



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



APR 28 2014

Glen Mears  
Bakersfield Crude Terminal, LLC  
19430 Beech Ave.  
Shafter, CA 93263

**Re: Notice of Preliminary Decision - Authority to Construct**  
**Facility Number: S-8165**  
**Project Number: S-1140214**

Dear Mr. Mears:

Enclosed for your review and comment is the District's analysis of Bakersfield Crude Terminal, LLC's application for an Authority to Construct for the installation of four 24 bbl sump tanks and a 2,000 gallon oil-water separator tank, at the corner of South Lake Road and Santiago Road in Taft within Section 13, Township 32S, Range 25E.

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

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. David Torii of Permit Services at (661) 392- 5620.

Sincerely,

Arnaud Marjollet  
Director of Permit Services

AM:DBT/st

Enclosures

cc: Mike Tollstrup, CARB (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: 661-392-5500 FAX: 661-392-5585

# San Joaquin Valley Air Pollution Control District

## Authority to Construct Application Review

Fixed Roof Tanks

Facility Name: Bakersfield Crude Terminal  
Mailing Address: 19430 Beech Ave.  
Shafter, CA 93263  
Contact Person: Glen Mears  
Telephone: 661-368-7919  
Application #(s): S-8165-4-0, '5-0, '6-0, '7-0 and '8-0  
Project #: 1140214  
Deemed Complete: 2/13/14

APR 24 2014

Engineer: David Torii  
Lead Engineer: Rich Karrs

RWK 4/24/14

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### I. Proposal

Bakersfield Crude Terminal, LLC (BCT) has requested Authority to Construct (ATC) permits for the installation of four 24 bbl sump tanks and a 2,000 gallon oil-water separator (OWS) tank.

### II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)  
Rule 2410 Prevention Of Significant Deterioration (11/26/12)  
Rule 2520 Federally Mandated Operating Permits (6/21/01)  
Rule 4001 New Source Performance Standards (4/14/99)  
Rule 4002 National Emissions Standards for Hazardous Air Pollutants (5/20/04)  
Rule 4101 Visible Emissions (2/17/05)  
Rule 4102 Nuisance (12/17/92)  
Rule 4201 Particulate Matter Concentration (12/17/92)  
Rule 4623 Storage of Organic Liquids (May 19, 2005)  
CH&SC 41700 Health Risk Assessment  
CH&SC 42301.6 School Notice  
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

### III. Project Location

The equipment will be located at the corner of South Lake Road and Santiago Road in Taft within Section 13, Township 32S, Range 25E. 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.

### IV. Process Description

The proposed sump tanks will be used as lift stations for crude oil and water collected from equipment drains and surface water equipment pads. From the sump tanks the fluid will be

sent to the proposed OWS tank will pump the separated water to retention basin(s); the separated oil will be removed via vacuum trucks. See equipment diagrams in Appendix B.

## V. Equipment Listing

- S-8165-4-0: 24 BBL FIXED ROOF SUMP TANK EQUIPPED WITH PV VENT
- S-8165-5-0: 24 BBL FIXED ROOF SUMP TANK EQUIPPED WITH PV VENT
- S-8165-6-0: 24 BBL FIXED ROOF SUMP TANK EQUIPPED WITH PV VENT
- S-8165-7-0: 24 BBL FIXED ROOF SUMP TANK EQUIPPED WITH PV VENT
- S-8165-8-0: 2,000 GALLON OIL WATER SEPARATOR INCLUDING PUMPS AND CONNECTIONS, SERVED BY A 200 LB CARBON CANISTER

## VI. Emission Control Technology Evaluation

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

The OWS tank will be equipped with a vapor control system consisting of a 200-lb. carbon canister. Typically, a carbon adsorption system required to operate with two carbon canisters connected in series in the event breakthrough occurs at the upstream canister. Owing to the OWS's expected low actual emissions only one canister will be required. The passive control system will control 95% of captured VOCs. As shown below the system should be able to operate continuously for at least seven days without breakthrough.

### Verification of Carbon Breakthrough:

Per District policy of carbon breakthrough in a carbon adsorption controlled project, the canister must be capable of operating at least 168 consecutive hours (or seven days) at the maximum influent concentration before breakthrough.

Max influent Contaminant rate =	6.0 lb/day
Max effluent Contaminant rate =	0.30 lb/day (based on a 95% control)
VOC adsorbed =	Max Influent VOC – Max Effluent VOC
	6.0 – 0.3 lb/day
	= 5.7 lb/day
# of canisters proposed =	1
Mass of carbon/canister =	200 lbs (proposed by the applicant)
Mass of Breakthrough Carbon* =	200 lbs

Assuming a working bed capacity of 20% for carbon (weight of solvent per weight of carbon) before breakthrough, the total mass of carbon from the canister to adsorb solvent is:

$$200 \text{ lbs} \times (0.2) = 40 \text{ lbs}$$

The number of days before breakthrough would then be:

$$40 \text{ lb} \div 5.7 \text{ lb/day} = 7.02 \text{ days}$$

As shown above the breakthrough period is at least seven days.

## VII. General Calculations

### A. Assumptions

- Facility will operate 24 hours per day, 7 days per week, and 52 weeks per year.
- The tanks emit only volatile organic compounds (VOCs),
- RVP of oil = 11.0 psia (Applicant, Rule 4623)
- Tank temperature (unheated)
- Sump tank total throughput: 3.1 bbl/day
- OWS total throughput: 7.0 bbl/day
- Capture and control efficiency of carbon canisters system: 95%

### B. Emission Factors

Both the daily and annual PE's for each permit unit will be based on the results from the District's Microsoft Excel spreadsheets for Tank Emissions - Fixed Roof Crude Oil greater than 26° API. See appendix C for calculations

### C. Calculations

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

Since this is a new emissions unit, PE1 = 0 for all pollutants.

