



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

NOV 08 2011

Mr. Gregg A. Lies
SFPP, LP
1100 Town & Country Road
Orange, CA 92868

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # C-1077
Project # C-1074133**

Dear Mr. Lies:

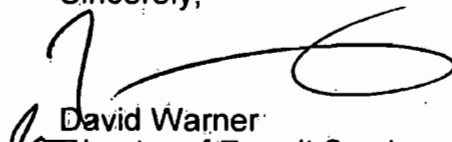
Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. The applicant is requesting that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. SFPP has requested an Authority to Construct (ATC) permit for the installation of an off-specification product truck unloading station.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. 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. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,


David Warner
Director of Permit Services

Enclosures

c: Stanley Tom, Permit Services

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) 230-6081

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



NOV 08 2011

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # C-1077
Project # C-1074133**

Dear Mr. Rios:

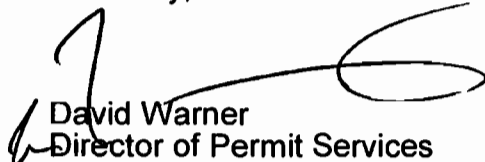
Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for SFPP, LP 4149 Maple Avenue in Fresno, CA, which has been issued a Title V permit. SFPP, LP is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. SFPP has requested an Authority to Construct (ATC) permit for the installation of an off-specification product truck unloading station.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authority to Construct # ATC # C-1077-52-0 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

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David Warner
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c: Stanley Tom, Permit Services

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NOV 08 2011

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

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # C-1077
Project # C-1074133**

Dear Mr. Tollstrup:

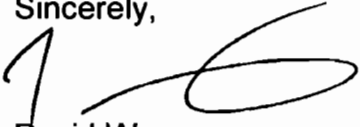
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Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authority to Construct # ATC # C-1077-52-0 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 30-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

Enclosures
c: Stanley Tom, Permit Services

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Executive Director/Air Pollution Control Officer

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Fresno Bee

**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 SFPP, LP for its bulk fuel terminal 4149 Maple Avenue in Fresno, CA, California. SFPP has requested an Authority to Construct (ATC) permit for the installation of an off-specification product truck unloading station.

The District's analysis of the legal and factual basis for this proposed action, project #C-1074133, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested by the public, the District will hold a public hearing regarding issuance of this modification. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.

San Joaquin Valley Air Pollution Control District

Authority to Construct

Application Review

Off-Specification Product Truck Unloading Station

Facility Name: SFPP, LP
Mailing Address: 1100 Town and Country Road
Orange, CA 92868
Contact Person: Gregg A. Lies
Telephone: (707) 580-5751
Application #s: C-1077-52-0
Project #: C-1074133
Deemed Complete: June 30, 2011

Date: October 19, 2011
Engineer: Stanley Tom
Lead Engineer: Joven Refuerzo

I. Proposal

SFPP has requested an Authority to Construct (ATC) permit for the installation of an off-specification product truck unloading station.

SFPP, LP has received their Title V Permit. This modification can be 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. SFPP, LP must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC issued with this project.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (04/21/11)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4624 Transfer of Organic Liquid (12/20/07)
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 facility is located at 4149 Maple Avenue in Fresno, CA. This site is not within 1,000 feet of any K-12 school, therefore the requirements of CH&SC 42301.6 do not apply.

IV. Process Description

SFPP is a bulk fuel terminal. Gasoline and other fuels are sent via pipeline from the various refineries around the state directly to SFPP. SFPP operates a tank farm to store the gasoline until tanker trucks arrive to receive the fuel. The trucks deliver the fuel to retail gasoline stations, where the fuel is ultimately sold to the public for use in automobiles, etc.

The off-specification unloading system is designed to transfer off-specification product from a loading truck to an aboveground floating roof tank. The proposed station normally unloads to Tank FR-14 (permit C-1077-14) but the station can be directed to any tank in the tank farm through the manifold. The off-specification unloading rack is primarily used to offload products from tanker trucks that do not meet delivery specifications. This situation usually happens due to the power failure, instrument malfunction, or operator errors during loading of the fuel. The most common occurrence is when the truck is loaded incorrectly at one of the loading racks (gasoline, diesel, or jet fuel). The truck will then move to the offloading rack and empty the contents back into the system. In order to unload the off-specification product into a storage tank, one four inch unloading connection will gravity-drain the off-specification product to one underground pump sleeve, and one submerged pump will then transfer the off-specification product to one of the storage tanks. Most of this off-specification product will be classified as transmix, and pumped to a transmix tank. Occasionally, testing of the rack will require trucks be loaded and unloaded (such as meter testing). In this case, the product would be pumped back to the appropriate tank. The rack is controlled by a balance system, so vapors are routed back into the tanker trucks. The system consists of a positive displacement pump, a vertical air eliminator, a flowmeter, a digital control valve and digital controller.

