



APR 04 2013

Kenneth Bork
Plains Exploration & Production Company
1200 Discovery Drive, Suite 500
Bakersfield, CA 93309

**Re: Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)
District Facility # S-1372
Project # S-1130582**

Dear Mr. Bork:

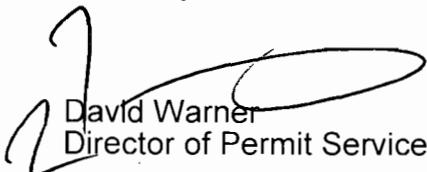
Enclosed for your review is the District's analysis of your application for Authorities to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The applicant is proposing to install a new 5.0 MMBtu/hr heater treater consisting of two (2) – 2.5 MMBtu/hr Maxon Ultra Low NOx burners fueled by PUC-quality natural gas served by the vapor control system listed on permit S-1372-100.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authorities 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
cc: Stanley Tom, Permit Services

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
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Central Region (Main Office)
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San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



APR 04 2013

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

Re: **Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)
District Facility # S-1372
Project # S-1130582**

Dear Mr. Rios:

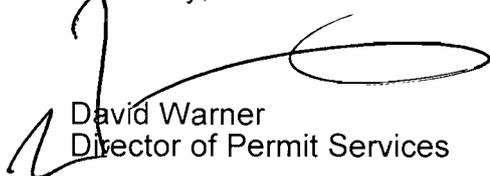
Enclosed for your review is the District's engineering evaluation of an application for Authorities to Construct for Plains Exploration & Production Company, located at McKittrick Unit Lease (NE/4 Section 6, T30S, R22E in the Cymric Oilfield in Heavy Oil Western stationary source, Kern County, which has been issued a Title V permit. Plains Exploration & Production Company is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The applicant is proposing to install a new 5.0 MMBtu/hr heater treater consisting of two (2) – 2.5 MMBtu/hr Maxon Ultra Low NOx burners fueled by PUC-quality natural gas served by the vapor control system listed on permit S-1372-100.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authorities to Construct # S-1372-100-30 and '412-0 with Certificate of Conformity. After demonstrating compliance with the Authorities 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.

Sincerely,



David Warner
Director of Permit Services

Enclosures
cc: Stanley Tom, Permit Services

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Heater Treater Connected to Vapor Control

Facility Name: Plains Exploration & Production Company Date: March 16, 2013
Mailing Address: 1200 Discovery Drive, Suite 500 Engineer: Stanley Tom
Bakersfield, CA 93309 Lead Engineer: Joven Refuerzo
Contact Person: Kenneth Bork
Telephone: (661) 395-5458
Application #(s): S-1372-100-30 and '412-0
Project #: S-1130582
Deemed Complete: March 14, 2013

I. Proposal

Plains Exploration & Production Company (PXP) is applying for an Authority to Construct (ATC) permit to install a new 5.0 MMBtu/hr heater treater consisting of two (2) – 2.5 MMBtu/hr Maxon Ultra Low NOx burners fueled by PUC-quality natural gas served by the vapor control system listed on permit S-1372-100 (see Attachment A). The device will have a 5 hp electric blower, variable frequency drive based on temperature, and an air/fuel electronic flow controller.

The volume of the heater treater vessel is 1,265 bbl and the heater treater burners are permit exempt per Rule 2020 Section 6.1.1. The heater treater vessel will be issued a permit and the two heater treater burners will be issued a Permit-Exempt Equipment Registration (PEER). Therefore, only the heater treater vessel will be addressed in this project.

PXP has received their Title V Permit. This modification can be classified as a Title V minor 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. PXP must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4001 New Source Performance Standards (4/14/99)
Rule 4101 Visible Emissions (4/20/05)
Rule 4102 Nuisance (12/17/92)
Rule 4623 Storage of Organic Liquids (5/19/05)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The tank in this project is located at the McKittrick Unit Lease (NE/4 Section 6, T30S, R22E in the Cymric Oilfield at PXP's Heavy Oil Western stationary source, Kern County. The equipment is not located within 1,000 feet of the outer boundary of any K-12 school; therefore, pursuant to CH&SC 42301.6, California Health and Safety Code (School Notice), public notification is not required.

IV. Process Description

The purpose of this facility is to separate oil and produced water during heavy oil production. Heavy crude oil (14.6 API gravity) is produced at PXP's McKittrick Unit property. This oil is viscous and is a mixture of oil and produced water. The steam generators create steam that is used to lower the viscosity of the oil so it can be produced more easily.

Produced oil and water from wells at PXP's McKittrick Unit and Morris properties will be processed through a freewater knockout and then to the new heater treater to dehydrate the crude oil. These separated fluids will then be routed to clarifier tanks for further polishing.

The vapors from the heater treater are routed to the existing TEOR vapor recovery system listed on permit S-1372-100. The vapor recovery system is served by a flare (which is part of the equipment listed on permit S-1372-100) or a waste gas steam generator listed on permits S-1372-127 and/or '317.