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

S-8165-8-0:

Uncontrolled emissions: 6.0 lb-VOC/day and 2187 lb-VOC/yr

Controlled emissions:  $(6.0 \text{ lb/day})(1-0.95) = 0.3 \text{ lb-VOC/day}$   
 $(2187 \text{ lb/year})(1-0.95) = 109 \text{ lb-VOC/yr}$

Permit Unit	VOC - Daily PE1 (lb/day)	VOC - Annual PE1 (lb/Year)
S-8165-4-0	5.5	1997
S-8165-5-0	5.5	1997
S-8165-6-0	5.5	1997
S-8165-7-0	5.5	1997
S-8165-8-0	0.3	109
Total:		8010

See appendix C for calculations

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

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Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

The SSPE1 can be calculated by adding the PE1 from all units with valid ATCs or PTOs and the sum of the ERCs that have been banked at the source and which have not been used on-site (Total<sub>ERC</sub>).

$$\text{SSPE1}_{\text{Total}} = \text{SSPE1}_{\text{Permit Unit}} + \text{Total}_{\text{ERC}}$$

SSPE1 (lb/year)					
Permit Unit/ERC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
S-8165-1-1	0	0	0	0	9,460
S-8165-2-1	0	0	0	0	9,460
S-8165-3-1	0	0	0	0	1,072
SSPE1	0	0	0	0	19,992

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

Pursuant to District Rule 2201, the 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.

SSPE2 (lb/year)					
Permit Unit	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
S-8165-1-1	0	0	0	0	9,460
S-8165-2-1	0	0	0	0	9,460
S-8165-3-1	0	0	0	0	1,072
S-8165-4-0	0	0	0	0	1997
S-8165-5-0	0	0	0	0	1997
S-8165-6-0	0	0	0	0	1997
S-8165-7-0	0	0	0	0	1997
S-8165-8-0	0	0	0	0	109
SSPE2	0	0	0	0	28,089

#### 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)

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- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

Rule 2201 Major Source Determination (lb/year)					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
SSPE1	0	0	0	0	19,992
SSPE2	0	0	0	0	28,089
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	yes

As seen in the table above, the facility is not an existing or New Major Source for any pollutant; however, is becoming a Major Source for VOC emissions as a result of this project.

**Rule 2410 Major Source Determination:**

The facility or the equipment evaluated under this project is 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)							
	NO <sub>2</sub>	VOC	SO <sub>2</sub>	CO	PM	PM <sub>10</sub>	CO <sub>2e</sub>
Estimated Facility PE before Project Increase	0	14	0	0	0	0	0
PSD Major Source Thresholds	100	100	100	100	100	100	100,000
PSD Major Source ? (Y/N)	n	n	n	n	n	n	n

As shown above, the facility is not an existing major source for PSD for at least one pollutant. Therefore the facility is not 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. Since this is a new emissions unit, BE = PE1 = 0 for all pollutants.

## **7. SB 288 Major Modification**

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

Since this facility is a major source for 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?
NO <sub>x</sub>	0	50,000	N
SO <sub>x</sub>	0	80,000	N
PM <sub>10</sub>	0	30,000	N
VOC	8097	50,000	N

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

Since this facility is not an Existing or New Major Source for any pollutants, this project does not constitute a Federal Major Modification. Additionally, since the facility is not a major source for PM<sub>10</sub> (140,000 lb/year), it is not a major source for PM<sub>2.5</sub> (200,000 lb/year).

## **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>

**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 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: Potential to Emit (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Total PE from New and Modified Units	0	14	0	0	0	0	0
PSD Major Source threshold	100	100	100	100	100	100	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. Detailed QNEC calculations are included in Appendix A.

**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\*:

- Any new emissions unit with a potential to emit exceeding two pounds per day,
- The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- 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 seen in Section VII.C.2 above, the applicant is proposing to install four new sump tanks each with a PE greater than 2 lb/day for VOC. BACT is triggered for VOC for S-8165-4-0, '5-0, '6-0 and '7-0 since the PEs are greater than 2 lbs/day. BACT is not required for units S-S-8165-8-0 as the emission increases is less than 0.5 lb/day.

**2. BACT Guideline**

Per District Policy APR 1305, Section IX, "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 for source categories or classes covered in the BACT Clearinghouse, relevant information under each of the following steps may be simply cited from the Clearinghouse without further analysis."

BACT Guideline 7.3.1, applies to Petroleum and Petrochemical Production – Fixed Roof Organic Liquid Storage or Processing Tank, < 5,000 bbl tank capacity (see 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: pressure and vacuum (PV) relief valve on tank vent 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.

Pursuant to District Policy APR 1130, a daily increase in permitted emissions of any criteria pollutant of less than or equal to 0.5 lb/day per permit unit is rounded to zero (0) lb/day for New and Modified Source Review (NSR) rule requirements. Therefore,

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offsets will not be required for this project for the S-8165-8-0 since its increase in permitted emissions is less than or equal to 0.5 lb/day and is therefore rounded to zero for the purposes of triggering NSR requirements. However, to minimize future rounding errors, the figures are presented in the EE and in the permit without rounding the daily increase in emissions to zero.