V. Equipment Listing

Post Project Equipment Description:

C-1077-52-0 OFF-SPECIFICATION PRODUCT TRUCK UNLOADING STATION WITH ONE UNLOADING CONNECTION GRAVITY DRAINED TO ONE PUMP SLEEVE, ONE PUMP, AIR ELIMINATOR, METER AND SUPPORT EQUIPMENT, AND VAPOR RETURN SYSTEM (VAPOR VENTED BACK TO TANKER TRUCK)

VI. Emission Control Technology Evaluation

The facility employs a balance vapor recovery system on this unloading operation. The off-specification product is gravity fed to an underground pump sleeve. This pump sleeve has a vapor space with a volume of 158.84 gallons. When the liquid product enters the pump sleeve it displaces the vapors. These displaced vapors are routed back to the tanker truck which is connected to a vapor return line during the unloading process.

Instead of incineration, the applicant routes the vapors back to delivery trucks that are capable of passing MACT-level annual leak tests (not more than 1 inch water column pressure change in 5 minutes after pressurizing to 18 inches water followed by pulling a vacuum of 6 inches water)¹. According to AP-42, this method yields a control efficiency of 99%.

¹ This is defined in 40 CFR 63.2406 under "vapor-tight transport vehicle" definition.

The following MACT-level annual leak test requirements will be included in the truck unloading station permit:

- All delivery trucks must be equipped with vapor collection equipment capable of undergoing a pressure change of no more than 1 inch of water within 5 minutes after it is pressurized to 18 inches of water. This must be demonstrated annually for each truck using the procedures specified in EPA Method 27 of 40 CFR 60, Appendix A or CARB Test Methods CP-204, TP-204.1, TP-204.2, and TP-204.3. [District NSR Rule]

VII. General Calculations

A. Assumptions

- Facility operates 24 hours per day, 365 days/per year
- Maximum daily throughput for the unloading rack is 75,600 gallons (applicant proposal)
- Maximum annual throughput for the unloading rack is 27,552,000 gallons (applicant proposal)
- Each truck tank is 8,400 gallons
- Loading losses from displaced vapors are based on the first 158.84 gallons of each unloading event (applicant proposal)
- Maximum daily number of unloading events is 45 = 9 trucks x 5 compartments per truck (applicant proposal)
- Maximum annual number of unloading events is 16,400 = 3,280 trucks x 5 compartments per truck (applicant proposal)
- The vapor collection system has a 99% control efficiency (AP-42 assumption)

B. Emission Factors

Loading Rack Emissions

Loading Loss (lbs/1000 gal) = 12.46 SPM/T (AP-42 Section 5.2 1/95)

S = saturation factor

P = true vapor pressure of liquid loaded (psia)

M = molecular weight of vapors (lb/lb-mole)

T = temperature of bulk liquid loaded (Rankin = Fahrenheit + 460)

S = 1 (assuming loading at the terminal is splash loading: dedicated normal service)

P = 5.93 psia (EPA Tanks 4.0.9d)

M = 66.0 lb/lb-mole (EPA Tanks 4.0.9d)

T = 65.48 deg F = 525.48 deg R

$$\begin{aligned} \text{Loading Loss} &= 12.46 (1)(5.93)(66.0)/(525.48) \\ &= 9.3 \text{ lb/1000 gal} \end{aligned}$$

Fugitive Emissions

- Fugitive emissions from the off-specification unloading system can be estimated using USEPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates: Table 2-3 Marketing Terminals Average Emission Factors

Disconnect Emissions

A spillage rate of 10 mL per disconnect is assumed. The applicant has stated there will be 9 trucks per day with 2 disconnects per truck. Using an ethanol density of 6.8 lb/gal, the following is the disconnect emission factor.

$$\begin{aligned} EF_{\text{VOC Disconnect}} &= (10 \text{ mL/disconnect}) \times (1 \text{ gal}/3,785 \text{ mL}) \times (6.8 \text{ lb-VOC/gal}) \\ EF_{\text{VOC Disconnect}} &= 0.0180 \text{ lb-VOC/disconnect} \end{aligned}$$

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)

Loading Rack Emissions

$$\begin{aligned} \text{Daily PE2} &= 9 \text{ trucks/day} \times 5 \text{ compartments/truck} \times 158.84 \text{ gallons/compartment} \\ &\quad \times 9.3 \text{ lb-VOC}/1000 \text{ gallons} \times (1 - 0.99) \\ &= 0.7 \text{ lb-VOC/day} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2} &= 3,280 \text{ trucks/year} \times 5 \text{ compartments/truck} \times 158.84 \text{ gallons/compartment} \\ &\quad \times 9.3 \text{ lb-VOC}/1000 \text{ gallons} \times (1 - 0.99) \\ &= 242 \text{ lb-VOC/year} \end{aligned}$$