V. Equipment Listing

Pre-Project Equipment Description

Current Permit	Pre-Project Equipment Description
S-1372-100-26	TEOR OPERATION WITH WELL CASING COLLECTION SYSTEM SERVING 633 STEAM ENHANCED WELLS WITH 3-PHASE SEPARATORS, STANDBY FLARE, SLUG CATCHER, SCRUBBERS, HEAT EXCHANGERS, COMPRESSORS, PUMPS, SULFA CHECK AND LIQUID SULFUR REMOVAL SYSTEMS (GAMBLE/MCKITTRICK FRONT)

ATC Equipment Description

ATC Permit	ATC Equipment Description
S-1372-100-30	MODIFICATION OF TEOR OPERATION WITH WELL CASING COLLECTION SYSTEM SERVING 633 STEAM ENHANCED WELLS WITH 3-PHASE SEPARATORS, STANDBY FLARE, SLUG CATCHER, SCRUBBERS, HEAT EXCHANGERS, COMPRESSORS, PUMPS, SULFA CHECK AND LIQUID SULFUR REMOVAL SYSTEMS (GAMBLE/MCKITTRICK FRONT): CONNECT HEATER TREATER LISTED ON PERMIT S-1372-412 TO THE VAPOR CONTROL SYSTEM
S-1372-412-0	1,265 BBL HEATER TREATER VESSEL VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1372-100 WITH TWO PERMIT EXEMPT BURNERS (NATURAL GAS FIRED, 5 MMBTU/HR OR LESS)

Post-Project Equipment Description

Proposed Permit	Post-Project Equipment Description
S-1372-100-30	TEOR OPERATION WITH WELL CASING COLLECTION SYSTEM SERVING 633 STEAM ENHANCED WELLS WITH 3-PHASE SEPARATORS, STANDBY FLARE, SLUG CATCHER, SCRUBBERS, HEAT EXCHANGERS, COMPRESSORS, PUMPS, SULFA CHECK AND LIQUID SULFUR REMOVAL SYSTEMS (GAMBLE/MCKITTRICK FRONT)
S-1372-412-0	1,265 BBL HEATER TREATER VESSEL VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1372-100 WITH TWO PERMIT EXEMPT BURNERS (NATURAL GAS FIRED, 5 MMBTU/HR OR LESS)

VI. Emission Control Technology Evaluation

The vapor control system collects vapors from the heater treater and routes the vapors to be used for steam generator fuel or other fired equipment. The VOC control efficiency of the vapor control system is at least 99%.

TEOR gas combustion in steam generators or flares generally produces higher emissions of SOx and PM10 than natural gas combustion. This is reflected by higher SOx and PM10 emission limits for units authorized to burn TEOR waste gas.

Steam generators S-1372-127 and '317 will be augmented with a spray tower scrubber for acid removal and a wet electrostatic precipitator for particulate matter removal. The devices utilized shall be a Turbosonic spray tower and Turbosonic "SonicKleen" wet ESP or equivalents. The removal efficiencies of SOx and PM10 by the wet ESP are not stated in the manufacturer literature. However, the combination scrubber/wet ESP is expected to remove at least 95% of the SOx emissions. The scrubber, with or without the wet ESP, satisfies BACT for control of PM10.

VII. General Calculations

S-1372-100-30

For ATC S-1372-100-30, this project does not meet the criteria for a Rule 2201 Modification, as defined in Section 3.26, and is not subject to the requirements of Rule 2201. Therefore, formal calculations for Rule 2201 are not necessary.

A. Assumptions

- Facility will operate 24 hours per day, 7 days per week, and 52 weeks per year.
- Heater treater listed on permit S-1372-412-0 is connected to a vapor control system; therefore, according to District Policy SSP 2015 emissions will be assessed based on fugitive component emissions.

B. Emission Factors

- Pursuant to District Policy SSP 2015, VOC emissions are not assessed to piping and components handling fluid streams with a VOC content of 10% or less by weight. The heater treater listed on permit S-1372-412-0 will be limited to a VOC content in the TOC of the vapor stream of 10% or less by weight.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

S-1372-412-0

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

2. Post Project Potential to Emit (PE2)

S-1372-412-0

As stated above, VOC emissions are not assessed to piping and components handling fluid streams with a VOC content of 10% or less by weight.

Post-Project Potential to Emit	
Daily PE2 (lb-VOC/day)	Annual PE2 (lb-VOC/year)
0.0	0

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

Pursuant to 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)

Pursuant to District Rule 2201, the post-project stationary source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the stationary source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. The post-project stationary source Potential to Emit (SSPE2) is presented in the following table:

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

5. Major Source Determination

Rule 2201 Major Source Determination

Pursuant to 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, 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 pollutants are proposed or expected as a result of this project.

Rule 2410 Major Source Determination

As determined in Section VII.D.4 of this document, this facility is an existing Rule 2201 major source for VOC emissions. The following table summarizes the

potential CO₂e emissions from existing permits for this facility before the proposed project.

Permit Number	Equipment Rating (MMBtu/hr)	PE (ton-CO ₂ e/year)
S-1372-394-0	85	43,557
S-1372-395-0	85	43,557
S-1372-411-0	85	43,557
Total		130,671

The below is a sample calculation for the values in the above table.