Offset Determination (lb/year)					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
SSPE2	0	0	0	0	28,089 – 109 = 27,980
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	Yes

## 2. Quantity of Offsets Required

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

The quantity of offsets in pounds per year for VOC is calculated as follows for sources with an SSPE1 less than the offset threshold levels before implementing the project being evaluated.

$$\text{Offsets Required (lb/year)} = [(\text{SSPE2} - \text{ROT} + \text{ICCE}) \times \text{DOR}]$$

Where,

SSPE2 = Post Project Stationary Source Potential to Emit

ROT = Respective Offset Threshold, for the respective pollutant

ICCE = Increase in Cargo Carrier Emissions

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

$$\text{Offsets Required (lb/year)} = [(\text{SSPE2} - \text{ROT} + \text{ICCE}) \times \text{DOR}]$$

$$\text{SSPE2 (VOC)} = 27,980 \text{ lb/year}$$

$$\text{Offset threshold (VOC)} = 20,000 \text{ lb/year}$$

$$\text{ICCE} = 0 \text{ lb/year}$$

The applicant has stated that the facility plans to use ERC certificate S-4191-1 to offset the increases in VOC emissions associated with this project. The ERC's AER occurred greater than 15 miles from the proposed units; therefore, the ERC is subject to an offset ratio of 1.5:1.

$$\begin{aligned} \text{Offsets Required (lb/year)} &= [(27,980 - 20,000 + 0) \times 1.5] \\ &= 11,980 \text{ lb VOC/year} \end{aligned}$$

Calculating the appropriate total (all four sump tanks) 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>
2993	2993	2993	2993

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Calculating the appropriate quarterly emissions for each of the four sump tanks 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>
748	748	748	748

The above certificate has available quarterly VOC credits 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>
ERC #S-4191-1	2993	2993	2993	2993

As seen above, the facility has sufficient credits to fully offset the quarterly VOC emissions increases associated with this project.

**Proposed Rule 2201 (offset) Conditions for Each Permit:**

- {GC# 4447 - edited} Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter – 748 lb, 2nd quarter – 748 lb, 3rd quarter – 748 lb, and fourth quarter – 748 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]
- {GC# 1983} ERC Certificate Number S-4191-1(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 SSIP 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 Sections VII.C.7 and VII.C.8, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not 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 which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

**c. Offset Threshold**

The 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>	0	0	20,000 lb/year	No
SO <sub>x</sub>	0	0	54,750 lb/year	No
PM <sub>10</sub>	0	0	29,200 lb/year	No
CO	0	0	200,000 lb/year	No
VOC	19,992	28,089	20,000 lb/year	yes

As detailed above, offset thresholds were surpassed for VOC with this project; therefore public noticing is 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	SSPE1 (lb/year)	SSPE2 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO <sub>x</sub>	0	0	0	20,000 lb/year	No
SO <sub>x</sub>	0	0	0	20,000 lb/year	No
PM <sub>10</sub>	0	0	0	20,000 lb/year	No
CO	0	0	0	20,000 lb/year	No
VOC	19,992	28,089	8010	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, public noticing is required for this project for the VOC IPE exceeding the offset threshold. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

#### **D. Daily 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:**

S-8165-4-0, '5-0, '6-0 and '7-0:

- VOC emissions from the tank shall not exceed 5.5 lb/day. [District Rule 2201] N
- Tank fluid throughput shall not exceed 3.1 bbl/day. [District Rule 2201] N

S-8165-8-0:

- Tank fluid throughput shall not exceed 10.2 bbl/day. [District Rule 2201] N
- VOC emission from the outlet of the carbon canister shall not exceed 0.6 lb/day. [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**

S-8165-8-0:

- Permittee shall measure and record the VOC concentration at the outlet of the carbon canister at least once each week. [District Rule 2201] N

##### **3. Recordkeeping**

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) are listed on the permit to operate:

- Permittee shall maintain monthly records of average daily fluid throughput. [District Rule 2201] N
- All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623] N

#### **4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

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

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Title I Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Section VIII above, this facility is a new major source and this project does constitute a Title I modification, therefore this requirement is applicable. BCT's compliance certification is included in Appendix E.

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

The current project occurs at an existing facility. The applicant proposes to install four sump tanks and an oil water separator

Since the project will provide site oil and water collection needed at the same 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 2410 Prevention Of Significant Deterioration**

As shown above in section VII.C.9.I this project does not result in a PSD major modification due to a significant emission increase; no further discussion is required.

#### **Rule 2520 Federally Mandated Operating Permits**

As discussed above, this facility is a major source. Pursuant to Rule 2520 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 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 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 these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

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

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 (**Appendix F**), 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:

RMR Summary					
Categories	Sump Tank (Unit 4-0)	Sump Tank (Unit 5-0)	Sump Tank (Unit 6-0)	Sump Tank (Unit 7-0)	Seperator (Unit 8-0)
Prioritization Score	0.34	0.34	0.34	0.34	0.00
Acute Hazard Index	0.00	0.00	0.00	0.00	0.00
Chronic Hazard Index	0.00	0.00	0.00	0.00	0.00
Maximum Individual Cancer Risk (10 <sup>-6</sup> )	0.07	0.09	0.1	0.1	0.00
T-BACT Required?	No	No	No	No	No
Special Permit Conditions?	No	No	No	No	No

RMR Summary		
Categories	Project Totals	Facility Totals
Prioritization Score	1.38	>1
Acute Hazard Index	0.00	0.00
Chronic Hazard Index	0.00	0.00
Maximum Individual Cancer Risk (10 <sup>-6</sup> )	0.37	1.19
T-BACT Required?		
Special Permit Conditions?		

## 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**

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.

