**  
**General Manager - Operations**

**ATTACHMENT IX**  
**Title V Compliance Certification Form**

RECEIVED  
MAY 30 2013  
SJVAPCD  
Southern Region

San Joaquin Valley  
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION       ADMINISTRATIVE AMENDMENT  
 MINOR PERMIT MODIFICATION

COMPANY NAME: CHEVRON U.S.A. INC.	FACILITY ID: S-2010
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: CHEVRON U.S.A. INC.	
3. Agent to the Owner: N/A	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the foregoing is correct and true:

  
\_\_\_\_\_  
Signature of Responsible Official

5/30/13  
\_\_\_\_\_  
Date

Matthew Rockett  
\_\_\_\_\_  
Name of Responsible Official (please print)

Allow limited non-emergency use of GS#10 tank  
S-2010-315

Operations Supervisor, LHICA  
\_\_\_\_\_  
Title of Responsible Official (please print)

ATTACHMENT X  
HRA

## San Joaquin Valley Air Pollution Control District Risk Management Review

To: Richard Edgehill, AQE – Permit Services  
 From: Leland Villalvazo, SAQS – Technical Services  
 Date: June 21, 2013  
 Facility Name: Chevron USA Inc.  
 Location: SW04, T27S, R21E  
 Application #(s): S-2010-315-1  
 Project #: S-1132264

### A. RMR SUMMARY

RMR Summary			
Categories	Emergency Tank (Unit 315-1)	Project Totals	Facility Totals
Prioritization Score	0.0 <sup>1</sup>	0.0 <sup>1</sup>	>1.0
Acute Hazard Index	2.99E <sup>-5</sup>	2.99E <sup>-5</sup>	0.08
Chronic Hazard Index	4.43E <sup>-4</sup>	4.43E <sup>-4</sup>	0.04
Maximum Individual Cancer Risk (10 <sup>-6</sup> )	8.26E <sup>-07</sup>	8.26E <sup>-07</sup>	2.82
T-BACT Required?	No		
Special Permit Conditions?	No		

<sup>1</sup> The prioritization score for this project was less than one; however the facility total prioritization is greater than one. Further analysis was required.

### Proposed Permit Conditions

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

Unit # S-2010-315-1:

No special Conditions

### RMR REPORT

#### I. Project Description

Technical Services received a request to perform a Risk Management Review to modify one 100 bbl drain/relief crude oil storage tank to allow for limited nonemergency operation.

## Analysis

Toxic emissions for the proposed unit were calculated using the District's Oil Field Fugitive emissions for heavy crude oil and the VOC emissions rates provided by the processing engineer. 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); however, the facility prioritization score was greater than one. Consequently further analysis was necessary. The AERMOD model was used, with the parameters outlined below and the five year concatenated meteorological data for 2005-2009 from Bakersfield to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the Hot Spots Analysis and Reporting Program (HARP) risk assessment module to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Analysis Parameters Unit S-2010-513-0			
Type of Source	Circular Area	Location Type	Rural
Release Height (m)	2.432	Closest Receptor (m)	1733
Tank Radius (m)	1.4	Worse Case* Operational Hrs/Yr	6742
VOC Emissions (lbs/hr)	0.07	VOC Emissions (lbs/yr)	472

## III. Conclusion

The acute and chronic hazard indices were less than 1.0 and the cancer risk associated with the project is less than one in a million. In accordance with the District's Risk Management Policy, this project is approved **without** Toxic Best Available Control Technology (T-BACT).

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

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

## Attachments:

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

ATTACHMENT XI  
Draft ATC

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

PERMIT NO: S-2010-315-1

LEGAL OWNER OR OPERATOR: CHEVRON USA INC  
MAILING ADDRESS: PO BOX 1392  
BAKERSFIELD, CA 93302

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE  
CA

SECTION: SW04 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 100 BBL FIXED ROOF CRUDE OIL EMERGENCY DRAIN/RELIEF TANK WITH PVRV - LOST HILLS GAUGE SETTING (GS) #10: AUTHORIZE LIMITED NON-EMERGENCY OPERATION

**CONDITIONS**

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
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 leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. The tank and all piping, valves, and fittings shall be maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit

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-2010-315-1 : Jun 20 2013 11:51AM - EDGEHILR - Joint Inspection NOT Required

6. A leak-free condition is a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak or a liquid leak is a violation of this permit and Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
7. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that: 1) is not due to neglect or disregard of air pollution laws or rules; 2) is not intentional or the result of negligence; 3) is not due to improper maintenance; and 4) is necessary to prevent or control an unsafe situation. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The owner or operator shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of no greater than 1.4 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Crude oil throughput shall not exceed 16,000 barrels per emergency event. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Crude oil throughput during non-emergency use shall not exceed 4 barrels per monthly average day nor 480 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank within 60 days of startup to verify compliance with 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. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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 (Tcst 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] Federally Enforceable Through Title V Permit
16. 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] Federally Enforceable Through Title V Permit
17. The API gravity of crude oil or pctroleum 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] Federally Enforceable Through Title V Permit
18. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event; 5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; 6) a specific statement of the reason or cause for the occurrence; and 7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 2201] Federally Enforceable Through Title V Permit

**DRAFT**

19. For non-emergency use, 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] Federally Enforceable Through Title V Permit
20. For emergency use, permittee shall maintain records showing: 1) date(s) the organic liquid is first introduced into the tank; 2) the date(s) the tank is fully drained; 3) a description of each emergency event; and 4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
21. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 177 lb, 2nd quarter - 177 lb, 3rd quarter - 177 lb, and fourth quarter - 177 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
23. ERC Certificate Number S-2458-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

**DRAFT**