Greenhouse Gas Calculations

Basis and Assumptions

- Emission factors and global warming potentials (GWP) are taken from EPA 40 CFR Part 98, Subpart A, Tables C-1 and C-2:

CO₂ 53.02 kg/MMBtu (116.89 lb/MMBtu)
 CH₄ 1 x 10⁻³ kg/MMBtu (0.002 lb/MMBtu)
 N₂O 1 x 10⁻⁴ kg/MMBtu (0.0002 lb/MMBtu)

GWP for CH₄ = 21 lb-CO₂(eq) per lb-CH₄
 GWP for N₂O = 310 lb-CO₂(eq) per lb-N₂O

Calculations

Annual Emissions

CO₂ Emissions = 85 MMBtu/hr x 8,760 hours/year x 116.89 lb/MMBtu
 = 87,036,294 lb-CO₂(eq)/year

CH₄ Emissions = 85 MMBtu/hr x 8,760 hours/year x 0.002 lb/MMBtu
 x 21 lb-CO₂(eq) per lb-CH₄
 = 31,273.2 lb-CO₂(eq)/year

N₂O Emissions = 85 MMBtu/hr x 8,760 hours/year x 0.0002 lb/MMBtu
 x 310 lb-CO₂(eq) per lb-N₂O
 = 46,165.2 lb-CO₂(eq)/year

Total = 87,036,294 + 31,273.2 + 46,165.2 = 87,113,732.4 lb-CO₂(eq)/year

Total = 87,113,732.4 lb-CO₂(eq)/year ÷ 2,000 lb/ton = **43,557 short tons-CO₂(eq)/year**

As indicated above, the SSPE CO₂e emissions before the proposal project is calculated to be greater than 130,671 short tons per year.

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

PSD Major Source Determination (tons/year)	
	CO2e
Facility PE before Project Increase	> 130,671
PSD Major Source Thresholds	100,000
PSD Major Source?	Yes

As shown above, the facility is an existing major source for PSD.

6. Baseline Emissions (BE)

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

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 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.*"

As discussed in Section VII.C.5 above, the facility is an existing Major Source for all pollutants; however, the project by itself would need to be a significant increase in order to trigger a Major Modification.

Fugitive emissions will be included to determine if a project is a Federal Major Modification only if the stationary source is one of the specific source categories listed in 40 CFR 51.165. This stationary source is not one of the specific source

categories listed in 40 CFR 51.165; therefore, this unit is not included in the SB288 Major Modification calculation.

Therefore, this project is not an SB 288 Major Modification.

8. Federal Major Modification

District Rule 2201, Section 3.17 states that major modifications are also federal major modifications, unless they qualify for either a “Less-Than-Significant Emissions Increase” exclusion or a “Plantwide Applicability Limit” (PAL) 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
NO _x	0
PM ₁₀	30,000
SO _x	80,000

Fugitive emissions will be included to determine if a project is a Federal Major Modification only if the stationary source is one of the specific source categories listed in 40 CFR 51.165. This stationary source is not one of the specific source categories listed in 40 CFR 51.165; therefore, this unit is not included in the Federal Major Modification calculation.

Therefore, this project does not constitute a Federal Major Modification.

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:

- NO₂ (as a primary pollutant)
- SO₂ (as a primary pollutant)
- CO
- PM
- PM₁₀
- Greenhouse gases (GHG): CO₂, N₂O, CH₄, HFCs, PFCs, and SF₆

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

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

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

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

I. Project Location Relative to Class 1 Area

As demonstrated in the “PSD Major Source Determination” Section above, the facility was determined to be a existing major source for PSD. Because the project is not located within 10 km of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

II. Significance of Project Emission Increase Determination

a. Potential to Emit of attainment/unclassified pollutant for New or Modified Emission Units vs PSD Significant Emission Increase Thresholds

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

PSD Significant Emission Increase Determination: Potential to Emit (tons/year)						
	NO2	SO2	CO	PM	PM10	CO2e
Total PE from New and Modified Units	0	0	0	0	0	0*
PSD Major Source threshold	40	40	100	25	15	75,000
New PSD Major Source?	N	N	N	N	N	N

* Project only involves fugitive emissions which are excluded from PSD potential to emit determination since this facility is not a specific source category specified in 40 CFR 52.21 (b)(1)(i).

As demonstrated above, because the project has a total potential to emit from all new and modified emission units below the PSD significant emission increase thresholds, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

10. 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 - BE, where:

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

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

BE = Baseline Emissions (per Rule 2201) 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 BE can be calculated as follows:

$$\begin{aligned} PE2_{quarterly} &= PE2_{annual} \div 4 \text{ quarters/year} \\ &= 0 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 0 \text{ lb VOC/qtr} \end{aligned}$$

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

S-1327-421-0

Quarterly NEC [QNEC]			
Pollutant	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
VOC	0	0	0

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

S-1372-100-30

As noted in Section VII of this engineering evaluation, the proposed modification does not constitute an NSR modification; Pursuant to section 3.26 of District Rule 2201, a modification is defined as:

3.26.1.1 Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.

The proposed modification does not result in a change in the hour of operation, production rate or method of operation which necessitates a change in permit conditions.