The four sump tanks (S-8165-4-0, '5-0, '6-0 and '7-0) have design capacities of less than 1100 gallons and therefore are not subject to this rule.

The oil water separator (S-8165-8-0) is subject to the Table 1 requirements for tanks having capacities between 1,100 and 19,800 gallons. The operator has chosen to equip the tank with a vapor control system consisting of collection piping to a 200 lb carbon canister. The system is passive (no blower) and will control primarily tank breathing loss emissions. The carbon canister has been sized to give a high level of control (> 95%) for, at a minimum, one week. The operator will sample the canister outlet weekly and change out the canister at carbon breakthrough, which is indicated by an outlet concentration exceeding 10,000 ppmv.

This rule also requires the tank and tank vapor control system to be maintained in a leak-free condition. Leak-free is defined in the rule as no readings on a portable VOC detection device greater than 10,000 ppmv above background and no dripping of organic liquid at a rate of more than 3 drops per minute.

Compliance with the requirements of this rule is expected.

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

The District has verified that this 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)**

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

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

The County of Kern (County) is the public agency having principal responsibility for approving the Project. As such, the County served as the Lead Agency for the project. Consistent with CEQA Guidelines §15300.1, a Notice of Exemption was prepared and adopted by the County.

The District is a Responsible Agency for the project because of its discretionary approval power over the project via its Permits Rule (Rule 2010) and New Source Review Rule (Rule



Bakersfield Crude Terminal, LLC, 1140214, S-8165

2201), (CEQA Guidelines §15381).

The District's engineering evaluation of the project (this document) demonstrates that compliance with District rules and permit conditions would reduce Stationary Source emissions from the project to levels below the District's thresholds of significance for criteria pollutants. Thus, the District concludes that through a combination of project design elements and permit conditions, project specific stationary source emissions will be reduced and mitigated to less than significant levels. The District does not have authority over any of the other project impacts and has, therefore, determined that no additional findings are required (CEQA Guidelines §15096(h)).

**IX. Recommendation**

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATCs S-8165-4-0, '5-0, '6-0, '7-0 and '8-0 subject to the permit conditions on the attached draft ATCs in **Appendix G**.

**X. Billing Information**

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-8165-4-0	3020-05-A	1008 gallons	\$75
S-8165-5-0	3020-05-A	1008 gallons	\$75
S-8165-6-0	3020-05-A	1008 gallons	\$75
S-8165-7-0	3020-05-A	1008 gallons	\$75
S-8165-8-0	3020-05-A	2,000 gallons	\$75

**APPENDIX A**  
**Quarterly Net Emissions Change (QNEC)**

### Quarterly Net Emissions Change (QNEC)

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

$QNEC = PE2 - PE1$ , where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

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

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

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

Quarterly NEC [QNEC]					
PE2 (lb/yr)	PE2 (lb/yr)	PE2 (lb/qtr)	PE1 (lb/yr)	PE1 (lb/qtr)	QNEC (lb/qtr)
S-8165-4-0	1997	499	0	0	499
S-8165-5-0	1997	499	0	0	499
S-8165-6-0	1997	499	0	0	499
S-8165-7-0	1997	499	0	0	499
S-8165-8-0	109	27	0	0	27

Permit #: S-8165-4-0	Last Updated
Facility: BAKERSFIELD CRUDE TERMINAL, LLC	02/17/2014 TORID

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	1997.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	5.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:					499.0
Q2:					499.0
Q3:					499.0
Q4:					499.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:					749.0
Q2:					749.0
Q3:					749.0
Q4:					749.0

Permit #: S-8165-5-0	Last Updated
Facility: BAKERSFIELD CRUDE TERMINAL, LLC	02/17/2014 TORID

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	1997.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	5.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:					499.0
Q2:					499.0
Q3:					499.0
Q4:					499.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:					749.0
Q2:					749.0
Q3:					749.0
Q4:					749.0

Permit #: S-8165-6-0	Last Updated
Facility: BAKERSFIELD CRUDE TERMINAL, LLC	02/17/2014 TORID

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	1997.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	5.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:					499.0
Q2:					499.0
Q3:					499.0
Q4:					499.0
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-8165-7-0	Last Updated
Facility: BAKERSFIELD CRUDE TERMINAL, LLC	02/17/2014 TORID

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	1997.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	5.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:					499.0
Q2:					499.0
Q3:					499.0
Q4:					499.0
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-8165-8-0	Last Updated
Facility: BAKERSFIELD CRUDE TERMINAL, LLC	02/17/2014 TORID