Fugitive Emissions

Per Appendix A, the fugitive component emissions are equal to the following.

$$\begin{aligned} \text{Daily PE2} &= 0.06 \text{ lb-VOC/day} \\ \text{Annual PE2} &= 20 \text{ lb-VOC/year} \end{aligned}$$

Disconnect Emissions

VOC emissions will also be accounted for due to spillage during connection and disconnection between the off-specification unloading system and the delivery truck.

$$\begin{aligned} \text{Daily PE2} &= 0.0180 \text{ lb-VOC/disconnect} \times 9 \text{ trucks/day} \times 2 \text{ disconnect/truck} \\ &= 0.3 \text{ lb-VOC/day} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2} &= 0.0180 \text{ lb-VOC/disconnect} \times 3,280 \text{ trucks/year} \times 2 \text{ disconnect/truck} \\ &= 118 \text{ lb-VOC/year} \end{aligned}$$

Information collected at the terminal regarding denatured ethanol offloading is most readily available in the form of throughput data. Instead of monitoring the number of disconnects, the applicant proposes to limit the daily throughput of denatured ethanol unloaded. Using a conservative truck tank volume of 8,400 gallons per delivery truck and 2 disconnects per truck,

$$\begin{aligned} \text{Daily throughput} &= 8,400 \text{ gallons/truck} \times 9 \text{ trucks/day} = 75,600 \text{ gallons/day} \\ \text{Annual throughput} &= 8,400 \text{ gallons/truck} \times 3,280 \text{ trucks/year} = 27,552,000 \text{ gallons/year} \end{aligned}$$

Post Project Potential to Emit (PE2)		
	Daily Emissions (lb-VOC/day)	Annual Emissions (lb-VOC/year)
Loading Rack	0.7	242
Fugitive	0.06	20
Disconnect	0.3	118
Total	1.1	380

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.

Facility emissions are already above the Offset and Major Source Thresholds for VOC emissions; therefore, SSPE1 calculations are not necessary.

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

Facility emissions are already above the Offset and Major Source Thresholds for VOC emissions; therefore, SSPE2 calculations are not necessary.

5. Major Source Determination

Pursuant to Section 3.25 of District Rule 2201, a major source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.25.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

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

6. Baseline Emissions (BE)

BE = Pre-project Potential to Emit for:

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

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.23

Since 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?
VOC	380	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute a SB288 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. SB 288 Major Modifications are not federal major modifications if they meet the criteria of the "Less-Than-Significant Emissions Increase" exclusion.

A Less-Than-Significant Emissions Increase exclusion is for an emissions increase for the project, or a Net Emissions Increase for the project (as defined in 40 CFR 51.165 (a)(2)(ii)(B) through (D), and (F)), that is not significant for a given regulated NSR pollutant, and therefore is not a federal major modification for that pollutant.

- To determine the post-project projected actual emissions from existing units, the provisions of 40 CFR 51.165 (a)(1)(xxviii) shall be used.
- To determine the pre-project baseline actual emissions, the provisions of 40 CFR 51.165 (a)(1)(xxxv)(A) through (D) shall be used.
- If the project is determined not to be a federal major modification pursuant to the provisions of 40 CFR 51.165 (a)(2)(ii)(B), but there is a reasonable possibility that the project may result in a significant emissions increase, the owner or operator shall comply with all of the provisions of 40 CFR 51.165 (a)(6) and (a)(7).
- Emissions increases calculated pursuant to this section are significant if they exceed the significance thresholds specified in the table below.

Significant Threshold (lb/year)	
Pollutant	Threshold (lb/year)
VOC	0

The Net Emissions Increases (NEI) for purposes of determination of a "Less-Than-Significant Emissions Increase" exclusion will be calculated below to determine if this project qualifies for such an exclusion.

Net Emission Increase for New Units (NEI_N)

Per 40 CFR 51.165 (a)(2)(ii)(D) for new emissions units in this project,

$$NEI_N = PE2_N - BAE$$

$$BAE = 0 \text{ for the new unit therefore } NEI_N = PE2_N$$

$$NEI_N \text{ (VOC)} = 380 \text{ lb/year}$$

$$NEI \text{ (VOC)} = 380 \text{ lb/year}$$

The NEI for this project will be greater than the federal Major Modification threshold of 0 lb/year for VOC. Therefore, this project does not qualify for a "Less-Than-Significant Emissions Increase" exclusion and is thus determined to be a Federal Major Modification for VOC.