3.26.1.2 Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.

The proposed modification does not constitute a structural change or addition to an existing emissions unit which necessitates a change in permit conditions.

3.26.1.3 An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.

The proposed modification does not result in an increase in emissions from any emissions unit.

3.26.1.4 Addition of any new emissions unit which is subject to District permitting requirements.

The proposed modification does not result in the addition of any new emissions units.

3.26.1.5 A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

The proposed modification does not change a permit term or condition to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

As discussed above, the modification proposed to unit S-1372-100 does not meet any of the criteria for a modification. Therefore, it is not subject to the requirements of District Rule 2201.

A. BACT

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following:

- a) Any new emissions unit with a potential to emit exceeding two pounds per day*,
- b) The relocation from one stationary source to another of an existing emissions unit with a potential to emit exceeding two pounds per day, and/or
- c) Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day*.
- d) When a Major Modification is triggered for a modification project at a facility that is a Major Source.

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

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

As seen in Section VII.C.2 above, the applicant is proposing to install a new heater treater with a PE less than 2 lb/day. BACT is not triggered 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. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does not constitute a SB 288 and/or Federal Major Modification; therefore BACT is not triggered.

B. Offsets

1. Offset Applicability

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.

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

Offset Determination (lb/year)					
	NO_x	SO_x	PM₁₀	CO	VOC
Post Project SSPE (SSPE2)	> 20,000	> 54,750	> 29,200	> 200,000	> 20,000
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	Yes	Yes	Yes	Yes

2. Quantity of Offsets Required

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

The permit unit only emits VOC; therefore offset calculations will be required for VOC only.

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

Where,

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

BE = Baseline Emissions, (lb/year)

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

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = PE1 for:

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

otherwise,

BE = HAE

As calculated in Section VII.C.6 above, the BE from this unit are equal to zero. Also, there is only one emissions unit associated with this project and there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

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

Offsets Required = 0 lb-VOC/year

As demonstrated in the calculation above, the amount of offsets is zero. Therefore, offsets will not be required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:

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

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

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

As demonstrated in VII.C.7, this project 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. There are no new emissions units associated with this project. Therefore public noticing is not required for this project for PE > 100 lb/day.

c. Offset Threshold

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

Offset Threshold				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	> 20,000	> 20,000	20,000 lb/year	No
SO _x	> 54,750	> 54,750	54,750 lb/year	No
PM ₁₀	> 29,200	> 29,200	29,200 lb/year	No
CO	> 200,000	> 200,000	200,000 lb/year	No
VOC	> 20,000	> 20,000	20,000 lb/year	No

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

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a 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 SSIPE is compared to the SSIPE Public Notice thresholds in the following table:

Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice					
Pollutant	Project PE2 (lb/year)	Project 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	0	0	0	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.

Therefore, public noticing is not required for SSIPE purposes.

2. Public Notice Action

This project will not result in emissions, for any criteria pollutant, which would subject these emission units to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

D. Daily Emissions Limits (DEL)

Daily Emissions Limitations (DELs) and other enforceable conditions are required 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.

For the subject heater treater, the DEL is stated in the form of a 10% vapor stream VOC concentration limit which equates to a 0.0 lb-VOC/day limit.

Proposed Rule 2201 (DEL) Conditions

- The VOC content of heater treater vapor recovery gas shall not exceed 10% by weight. [District Rule 2201]

E. Compliance Assurance

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

1. Source Testing

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

2. Monitoring

The following testing conditions will be included for exemption from Rule 4623:

- Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this heater treater at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this heater treater in order to maintain exemption from the rule. [District Rule 2080]

The following testing conditions will be included for exemption from fugitive VOC emissions:

- Operator shall conduct quarterly sampling from the heater treater to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If fluids sampled are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201]
- VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201]

3. Record Keeping

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 to ensure compliance:

- Permittee shall maintain records of the tank identification number, Permit to Operate number, vapor VOC concentration, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 2080]
- 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.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit pursuant to Section 3.20 of this rule:

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application.

Rule 4001 New Source Performance Standards

This rule incorporates the New Source Performance Standards from 40 CFR Part 60. 40 CFR Part 60, Subparts, K, Ka and Kb could potentially apply to the storage tanks located at this facility. However, pursuant to 40 CFR 60.110 (b), 60.110(a) (b), and 60.110(b) (b), these subparts do not apply to storage vessels less than 10,000 bbls, used for petroleum or condensate, that is stored, processed, and/or treated at a drilling and production facility prior to custody transfer.

Therefore, the requirements of this subpart are not applicable to this project.

Rule 4101 Visible Emissions

Rule 4101 states that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity.

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

Rule 4102 Public Nuisance

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

California Health & Safety Code 41700 (Health Risk Assessment)

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

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

The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
S-1372-412-0	0.02 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 Attachment C of this report, the emissions increases for this project was determined to be less than significant.

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.