Equipment Pre-Baselined: NO

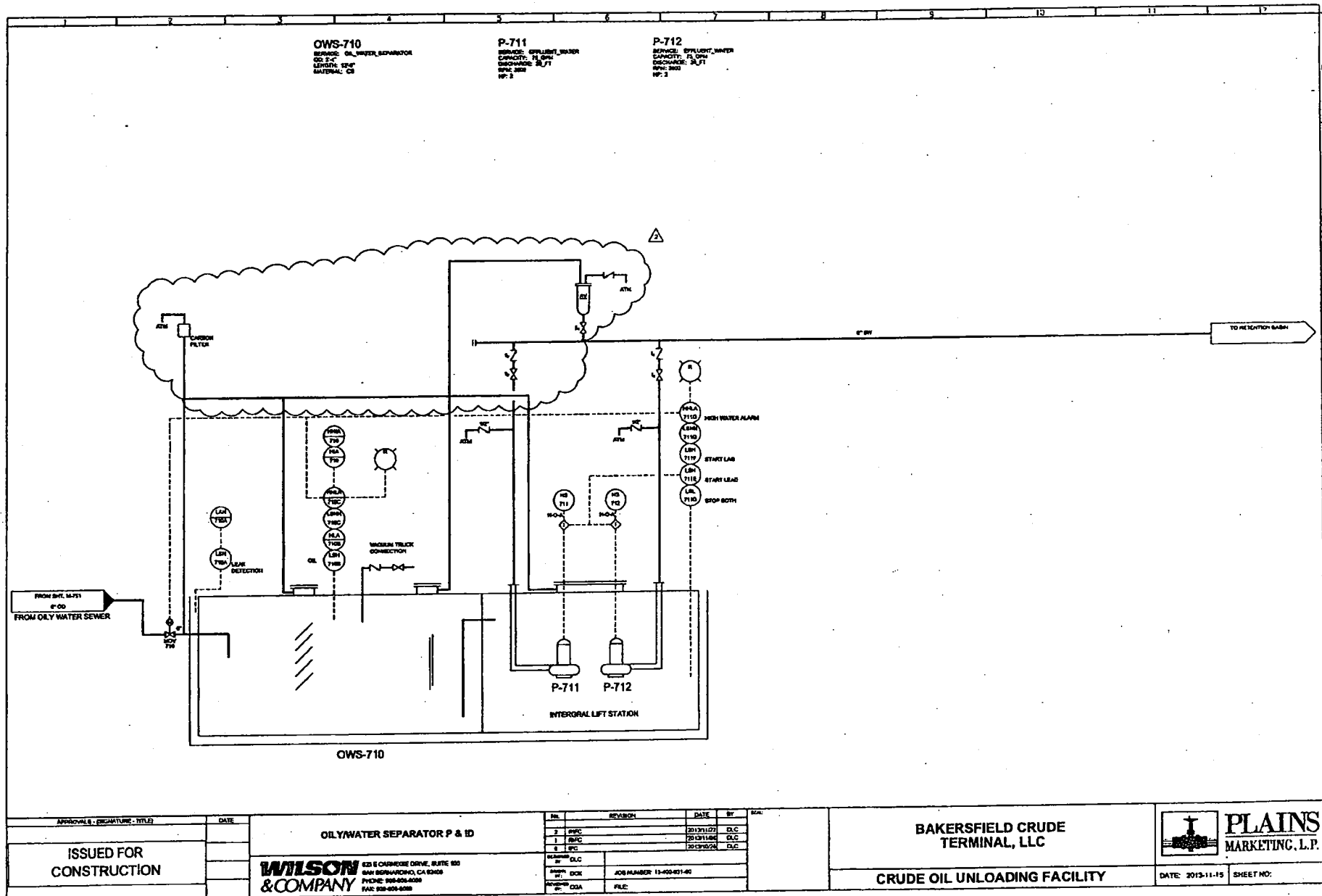
	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	109.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	0.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:					27.0
Q2:					27.0
Q3:					27.0
Q4:					27.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					



## **APPENDIX B**

### **Equipment Diagrams**





## **APPENDIX C**

### **Emission Calculations**

input

## \*\*FOR REFERENCE\*\* PAINT TABLE

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

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

METEOROLOGICAL DATA CODES	
AREA	CODE
BAKERSFIELD	0
FRESNO	1
STOCKTON	2

S-8165-4-0, 5-0, 6-0  
A 7-0

\*\*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)	11.00
VAPOR MOLECULAR WEIGHT (Mv)	50.00
USING THE CODES ABOVE, WHAT TYPE OF ORGANIC LIQUID (0, 1, 2, ...)	0
VDC CONTROL EFFICIENCY	0.00
TANK SHELL DIAMETER (FEET)	5.30
TANK SHELL HEIGHT, Hs (FEET)	5.90
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.03
VENT PRESSURE (POSITIVE psig)	0.03
TANK ID	
TANK USE	
SJVUAPCD PERMIT#	
CONE OR DOME ROOF (C/D)	C
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	3.10
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)	0.0001
----	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	y
ENTER MAXIMUM LIQUID HEIGHT (ft)	5.40
----	3.90
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	y
ENTER AVERAGE LIQUID HEIGHT (ft)	2.7
IS TANK CONSTANT LEVEL? (Y/N)	n
----	0.33
ARE THE CONTENTS OF THE TANK HEATED? (Y/N)	N
----	75

S-8165-4-0, 5-0, 6-0 &amp; 7-0

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	0.00	0.00	VERTICAL	5.3	5.9	23.2	CONE	-0.03	0.03

TANK ROOF		PAINT FACTOR	LIQUID DATA				CONSTANT LEVEL?	VAPOR MOL. WT.	VOC CNTRL %EFF (w/w)
COND.	COLOR		TYPE	HI=H(lx)	Kp	RVP			
GOOD	GRAY	0.68	CRUDE	5.4	0.75	11.00	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	8.95	96.1	4.53	0.729	27.02	23.53	50.55	201.93
	FEBRUARY	67.50	9.57	86.8	4.09	0.729	38.06	22.71	60.77	
	MARCH	71.54	10.19	96.1	4.53	0.729	63.84	26.77	90.61	
SECOND	APRIL	76.59	11.00	93	4.38	0.729	100.76	27.98	128.74	647.05
	MAY	82.17	11.96	96.1	4.53	0.729	175.84	31.43	207.26	
	JUNE	86.51	12.75	93	4.38	0.729	278.63	32.42	311.05	
THIRD	JULY	88.94	13.20	96.1	4.53	0.729	400.63	34.70	435.33	927.81
	AUGUST	87.00	12.84	96.1	4.53	0.729	281.59	33.73	315.32	
	SEPTEMBER	82.28	11.98	93	4.38	0.729	146.70	30.47	177.17	
FOURTH	OCTOBER	75.71	10.86	96.1	4.53	0.729	80.20	28.53	108.73	220.36
	NOVEMBER	67.78	9.61	93	4.38	0.729	38.54	24.44	62.98	
	DECEMBER	62.82	8.89	96.1	4.53	0.729	25.29	23.35	48.64	