9. 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:

$$QNEC = PE2 - PE1, \text{ where:}$$

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

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

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

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:

$$\begin{aligned} \text{PE2}_{\text{quarterly}} &= \text{PE2}_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 380 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 95 \text{ lb-VOC/qtr} \end{aligned}$$

$$\begin{aligned} \text{PE1}_{\text{quarterly}} &= \text{PE1}_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 0 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 0 \text{ lb-VOC/qtr} \end{aligned}$$

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	0	0	0
SO _x	0	0	0
PM ₁₀	0	0	0
CO	0	0	0
VOC	95	0	95

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 for the following*:

- 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
- Any new or modified emissions unit, in a stationary source project, which results in a Major Modification.

*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 of this evaluation, the applicant is proposing to install an off-specification truck unloading station with a PE less than 2 lb/day for VOC. BACT is not triggered for VOC since the PE is less than 2 lbs/day.

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

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

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

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

d. Major Modification

As discussed in Section VII.C.7 above, this project does constitute a Major Modification; therefore, BACT is triggered.

2. BACT Guideline

BACT Guideline 7.1.10, applies to the off-specification product unloading system. [Loading Rack/Switch Loading] (See Appendix B)

3. Top-Down BACT Analysis

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

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

VOC: bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency $\geq 99\%$

The facility employs a MACT-level annual leak test (not more than 1 inch water column pressure change in 5 minutes after pressurizing to 18 inches water followed by pulling a vacuum of 6 inches water. According to AP-42, this method yields a control efficiency of 99%.

B. Offsets

1. Offset Applicability

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

This facility is currently a Major Source for VOC. Therefore, offset calculations will be required for this project.

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.

Per Sections 4.7.1 and 4.7.3, the quantity of offsets in pounds per year for VOC is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

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

Where,

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

BE = Baseline Emissions, (lb/year)

ICCE = Increase in Cargo Carrier Emissions, (lb/year)

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = Pre-project Potential to Emit for:

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

otherwise,

BE = Historic Actual Emissions (HAE)

There are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

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

PE2 (VOC) = 380 lb/year

BE (VOC) = 0 lb/year

Offsets Required (lb/year) = $([380 - 0]) \times DOR$
 $= 380 \times DOR$
 $= 380 \text{ lb-VOC/year}$

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

<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
95	95	95	95

Assuming an offset ratio of 1.5:1, the amount of VOC ERCs that need to be withdrawn is:

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([380 - 0]) \times 1.5 \\ &= 380 \times 1.5 \\ &= 570 \text{ lb-VOC/year} \end{aligned}$$

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

<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
142	142	143	143

The applicant has stated that the facility plans to use ERC certificate S-2464-1 to offset the increases in VOC emissions associated with this project. The above certificate has available quarterly VOC credits as follows:

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
ERC #S-2464-1	2,625	2,625	2,625	2,625

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:

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 95 lb, 2nd quarter - 95 lb, 3rd quarter - 95 lb, and fourth quarter - 95 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 04/21/11). [District Rule 2201]
- ERC Certificate Number S-2464-1 (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 SB288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

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

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

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

b. PE > 100 lb/day

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

c. Offset Threshold

This facility is a major source for VOC pre and post-project. Since the Major source threshold for VOC is higher than the offset threshold, no offset thresholds were surpassed with this project.

Therefore, public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

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

Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice					
Pollutant	PE2 (lb/year)	PE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	0	0	0	20,000 lb/year	No
SO _x	0	0	0	20,000 lb/year	No
PM ₁₀	0	0	0	20,000 lb/year	No
CO	0	0	0	20,000 lb/year	No
VOC	380	0	380	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 Federal Major Modification for VOC emissions. 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)

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

The following conditions will be placed on the permit:

- Unloading VOC emissions from the unloading system shall not exceed 0.093 lb-VOC/1000 gallons¹. [District Rule 2201]
- Unloading VOC emissions from the unloading system shall not exceed 0.7 lb/day². [District Rule 2201]
- The maximum number of trucks unloaded shall not exceed either of the following limits: 9 trucks/day or 3,280 trucks/year. [District Rule 2201]
- Fugitive component VOC emissions from the unloading system shall not exceed 0.06 lb/day. [District Rule 2201]
- The maximum volume of liquid spillage/leaks from each hose disconnect shall not exceed 10 milliliters. [District Rule 2201]
- VOC emissions from truck unloading connections shall not exceed 0.3 lb/day. [District Rule 2201]
- The maximum throughput of off-specification product unloaded shall not exceed any of the following: 75,600 gallons per day or 27,552,000 gallons per year. [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.