According to Section 4.4, tanks exclusively receiving and or storing organic liquids with a TVP less than 0.5 psia are exempt from this Rule except for complying with Sections 6.2, 6.3.6, 6.4 and 7.2. Therefore, the following conditions shall be placed on the permit:

- This heater treater shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2080]
- Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this heater treater at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this heater treater in order to maintain exemption from the rule. [District Rule 2080]
- The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products". [District Rule 2080]
- For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2080]
- The TVP testing shall be conducted at actual storage temperature of the organic liquid in the heater treater. The permittee shall also conduct an API gravity testing. [District Rule 2080]
- Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. Permittee shall maintain records of the tank identification number, Permit to Operate number, vapor VOC concentration, type of stored organic liquid, storage temperature, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 2080]
- All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

Therefore, continued compliance with the requirements of this rule is expected.

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

The applicant has indicated that this facility is not within 1,000 feet of a K-12 school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

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

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

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission units are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District concludes that potential health impacts are less than significant.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue Authorities to Construct S-1372-100-30 and '412-0 subject to the permit conditions on the attached draft Authority to Construct in Attachment D.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1372-100-30	3020-09-A	633 wells	\$5912.22
S-1372-412-0	3020-05-A	53,130 gallons	\$185.00

Attachments

- A Current PTO
- B Certificate of Conformity
- C Health Risk Assessment Analysis
- D Draft ATCs

Attachment A

Current PTO

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1372-100-26

EXPIRATION DATE: 05/31/2016

SECTION: 06 TOWNSHIP: 30S RANGE: 22E

EQUIPMENT DESCRIPTION:

TEOR OPERATION WITH WELL CASING COLLECTION SYSTEM SERVING 633 STEAM ENHANCED WELLS WITH 3-PHASE SEPARATORS, STANDBY FLARE, SLUG CATCHER, SCRUBBERS, HEAT EXCHANGERS, COMPRESSORS, PUMPS, SULFA CHECK AND LIQUID SULFUR REMOVAL SYSTEMS (GAMBLE/MCKITTRICK FRONT)

PERMIT UNIT REQUIREMENTS

1. Operation shall include the following equipment: 633 steam enhanced wells, well vent vapor collection system, standby flare, slug catchers, heat exchangers, compressors, pumps, vapor piping, dry fuel gas sulfur scrubbing system and liquid sulfur removal systems, tanks and 3-phase separators. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Operation shall include vapor piping from tanks S-1372-128, S-1641-34, -35, -36, and -37 to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. At least one sulfur removal system shall be operated at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
4. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with liquid sulfur removal system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Collected condensate shall be discharged into production pipeline. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Flare S-1372-100 shall only be used to incinerate TEOR vapors when one or more of steam generators S-1372-1, -2 or -4 are not in operation. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Flare shall only use PUC quality natural gas as auxiliary fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Flare shall be designed for smokeless operation, with no visible emissions in excess of 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. The flare in this permit shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Flare shall comply with all of the applicable requirements of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
12. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
14. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
15. Flares using flow-sensing automatic ignition systems and not using a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
16. Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
17. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Rule 4311, Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
18. The operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare. [District Rule 4311, 5.10] Federally Enforceable Through Title V Permit
19. The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: 1) A copy of the compliance determination conducted pursuant to Section 6.4.1, 2) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation, 3) A copy of the approved flare minimization plan pursuant to Section 6.5, 4) On and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2, and 5) Where applicable, monitoring data collected pursuant to Sections 5.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
20. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of Rule 4311 shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit
21. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: 1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Rule 4311, Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: 1) The total volumetric flow of vent gas in standard cubic feet for each day, 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6, 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month, 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month, 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, 6) Flare monitoring system downtime periods, including dates and times, 7) For each day and for each month provide calculated sulfur dioxide emissions, and 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
23. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, or EPA Method 25A or 25B. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
24. Upon request, the operator of flares that are subject to Section 5.6 shall make available to the APCO the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1] Federally Enforceable Through Title V Permit
25. Operator shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5, as appropriate. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
26. Operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
27. All of the general monitoring provisions of Section 6.9, as applicable, shall be met. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
28. Operator shall install and maintain equipment that records a real-time digital image of the flare and flame at a frame rate of no less than one frame per minute. The recorded image of the flare shall be of sufficient size, contrast, and resolution to be readily apparent in the overall image or frame. The image shall include an embedded date and time stamp. The equipment shall archive the images for each 24-hour period. In lieu of video monitoring the operator may use an alternative monitoring method that provides data to verify date, time, vent gas flow, and duration of flaring events. [District Rule 4311, 6.10] Federally Enforceable Through Title V Permit
29. Vapors from this well vent vapor control system shall be incinerated in steam generators S-1372-1, -2, -4, -30, -32, -33, -127, -317, -334 or standby flare and/or injected into DOGGR approved gas injection wells. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Total sulfur oxide (SOx as SO₂) emissions shall not exceed 1,075.2 lb/day for the following steam generators: S-1372-1, -2, -4, '127, '317, and standby flare. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Fugitive emissions from vapor collection and control system shall not exceed 239.6 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
32. There shall be no more than 30 gas leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permittee shall maintain accurate records of well casing vapor H₂S concentration (periodic sampling of no less than once per month), daily volume of casing vapor incinerated, and calculated daily SO₂ emissions from S-1372-1, '-2, and '-4. [District Rules 1070 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