## \*\*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	9.57	279	13	0.729	129	73	202
SECOND	APR-JUN	81.76	11.90	282.1	13	0.729	555	92	647
THIRD	JUL-SEP	86.07	12.67	285.2	13	0.729	829	99	928
FOURTH	OCT-DEC	68.77	9.78	285.2	13	0.729	144	76	220
QUARTERLY AVERAGE		76.01	10.98	283			414	85	499
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							4.5	0.9	5.5
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							1657	340	1997

Tank Emission Calculation Spreadsheet, version 01/23/03

input

**\*\*FOR REFERENCE\*\* PAINT TABLE**

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

LIQUID TYPE	CODE	
CRUDE OIL	0	CRUDE
MOTDR GASLINE	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

S-8165-8-0

**\*\*PRESS [TAB] TO SKIP TO NEXT MODIFIABLE CELL\*\***

<b>**GIVEN AND ASSUMED DATA**</b>	
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)	11.00
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)	5.30
TANK SHELL HEIGHT, Hs (FEET)	12.20
VENT VACUUM (ENTER "-" FOLLOWED BY A VALUE IN PSIG)	-0.03
VENT PRESSURE (POSITIVE psig)	0.03
TANK ID	
TANK USE	
SJVUAPCD PERMIT#	
CONE DR DOME ROOF (C/D)	C
MAXIMUM TOTAL DAILY THROUGHPUT (BBL/DAY)	7.00
MIN LIQUID HEIGHT (USE 0.0 FT FOR DEFAULT)	0.00
TANK ROOF PAINT CONDITION, GOOD DR POOR (G/P)	G
TANK ROOF PAINT CDLOR, SEE ABOVE (AVG/RW)	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 (AVG/RW)	G
TANK SHELL PAINT SHADE, SEE ABOVE (S/D/L/M/P/N)	M

<b>**MODIFIABLE DATA**</b>	
----	----
----	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)	0.0001
----	----
----	1.00
DO YOU WANT TO ENTER A MAX LIQUID HEIGHT? (Y/N)	y
ENTER MAXIMUM LIQUID HEIGHT (ft)	10.20
----	n
DO YOU WANT TO ENTER AN AVERAGE LIQUID HEIGHT? (Y/N)	
IF NO, THE AVERAGE LIQUID HEIGHT WILL BE CALCULATED	----
----	2.7
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
----	75

S-8165-8-0

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	0.00	0.00	VERTICAL	5.3	12.2	47.9	CONE	-0.03	0.03

TANK ROOF		PAINT FACTOR	LIQUID DATA				CONSTANT LEVEL?	VAPOR MOL. WT.	VOC CNTRL %EFF (w/w)
COND.	COLOR		TYPE	Ht=H(lx)	Kp	RVP			
GOOD	GRAY	0.68	CRUDE	0.0	0.75	11.00	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	8.95	217	0.33	1.000	38.21	0.00	38.21	178.68
	FEBRUARY	67.50	9.57	196	0.33	1.000	52.96	0.00	52.96	
	MARCH	71.54	10.19	217	0.33	1.000	87.51	0.00	87.51	
SECOND	APRIL	76.59	11.00	210	0.33	1.000	135.68	0.00	135.68	731.57
	MAY	82.17	11.96	217	0.33	1.000	232.46	0.00	232.46	
	JUNE	86.51	12.75	210	0.33	1.000	363.43	0.00	363.43	
THIRD	JULY	88.94	13.20	217	0.33	1.000	518.76	0.00	518.76	1079.38
	AUGUST	87.00	12.84	217	0.33	1.000	366.74	0.00	366.74	
	SEPTEMBER	82.28	11.98	210	0.33	1.000	193.87	0.00	193.87	
FOURTH	OCTOBER	75.71	10.86	217	0.33	1.000	108.33	0.00	108.33	197.73
	NOVEMBER	67.78	9.61	210	0.33	1.000	53.57	0.00	53.57	
	DECEMBER	62.82	8.89	217	0.33	1.000	35.84	0.00	35.84	

## \*\*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	9.57	630	1	1.000	179	0	179
SECOND	APR-JUN	81.76	11.90	637	1	1.000	732	0	732
THIRD	JUL-SEP	86.07	12.67	644	1	1.000	1079	0	1079
FOURTH	OCT-DEC	68.77	9.78	644	1	1.000	198	0	198
QUARTERLY AVERAGE		76.01	10.98	639			547	0	547
DAILY AVERAGE (LB/DAY, BASED ON MONTHLY CALCULATIONS)							6.0	0.0	6.0
ANNUAL EMISSIONS (LB/YEAR, BASED ON MONTHLY CALCULATIONS)							2187	0	2187

Tank Emission Calculation Spreadsheet, version 01/23/03



**APPENDIX D**  
**BACT Guideline and Top-Down BACT Analysis**

**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 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.**

## Sump Tanks S-8165-4-0, '5-0, '6-0 and '7-0

### VOC Top Down BACT Analysis

#### 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 annualized capital cost is

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

AP = Equivalent Annual Capital Cost of Control Equip.