¹ 9.3 lb-VOC/1000 gallons x (1 – 0.99)

² 9 trucks/day x 5 compartments/truck x 158.84 gallons/compartments x 9.3 lb-VOC/1000 gallons x (1 – 0.99)

2. Monitoring

Monitoring is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition will appear on the permit:

- All delivery trucks must be equipped with vapor collection equipment capable of undergoing a pressure change of no more than 1 inch of water within 5 minutes after it is pressurized to 18 inches of water. This must be demonstrated annually for each truck using the procedures specified in EPA Method 27 of 40 CFR 60, Appendix A or CARB Test Methods CP-204, TP-204.1, TP204-2, and TP-204.3. [District NSR Rule]

3. Recordkeeping

Recordkeeping 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 permit:

- Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201]
- Daily records of amount of off-specification product unloaded and number of trucks unloaded at the unloading system shall be maintained. [District Rules 1070 and 2201]
- Permittee shall maintain the following records for each truck: 1) the annual vapor collection equipment test result, 2) date the test was performed, and 3) truck identification. [District NSR Rule]
- All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis

Section 4.14.1 of this Rule requires that an ambient air quality analysis (AAQA) be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. However, since this project involves only VOC and no ambient air quality standard exists for VOC, an AAQA is not required for this project.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Title I Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As

discussed in Sections VIII-Rule 2201-C.1.a and VIII-Rule 2201-C.1.b, this facility is a major source and this project does constitute a Title I modification, therefore this requirement is applicable. Included in Appendix C is SFPP's compliance certification.

H. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to install an off-specification product truck unloading station.

Since the project will not change any other facets of the operation 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 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."

Section 3.20.5 states that a minor permit modification is a permit modification that does not meet the definition of modification as given in Section 111 or Section 112 of the Federal Clean Air Act. Since this project is a Title I modification (i.e. Federal Major Modification), the proposed project is considered to be a modification under the Federal Clean Air Act. As a result, the proposed project constitutes a Significant Modification to the Title V Permit pursuant to Section 3.29.

As discussed above, the facility has applied for a Certificate of Conformity (COC) (see Appendix D); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility shall not implement the changes requested until the final permit is issued.

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). The visible emissions limit is not expected to be exceeded based on past inspections. Therefore, compliance with this rule is expected.

Rule 4102 Nuisance

Section 4.0 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 E), the total facility prioritization score including this project was greater than one. Therefore, a health risk assessment 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
C-1077-52-0	0.278 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.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 10 in a million). As outlined by the HRA Summary in Appendix E of this report, the emissions increases for this project was determined to be less than significant.

Rule 4624 Transfer of Organic Liquid

The purpose of this rule is to limit VOC emissions from the transfer of organic liquids. This rule applies to organic liquid transfer facilities as defined in this rule.

Permit C-1077-52 is an organic liquid loading rack, which is defined as "the portion from the connection at the inlet of an organic liquid pump to and including the hose and connector at the portable delivery tank.

This facility has the potential to be a Class 1 organic liquid transfer facility, meaning it is capable of transferring 20,000 gallons of organic liquid or more in any one day. Therefore, the requirements of Section 5.1 (Class 1) apply.

Section 5.1 For a Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred and use one of the following systems:

- 5.1.1 An organic liquid loading operation shall be bottom loaded.
- 5.1.2 The VOC from the transfer operation shall be routed to:
 - 5.1.2.1 A vapor collection and control system;
 - 5.1.2.2 A fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids);
 - 5.1.2.3 A floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or
 - 5.1.2.4 A pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or
 - 5.1.2.5 A closed VOC emission control system.

SFPP has proposed venting the off-specification product VOC vapors from the loading system pump sleeve to the tanker truck. The following condition will be included on the permit to ensure compliance with Section 5.1:

- Vapor return hose(s) shall connect displaced vapors to the delivery truck whenever tank truck, trailer, or car is unloading organic liquid. [District Rules 2201 and 4624]

Section 5.2 applies to Class 2 organic liquid transfer facilities. The present facility is Class 1; therefore, Section 5.2 is not applicable.

Section 5.3 states "A transfer operation utilizing a closed VOC emission control system or utilizing a container that meets the control requirements of Rule 4623 (Storage of Organic Liquids) to meet the emission control requirements of this rule shall demonstrate compliance with Sections 5.1 and 5.2 by complying with the leak inspection requirements of Section 5.9." See Section 5.9 below for leak inspection requirements.

Section 5.4 requires the vapor collection and control system to operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and six (6) inches water column vacuum. This section shall not apply to the transfer of liquefied petroleum gas.