35. Permittee shall maintain accurate component count for TEOR operation according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
36. The following test method shall be used for fuel gas sulfur content - ASTM D3246 or double GC for H₂S and mercaptans. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
37. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
38. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
39. The inspection requirements of Section 5.4.1 through Section 5.4.7 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10%) or less, as determined by the test methods in Section 6.3.4 of Rule 4401. [District Rule 4401, 4.7] Federally Enforceable Through Title V Permit
40. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
41. An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.1.1 and 5.1.2] Federally Enforceable Through Title V Permit
42. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.2.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401, 5.2.2] Federally Enforceable Through Title V Permit
43. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or a gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 2 of Rule 4401. [District Rule 4401, 5.2.2] Federally Enforceable Through Title V Permit
44. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.2.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.5 of Rule 4401. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
45. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit
46. An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401, 5.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

47. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401, 5.4.1] Federally Enforceable Through Title V Permit
48. An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.2] Federally Enforceable Through Title V Permit
49. In addition to the inspections required by Section 5.4.1 of Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit
50. In addition to the inspections required by Sections 5.4.1, 5.4.2 and 5.4.3 of Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Section 5.4.4.1 of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
51. An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401, 5.4.7] Federally Enforceable Through Title V Permit
52. District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401, 5.4.8] Federally Enforceable Through Title V Permit
53. An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit
54. An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and the component is found to be in compliance with the requirements of this rule. [District Rule 4401 5.5.2] Federally Enforceable Through Title V Permit
55. An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit
56. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit
57. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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58. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 3 of Rule 4401. [District Rule 4401, 5.5.5] Federally Enforceable Through Title V Permit
59. The time of the initial leak detection shall be the start of the repair period specified in Table 3 of Rule 4401. [District Rule 4401, 5.5.6] Federally Enforceable Through Title V Permit
60. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] Federally Enforceable Through Title V Permit
61. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit
62. An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 6.1.3] Federally Enforceable Through Title V Permit
63. Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401, 6.1.4] Federally Enforceable Through Title V Permit
64. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit
65. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401, 6.1.6] Federally Enforceable Through Title V Permit
66. Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401, 6.1.7] Federally Enforceable Through Title V Permit
67. Operator shall keep a list of all gauge tanks, as defined in Section 3.17 of Rule 4401. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
68. The results of gauge tank TVP testing conducted pursuant to Section 6.2.3 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401, 6.1.9] Federally Enforceable Through Title V Permit
69. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
70. An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. A process system as defined in Section 3.30 of Rule 4401 is not subject to compliance source testing requirements. [District Rule 4401, 6.2.1] Federally Enforceable Through Title V Permit
71. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection are controlled by an internal combustion engine subject to Rule 4702, a combustion device subject to Rule 4320, 4307 or 4308, a flare subject to Rule 4311. [District Rule 4401, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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72. An operator shall comply with the following requirements for each gauge tank, as defined in Section 3.17 of Rule 4401: Conduct periodic TVP testing of each gauge tank at least once every 24 months during summer (July - September), and whenever there is a change in the source or type of produced fluid in the gauge tank. The TVP testing shall be conducted at the actual storage temperature of the produced fluid in the gauge tank using the applicable TVP test method specified in Section 6.4 of Rule 4623 (Storage of Organic Liquids). The operator shall submit the TVP testing results to the APCO as specified in Section 6.1.9 of Rule 4401. [District Rule 4401, 6.2.3] Federally Enforceable Through Title V Permit
73. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
74. VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit
75. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit
76. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.4] Federally Enforceable Through Title V Permit
77. Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak. the date of repair, replacement, or removal from operation of leaking components, identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4] Federally Enforceable Through Title V Permit
78. Permittee shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. [District Rule 4401, 6.5] Federally Enforceable Through Title V Permit
79. In accordance with the approved Operator Management Plan (OMP), permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401, 6.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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80. By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit
81. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
82. The concentration of sulfur compounds in the exhaust from combustion equipment shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rules 4801 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
83. The requirements of SJVUAPCD Rule 4407 (Adopted 5/19/94) and SJVUAPCD Rule 4801 (Adopted 12/17/92) do not apply to the well vents. For Rule 4801 applicability, well vent emissions are fugitive emissions not considered to come from a point source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

Attachment B
Certificate of Conformity

San Joaquin Valley Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE AMENDMENT
 MINOR PERMIT MODIFICATION

COMPANY NAME: Plains Exploration & Production Company	FACILITY ID: S - 1372
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: Plains Exploration & Production Company	
3. Agent to the Owner: Steven P. Rusch	

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

- SRB* Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s).
- SRB* Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- SRB* Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- SRB* 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

 3/8/13
 Date

Steven P. Rusch
 Name of Responsible Official (please print)

Vice President-EHS & Governmental Affairs
 Title of Responsible Official (please print)

Attachment C

Health Risk Assessment Analysis

San Joaquin Valley Air Pollution Control District Risk Management Review

To: David Torii – Permit Services
 From: Ester Davila – Technical Services
 Date: March 19, 2013
 Facility Name: Plains Exploration & Production Company
 Location: NE Section 6, Township 30S, Range 22E
 Cymric Field, McKittrick Unit Lease
 Application #(s): S-1372-412-0
 Project #: S-1130582

A. RMR SUMMARY

RMR Summary			
Categories	1,256 BBL Heater Treater Vessel (Unit 412-0)	Project Totals	Facility Totals
Prioritization Score	0.00	0.00	>1.0
Acute Hazard Index	0.00	0.00	0.08
Chronic Hazard Index	0.00	0.00	0.03
Maximum Individual Cancer Risk (10^{-6})	0.02	0.02	1.07
T-BACT Required?	No		
Special Permit Conditions?	Yes		

Proposed Permit Conditions

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

Unit # 412-0

- The unit shall not operate within 2,437 feet of the nearest receptor.