P = Present value of the control equipment, including installation cost. \$276,050 + \$42,250 = \$318,300 (see cost information in project S1132362)

i = interest rate (use 10% per policy)

n = equipment life (assume 10 years per policy)

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

$AP = (\$318,300) \times (0.16274) = \$51,800/\text{year}$

Annual Maintenance Cost = \$12,000

Utility Cost = \$35,126

For calculation of the amount of VOCs removed from each tank (emissions unit) with the vapor control system, 100% control is assumed. The VOCs removed annually are

$$\text{Tons/yr} = (1997 \times 4 \text{ lb/yr}) / 2000 \text{ lb/ton} = 4.0 \text{ tons/yr}$$

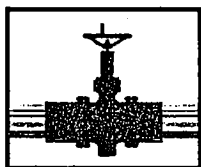
$$\begin{aligned} \text{Annualized cost} &= (\$51,800 + \$12,000 + \$35,126) / \text{yr} / 4.0 \text{ tons/yr} \\ &= \$24,732/\text{ton} \end{aligned}$$

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.

**APPENDIX E**  
**Compliance Certification**



**PLAINS**  
**ALL AMERICAN**  
**PIPELINE, L.P.**

February 18, 2014

RECEIVED

FEB 20 2014

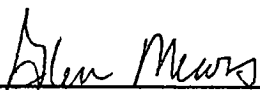
SJVAPCD  
Southern Region

Mr. David Torii  
San Joaquin Valley Unified  
Air Pollution Control District  
34946 Flyover Ct.  
Bakersfield, CA 93308

**Subject: Federal Major Modification Compliance Certification – Bakersfield Crude  
Terminal LLC ATC Application for Oil/Water Separator and Sump Tanks**

Dear Mr. Torii:

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

  
\_\_\_\_\_  
Signature: Glen Mears

Sr. Environmental RC Specialist  
Title

Plains All American GP LLC, General Partner of Plains AAP, L.P., the Sole Member of  
PAA GP LLC, the General Partner of Plains All American Pipeline, L.P.  
333 Clay Street, Suite 1600 (77002) • P.O. Box 4648 • Houston, Texas 77210-4648 • 713-646-4100

## **APPENDIX F**

### **RMR**

# San Joaquin Valley Air Pollution Control District

## Risk Management Review

To: David Torii – Permit Services

From: Esteban Gutierrez – Technical Services

Date: February 21, 2014

Facility Name: Bakersfield Crude

Location: South Lake Rd & Santiago Rd

Application #(s): S-8165- 4-0 thru 8-0

Project #: S-1140214

### A. RMR SUMMARY

RMR Summary					
Categories	Sump Tank (Unit 4-0)	Sump Tank (Unit 5-0)	Sump Tank (Unit 6-0)	Sump Tank (Unit 7-0)	Seperator (Unit 8-0)
Prioritization Score	0.34	0.34	0.34	0.34	0.00
Acute Hazard Index	0.00	0.00	0.00	0.00	0.00
Chronic Hazard Index	0.00	0.00	0.00	0.00	0.00
Maximum Individual Cancer Risk (10 <sup>-6</sup> )	0.07	0.09	0.1	0.1	0.00
T-BACT Required?	No	No	No	No	No
Special Permit Conditions?	No	No	No	No	No

RMR Summary		
Categories	Project Totals	Facility Totals
Prioritization Score	1.38	>1
Acute Hazard Index	0.00	0.00
Chronic Hazard Index	0.00	0.00
Maximum Individual Cancer Risk (10 <sup>-6</sup> )	0.37	1.19
T-BACT Required?		
Special Permit Conditions?		

### Proposed Permit Conditions



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

Unit # 4-0 thru 8-0

No special conditions are required.

## B. RMR REPORT

### I. Project Description

Technical Services received a request on February 21, 2014, to perform a Risk Management Review for a proposed installation of 4 24 BBL Sump tanks and one 20,000 gallon oil-water separator tank.

### II. Analysis

Technical Services performed a health risk assessment using the Toxic Fugitive Emissions from Oilfield Equipment spreadsheet. The Facility cumulative prioritization score was greater than 1.0, thus modeling was conducted using the AERMOD model, with the parameters outlined below and 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.

Analysis Parameters			
Unit 4-0 thru 7-0 each			
Source Type	Area circle	Location Type	Rural
Tank diameter(m)	11.58	Closest Receptor (m)	243
		Type of Receptor	Business
Release Height (m)	22.86	Pollutant Type	VOC
		Emission Rate hourly	0.23lb/hr
		Emission Rate annual	1997 lb/yr

Analysis Parameters			
Unit -8-0			
Source Type	Area	Location Type	Rural
X-Length (m)	6.1	Closest Receptor (m)	243
Y-Length (m)	6.1	Type of Receptor	Business
Release Height (m)	3	Pollutant Type	VOC
		Emission Rate hourly	0.0024 lb/hr
		Emission Rate annual	22 lb/yr

### III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with the project is less than 1.0 in a million. 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 G**

### **Draft ATCs**

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

PERMIT NO: S-8165-4-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: BAKERSFIELD CRUDE TERMINAL, LLC  
MAILING ADDRESS: P O BOX 4648  
HOUSTON, TX 77210-4648

LOCATION: SOUTH LAKE ROAD AND SANITAGO ROAD  
TAFT, CA

EQUIPMENT DESCRIPTION:  
24 BBL FIXED ROOF SUMP TANK EQUIPPED WITH PV VENT

**CONDITIONS**

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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 and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201]
3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
4. VOC emissions from the tank shall not exceed 5.5 lb/cay. [District Rule 2201]
5. Tank fluid throughput shall not exceed 3.1 bbl/day. [District Rule 2201]
6. Permittee shall maintain monthly records of average daily fluid throughput. [District Rule 2201]
7. 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]
8. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 748 lb, 2nd quarter - 748 lb, 3rd quarter - 748 lb, and fourth quarter - 748 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]