The following condition will be included on the permit to ensure compliance with Section 5.4:

- The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and six (6) inches water column vacuum. [District Rules 2201 and 4624]

Section 5.5 requires delivery tanks which previously contained organic liquids with a TVP of 1.5 psia or greater at the storage container's maximum organic liquid storage temperature to be filled only at transfer facilities satisfying Sections 5.1, 5.2, or 5.4, as applicable.

The displaced vapors from the pump sleeve, if any, will be vented back to the tanker truck.

Section 5.6 requires the transfer rack and vapor collection equipment to be designed, installed, maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections.

- The transfer rack and vapor collection equipment shall be designed, installed, maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. [District Rule 4624]
- A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv as methane above a background when measured using a portable hydrocarbon detection instrument in accordance with EPA Method 21. [District Rule 4624]
- Excess organic liquid drainage is defined as an average of more than ten (10) milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rule 4624]

Section 5.7 prohibits the construction of any new top loading facility or the reconstruction, as defined in 40 CFR 60.15, or the expansion of any existing top loading facility with top loading equipment.

The loading rack in this project is not top loading. Therefore, this section does not apply to this project.

Section 5.8 pertains to the transfer of liquefied petroleum gas (LPG).

This loading rack does not involve the transfer of LPG; therefore, Section 5.8 is not applicable.

Section 5.9 outlines the leak inspection requirements.

- 5.9.1 The operator of an organic liquid transfer facility shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8.
- 5.9.2 A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking for the purposes of this section.
- 5.9.3. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement.
- 5.9.4 An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections required under provisions of Sections 5.9.1 and 5.9.2 during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency would revert back to quarterly and the operator shall contact the APCO in writing within 14 days.

The following permit conditions ensure compliance with the requirements of this section.

- The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the EPA Method 21. [District Rule 4624, 5.9]
- All leaking components shall be repaired or replaced within 72 hours of discovery. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9]
- An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624, 5.9]

Section 6.1.3 requires an operator subject to any part of Section 5.0 to keep records of daily liquid throughput and the results of any required leak inspections.

The following conditions will ensure compliance with the daily liquid throughput records requirement and results of any required leak inspections.

- Daily records of amount of off-specification product unloaded and number of trucks unloaded at the unloading system shall be maintained. [District Rules 1070, 2201, 4624]
- Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 72 hours after detection. [District Rules 1070 and 4624]

Section 6.1.4 requires records to be retained for a minimum of five years and to be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA.

The following condition will ensure compliance with the recordkeeping requirements of Section 6.1.4:

- The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2201 and 4624, 6.1.4]

Per Sections 6.2.1.3 and 6.2.1.3.2, the source testing requirements of Section 6.2.1 shall not apply to any Class 1 or Class 2 organic liquid transfer facility controlling VOC by routing vapors to a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids).

The loading rack sends organic liquid from the tanker trucks to floating roof tanks. Therefore, the requirements of Section 6.2 are satisfied.

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.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

The District's engineering evaluation (this document – Appendix G) 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. Pending a successful NSR Public Noticing period, issue Authority to Construct C-1077-52-0 subject to the permit conditions on the attached draft Authority to Construct in Appendix F.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
C-1077-52-0	3020-01-A	5 Electric HP	\$87

Appendices

- A: Fugitive Component Emission Calculations
- B: BACT Guideline 7.1.10 and Top Down BACT Analysis
- C: Compliance Certification
- D: Certificate of Conformity
- E: Health Risk Assessment
- F: Draft ATC
- G: Greenhouse Gas Emission Calculations

APPENDIX A
Fugitive Component Emission Calculations

Off Specification Tanker Truck Unloading System (Fugitive Emissions)

Equipment	Number	Emission Factor (kg/hr/source)	VOC Emissions			
			lbs/hr	lbs/day	lbs/year	tons/year
Pump Seals	1	5.4E-04	1.2E-03	2.9E-02	10.4E+00	5.2E-03
Air Eliminator*	1	1.3E-04	2.9E-04	6.9E-03	2.5E+00	1.3E-03
Strainer	0	1.3E-04	0.0E+00	0.0E+00	000.0E+00	000.0E+00
Valves	6	4.3E-05	5.7E-04	1.4E-02	5.0E+00	2.5E-03
Flanges	16	8.0E-06	2.8E-04	6.8E-03	2.5E+00	1.2E-03
		TOTAL	2.3E-03	5.6E-02	20.4E+00	10.2E-03

The total number of components is estimated conservatively.

Emission factors are from the Office of Air Quality Planning and Standards.