B. RMR REPORT

I. Project Description

Technical Services received a request on March 14, 2013, to perform a Risk Management Review for the proposed installation of a 1,256 bbl heater treater vessel (tank) with permit exempt burners.

II. Analysis

Technical Services performed a health risk assessment using the "Oilfield Equipment Fugitive - District" spreadsheet. The cumulative prioritization scores were greater than 1.0, thus modeling was conducted using the AERMOD model, with the parameters outlined below and meteorological data for 2004-2008 from Fellows 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			
Source Type	Area	Location Type	Rural
X-Length (m)	2	Closest Receptor (m)	743
Y-Length (m)	2	Type of Receptor	Business
Release Height (m)	18	Pollutant Type	VOC
Annual Hours of Operation	8760	Emission Rate (lb/hr)	0.005
		Emission Rate (lb/yr)	47.5

III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with the heater treater vessel (tank) 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).**

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

Attachments:

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

Attachment D

Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-1372-100-30

LEGAL OWNER OR OPERATOR: PLAINS EXPLORATION & PRODUCTION COMPANY

MAILING ADDRESS: ATTN: KENNETH BORK
1200 DISCOVERY DRIVE, SUITE 500
BAKERSFIELD, CA 93309

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
CA

SECTION: 06 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF TEOR OPERATION WITH WELL CASING COLLECTION SYSTEM SERVING 633 STEAM ENHANCED WELLS WITH 3-PHASE SEPARATORS, STANDBY FLARE, SLUG CATCHER, SCRUBBERS, HEAT EXCHANGERS, COMPRESSORS, PUMPS, SULFA CHECK AND LIQUID SULFUR REMOVAL SYSTEMS (GAMBLE/MCKITTRICK FRONT): CONNECT HEATER TREATER LISTED ON PERMIT S-1372-412 TO VAPOR CONTROL SYSTEM

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. Operation shall include the following equipment: 633 steam enhanced wells, well vent vapor collection system, standby flare, slug catchers, heat exchangers, compressors, pumps, vapor piping, dry fuel gas sulfur scrubbing system and liquid sulfur removal systems, tanks and 3-phase separators. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operation shall include vapor piping from tanks S-1372-128, -412, S-1641-34, -35, -36, and -37 to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-1372-100-30 : Mar 16 2013 6:25PM -- TOMS : Joint Inspection NOT Required

5. At least one sulfur removal system shall be operated at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
6. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with liquid sulfur removal system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Collected condensate shall be discharged into production pipeline. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Flare S-1372-100 shall only be used to incinerate TEOR vapors when one or more of steam generators S-1372-1, -2 or -4 are not in operation. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Flare shall only use PUC quality natural gas as auxiliary fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Flare shall be designed for smokeless operation, with no visible emissions in excess of 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520] Federally Enforceable Through Title V Permit
12. The flare in this permit shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA method 9 test shall be conducted within 72 hours. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Flare shall comply with all of the applicable requirements of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
14. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
15. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
16. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311] Federally Enforceable Through Title V Permit
17. Flares using flow-sensing automatic ignition systems and not using a continuous flame pilot shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
18. Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311] Federally Enforceable Through Title V Permit
19. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Rule 4311, Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere [District Rule 4311] Federally Enforceable Through Title V Permit
20. The operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare. [District Rule 4311] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

21. The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: 1) A copy of the compliance determination conducted pursuant to Section 6.4.1, 2) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation, 3) A copy of the approved flare minimization plan pursuant to Section 6.5, 4) On and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2, and 5) Where applicable, monitoring data collected pursuant to Sections 5.10. [District Rule 4311] Federally Enforceable Through Title V Permit
22. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of Rule 4311 shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
23. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: 1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time, and duration of the flaring event. [District Rule 4311] Federally Enforceable Through Title V Permit
24. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Rule 4311, Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: 1) The total volumetric flow of vent gas in standard cubic feet for each day, 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6, 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month, 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month, 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, 6) Flare monitoring system downtime periods, including dates and times, 7) For each day and for each month provide calculated sulfur dioxide emissions, and 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311] Federally Enforceable Through Title V Permit
25. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, or EPA Method 25A or 25B. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311] Federally Enforceable Through Title V Permit
26. Upon request, the operator of flares that are subject to Section 5.6 shall make available to the APCO the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311] Federally Enforceable Through Title V Permit
27. Operator shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5, as appropriate. [District Rule 4311] Federally Enforceable Through Title V Permit
28. Operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311] Federally Enforceable Through Title V Permit
29. All of the general monitoring provisions of Section 6.9, as applicable, shall be met. [District Rule 4311] Federally Enforceable Through Title V Permit