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-8165-4-0 : Feb 28 2014 8:07AM - TORID : Joint Inspection NOT Required

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

9. ERC Certificate Number S-4191-1(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]

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT

PERMIT NO: S-8165-5-0

LEGAL OWNER OR OPERATOR: BAKERSFIELD CRUDE TERMINAL, LLC

MAILING ADDRESS: P O BOX 4648  
HOUSTON, TX 77210-4648

LOCATION: SOUTH LAKE ROAD AND SANITAGO ROAD  
TAFT, CA

**EQUIPMENT DESCRIPTION:**

24 BBL FIXED ROOF SUMP TANK EQUIPPED WITH PV VENT

**CONDITIONS**

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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 and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201]
3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
4. VOC emissions from the tank shall not exceed 5.5 lb/cay. [District Rule 2201]
5. Tank fluid throughput shall not exceed 3.1 bbl/day. [District Rule 2201]
6. Permittee shall maintain monthly records of average daily fluid throughput. [District Rule 2201]
7. 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]
8. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 748 lb, 2nd quarter - 748 lb, 3rd quarter - 748 lb, and fourth quarter - 748 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]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-8165-5-0: Feb 28 2014 8:07AM - TORID: Joint Inspection NOT Required

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9. ERC Certificate Number S-4191-1(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]

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT

PERMIT NO: S-8165-6-0

LEGAL OWNER OR OPERATOR: BAKERSFIELD CRUDE TERMINAL, LLC  
MAILING ADDRESS: P O BOX 4648  
HOUSTON, TX 77210-4648

LOCATION: SOUTH LAKE ROAD AND SANITAGO ROAD  
TAFT, CA

EQUIPMENT DESCRIPTION:  
24 BBL FIXED ROOF SUMP TANK EQUIPPED WITH PV VENT

**CONDITIONS**

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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 and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201]
3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
4. VOC emissions from the tank shall not exceed 5.5 lb/cay. [District Rule 2201]
5. Tank fluid throughput shall not exceed 3.1 bbl/day. [District Rule 2201]
6. Permittee shall maintain monthly records of average daily fluid throughput. [District Rule 2201]
7. 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]
8. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 748 lb, 2nd quarter - 748 lb, 3rd quarter - 748 lb, and fourth quarter - 748 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]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-8165-6-0: Feb 28 2014 8:37AM - TORID : Joint Inspection NOT Required

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9. ERC Certificate Number S-4191-1(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]

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT

**PERMIT NO:** S-8165-7-0

**LEGAL OWNER OR OPERATOR:** BAKERSFIELD CRUDE TERMINAL, LLC

**MAILING ADDRESS:** P O BOX 4648  
HOUSTON, TX 77210-4648

**LOCATION:** SOUTH LAKE ROAD AND SANITAGO ROAD  
TAFT, CA

**EQUIPMENT DESCRIPTION:**  
24 BBL FIXED ROOF SUMP TANK EQUIPPED WITH PV VENT

**CONDITIONS**

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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 and properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201]
3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
4. VOC emissions from the tank shall not exceed 5.5 lb/cay. [District Rule 2201]
5. Tank fluid throughput shall not exceed 3.1 bbl/day. [District Rule 2201]
6. Permittee shall maintain monthly records of average daily fluid throughput. [District Rule 2201]
7. 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]
8. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 748 lb, 2nd quarter - 748 lb, 3rd quarter - 748 lb, and fourth quarter - 748 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]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-8165-7-0 : Feb 26 2014 8:07AM - TORID : Joint Inspection NOT Required

9. ERC Certificate Number S-4191-1(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]

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT

PERMIT NO: S-8165-8-0

LEGAL OWNER OR OPERATOR: BAKERSFIELD CRUDE TERMINAL, LLC

MAILING ADDRESS: P O BOX 4648  
HOUSTON, TX 77210-4648

LOCATION: SOUTH LAKE ROAD AND SANITAGO ROAD  
TAFT, CA

**EQUIPMENT DESCRIPTION:**

2000 GALLON OIL WATER SEPARATOR INCLUDING PUMPS AND CONNECTIONS, SERVED BY A 200 LB CARBON CANISTER

**CONDITIONS**

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be a carbon canister system that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4. [District Rules 2201 and 4623]
3. Tank shall operate at a constant level. [District Rule 2201]
4. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623]
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
6. The tank and all piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623]
7. 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. [District Rules 2201 and 4623]
8. Carbon canister shall contain at least 200 pounds of carbon. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-8165-8-0: Feb 26 2014 8:07AM - TORID - Joint Inspection NOT Required

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9. The carbon canisters removed from the system shall be sealed vapor tight. [District Rule 2201]
10. Sampling port adequate for use of an FID, PID or other District-approved VOC detection device shall be provided for effluent gas stream of the carbon canister. [District Rule 1081]
11. Permittee shall measure and record the VOC concentration at the outlet of the carbon canister at least once each week. [District Rule 2201]
12. If the VOC concentration at the outlet of the carbon canister exceeds 10,000 ppmv, carbon canister shall be replaced with a fresh carbon canister. [District Rule 2201]
13. VOC emission from the outlet of the carbon canister shall not exceed 0.6 lb/day. [District Rule 2201]
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]

DRAFT