"Protocol for Equipment Leak Emission Estimates." USEPA, Research Triangle Park, NC. November 1995,
under Table 2-3 Marketing Terminal Average Emission Factors - Light Liquid

APPENDIX B
BACT Guideline 7.1.10 and Top Down BACT Analysis

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 7.1.10*

Last Update 2/23/2005

Loading Rack/Switch Loading

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
CO	natural gas fired pilot and air assist		
NOx	natural gas or LPG fired pilot and air assist		
PM10	air assisted flare with smokeless combustion		
SOx	natural gas fired flare		
VOC	bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency => 99%		

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**

Top Down BACT Analysis

BACT Analysis for off-specification unloading system in permit C-1077-52-0:

VOC

Step 1 - Identify All Possible Control Technologies

BACT guideline 7.1.10 identifies the following control technologies:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency $\geq 99\%$		

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

Step 3 - Rank Remaining Control Technologies

Rank	Control Technology	Control Efficiency	Technology Classification for BACT
1	Bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency $\geq 99\%$	99%	AIP

Step 4 - Cost Effectiveness Analyses

Per District BACT Policy, a cost effectiveness analysis is not required for AIP controls since the control must be implemented.

Step 5 - Select BACT

The remaining control not eliminated in Step 4 is considered AIP BACT for this class and category of source for VOC.

The facility employs a MACT-level annual leak test (not more than 1 inch water column pressure change in 5 minutes after pressurizing to 18 inches water followed by pulling a vacuum of 6 inches water. According to AP-42, this method yields a control efficiency of 99% and is therefore equivalent to the Achieved in Practice option of thermal incinerator or flare with a destruction efficiency of $\geq 99\%$.

APPENDIX C
Compliance Certification



VIA FEDERAL EXPRESS

October 10, 2011

Mr. David Warner
San Joaquin Valley Air Pollution Control District
1900 E. Gettysburg Avenue
Fresno, CA 93726-0244

Subject: Project C-1074113

Dear Mr. Warner:

Pursuant to the requirement of San Joaquin Valley Air Pollution Control District Rule 2201, Section 4.15.2, SFPP, L.P. (SFPP) submits this Compliance Certification Letter.

As of the date of this letter, all SFPP facilities in California are in compliance or on a schedule for compliance with all applicable emission limitations and standards.

If you have any questions or require additional information, please call Donny Homer at (707) 438-2101.

Sincerely yours,

Jim Giles
Director of Operations
SFPP, L.P.

cc: Yijin Wang, SFPP

APPENDIX D
Certificate of Conformity

AUG 29 2011

Permits Srvc
SJVAPCD

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
 MINOR PERMIT MODIFICATION


ADMINISTRATIVE
AMENDMENT

COMPANY NAME:SFPP, L.P.	FACILITY ID: C- 1077
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:	
3. Agent to the Owner:	

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 forgoing is correct and true:



Signature of Responsible Official

8/25/11

Date

Jim Giles

Name of Responsible Official (please print)

Director of Operations

Title of Responsible Official (please print)

APPENDIX E
Health Risk Assessment

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Stanley Tom – Permit Services
 From: Cheryl Lawler – Technical Services
 Date: October 28, 2011
 Facility Name: SFPP, LP
 Location: 4149 S. Maple Avenue, Fresno
 Application #(s): C-1077-52-0
 Project #: C-1074133

A. RMR SUMMARY

RMR Summary			
Categories	Off-Specification Product Truck Unloading Station (Unit 52-0)	Project Totals	Facility Totals
Prioritization Score	0.05	0.05	>1
Acute Hazard Index	0.00	0.00	0.01
Chronic Hazard Index	0.00	0.00	0.01
Maximum Individual Cancer Risk	2.78E-07	2.78E-07	6.25E-06
T-BACT Required?	No		
Special Permit Conditions?	No		

I. Project Description

Technical Services received a request on October 11, 2011, to perform a Risk Management Review (RMR) and Ambient Air Quality Analysis (AAQA) for an off-specification product truck unloading station. In regards to the AAQA, because VOCs are the only emissions reported for this project, an AAQA was not required or performed as VOCs are not analyzed as part of this process.

II. Analysis

Toxic emissions were calculated using emission factors for toxic fugitive emissions from oilfield equipment, along with VOC fugitive emission rates supplied by the processing engineer. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEART's database. The prioritization score for the project was less than 1.0 (see RMR Summary Table); however, the facility's combined prioritization scores totaled to greater than one. Therefore, a refined Health Risk Assessment was required and performed for the project. AERMOD was used with area source parameters outlined below and

concatenated 5-year meteorological data from Fresno to determine maximum dispersion factors at the nearest residential and business receptors. The dispersion factors were input into the HARP model to calculate the Chronic and Acute Hazard Indices and the Carcinogenic Risk.

The following parameters were used for the review:

Analysis Parameters			
Source Type	Area	Closest Receptor (m)	107
Length of Sides (m)	3.96 x 16.46	Type of Receptor	Business
Release Height (m)	5.49	Location Type	Rural

III. Conclusions

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with the project is **2.78E-07**, which is less than the 1 in a million threshold. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

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.

APPENDIX F
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: C-1077-52-0

LEGAL OWNER OR OPERATOR: SFPP, L.P.
MAILING ADDRESS: 1100 TOWN & COUNTRY ROAD
ORANGE, CA 92868

LOCATION: 4149 S MAPLE AVE
FRESNO, CA 93725

EQUIPMENT DESCRIPTION:

OFF-SPECIFICATION PRODUCT TRUCK UNLOADING STATION WITH ONE UNLOADING CONNECTION GRAVITY DRAINED TO ONE PUMP SLEEVE, ONE PUMP, AIR ELIMINATOR, METER AND SUPPORT EQUIPMENT, AND VAPOR RETURN SYSTEM (VAPOR VENTED BACK TO TANKER TRUCK)

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. Prior to operating equipment under this Authority to Construct, permittee shall surrender (pollutant) emission reduction credits for the following quantities of emissions: 1st quarter - 95 lb, 2nd quarter - 95 lb, 3rd quarter - 95 lb, and fourth quarter - 95 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 04/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Number S-2464-1 (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

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YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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
C-1077-52-0: Nov 3 2011 11:46AM -- TOMS : Joint Inspection NOT Required

5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
8. Vapor return hose(s) shall connect displaced vapors to the delivery truck whenever tank truck, trailer, or car is unloading organic liquid. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
9. All delivery trucks must be equipped with vapor collection equipment capable of undergoing a pressure change of no more than 1 inch of water within 5 minutes after it is pressured to 18 inches of water. This must be demonstrated annually for each truck using the procedures specified in EPA Method 27 of 40 CFR 60, Appendix A or CARB Test Methods CP-204, TP-204.1, TP204-2, and TP-204.3. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The vapor collection and control system shall operate such that the pressure in the delivery tank being unloaded does not exceed 18 inches water column pressure and six (6) inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
11. The transfer rack and vapor collection equipment shall be designed, installed, maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. [District Rule 4624] Federally Enforceable Through Title V Permit
12. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv as methane above a background when measured using a portable hydrocarbon detection instrument in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
13. The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the EPA Method 21. [District Rule 4624, 5.9] Federally Enforceable Through Title V Permit
14. All leaking components shall be repaired or replaced within 72 hours of discovery. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9] Federally Enforceable Through Title V Permit
15. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624, 5.9] Federally Enforceable Through Title V Permit
16. Unloading VOC emissions from the unloading system shall not exceed 0.093 lb-VOC/1000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Unloading VOC emissions from the unloading system shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The maximum number of trucks unloaded shall not exceed either of the following limits: 9 trucks/day or 3,280 trucks/year. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Fugitive component VOC emissions from the unloading system shall not exceed 0.06 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The maximum volume of liquid spillage/leaks from each hose disconnect shall not exceed 10 milliliters. [District Rule 2201] Federally Enforceable Through Title V Permit
21. VOC emissions from truck unloading connections shall not exceed 0.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

22. Permittee shall maintain accurate component count for tank according to EPA's "Protocol for Equipment Leak Emission Estimate," Table 2-3, Marketing Terminal Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The maximum throughput of off-specification product unloaded shall not exceed any of the following: 75,600 gallons per day or 27,552,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Daily records of amount of off-specification product unloaded and number of trucks unloaded at the unloading system shall be maintained. [District Rules 1070, 2201, 4624] Federally Enforceable Through Title V Permit
26. Permittee shall maintain the following records for each truck: 1) the annual vapor collection equipment test result, 2) date the test was performed, and 3) truck identification. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 72 hours after detection. [District Rules 1070 and 4624] Federally Enforceable Through Title V Permit
28. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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APPENDIX G
Greenhouse Gas Emission Calculations

GHG Calculation

Assume 100% of VOC emissions are methane and 21 lb-CO₂(eq) per lb-CH₄

$$\begin{aligned}\text{Annual GHG} &= 380 \text{ lb-CH}_4/\text{year} \times 21 \text{ lb-CO}_2(\text{eq})/\text{lb-CH}_4 \times 1 \text{ ton}/2000 \text{ lb} \\ &= 3.99 \text{ ton-CO}_2(\text{eq})/\text{year} \times 0.9072 \text{ metric ton}/\text{short ton} \\ &= 3.6 \text{ metric ton-CO}_2(\text{eq})/\text{year}\end{aligned}$$

Per District Policy, project specific greenhouse gas emissions less than or equal to 230 metric tons-CO₂e/year are considered to be zero for District permitting purposes and are exempt from further environmental review.