30. Operator shall install and maintain equipment that records a real-time digital image of the flare and flame at a frame rate of no less than one frame per minute. The recorded image of the flare shall be of sufficient size, contrast, and resolution to be readily apparent in the overall image or frame. The image shall include an embedded date and time stamp. The equipment shall archive the images for each 24-hour period. In lieu of video monitoring the operator may use an alternative monitoring method that provides data to verify date, time, vent gas flow, and duration of flaring events. [District Rule 4311] Federally Enforceable Through Title V Permit
31. Vapors from this well vent vapor control system shall be incinerated in steam generators S-1372-1, -2, -4, -30, -32, -33, -127, -317, -334 or standby flare and/or injected into DOGGR approved gas injection wells. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Total sulfur oxide (SO_x as SO₂) emissions shall not exceed 1,075.2 lb/day for the following steam generators: S-1372-1, -2, -4, '127, '317, and standby flare. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Fugitive emissions from vapor collection and control system shall not exceed 239.6 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
34. There shall be no more than 30 gas leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Permittee shall maintain accurate records of well casing vapor H₂S concentration (periodic sampling of no less than once per month), daily volume of casing vapor incinerated, and calculated daily SO₂ emissions from S-1372-1, '-2, and '-4. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
36. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
37. Permittee shall maintain accurate component count for TEOR operation according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
38. The following test method shall be used for fuel gas sulfur content - ASTM D3246 or double GC for H₂S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
39. {1296} All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
40. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
41. The inspection requirements of Section 5.4.1 through Section 5.4.7 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10%) or less, as determined by the test methods in Section 6.3.4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
42. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
43. An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

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44. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.2.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401] Federally Enforceable Through Title V Permit
45. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or a gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 2 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
46. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.2.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.5 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
47. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] Federally Enforceable Through Title V Permit
48. An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401] Federally Enforceable Through Title V Permit
49. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401] Federally Enforceable Through Title V Permit
50. An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
51. In addition to the inspections required by Section 5.4.1 of Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
52. In addition to the inspections required by Sections 5.4.1, 5.4.2 and 5.4.3 of Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Section 5.4.4.1 of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401] Federally Enforceable Through Title V Permit
53. An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401] Federally Enforceable Through Title V Permit
54. District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401] Federally Enforceable Through Title V Permit

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55. An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401] Federally Enforceable Through Title V Permit
56. An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and the component is found to be in compliance with the requirements of this rule. [District Rule 4401] Federally Enforceable Through Title V Permit
57. An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401] Federally Enforceable Through Title V Permit
58. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401] Federally Enforceable Through Title V Permit
59. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401] Federally Enforceable Through Title V Permit
60. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
61. The time of the initial leak detection shall be the start of the repair period specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
62. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401] Federally Enforceable Through Title V Permit
63. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401] Federally Enforceable Through Title V Permit
64. An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
65. Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
66. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401] Federally Enforceable Through Title V Permit
67. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
68. Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401] Federally Enforceable Through Title V Permit

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69. Operator shall keep a list of all gauge tanks, as defined in Section 3.17 of Rule 4401. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401] Federally Enforceable Through Title V Permit
70. The results of gauge tank TVP testing conducted pursuant to Section 6.2.3 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401] Federally Enforceable Through Title V Permit
71. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401] Federally Enforceable Through Title V Permit
72. An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. A process system as defined in Section 3.30 of Rule 4401 is not subject to compliance source testing requirements. [District Rule 4401] Federally Enforceable Through Title V Permit
73. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection are controlled by an internal combustion engine subject to Rule 4702, a combustion device subject to Rule 4320, 4307 or 4308, a flare subject to Rule 4311. [District Rule 4401] Federally Enforceable Through Title V Permit
74. An operator shall comply with the following requirements for each gauge tank, as defined in Section 3.17 of Rule 4401: Conduct periodic TVP testing of each gauge tank at least once every 24 months during summer (July - September), and whenever there is a change in the source or type of produced fluid in the gauge tank. The TVP testing shall be conducted at the actual storage temperature of the produced fluid in the gauge tank using the applicable TVP test method specified in Section 6.4 of Rule 4623 (Storage of Organic Liquids). The operator shall submit the TVP testing results to the APCO as specified in Section 6.1.9 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
75. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401] Federally Enforceable Through Title V Permit
76. VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401] Federally Enforceable Through Title V Permit
77. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401] Federally Enforceable Through Title V Permit
78. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401] Federally Enforceable Through Title V Permit

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79. Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak. the date of repair, replacement, or removal from operation of leaking components, identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401] Federally Enforceable Through Title V Permit
80. Permittee shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. [District Rule 4401] Federally Enforceable Through Title V Permit
81. In accordance with the approved Operator Management Plan (OMP), permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
82. By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401] Federally Enforceable Through Title V Permit
83. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407] Federally Enforceable Through Title V Permit
84. The concentration of sulfur compounds in the exhaust from combustion equipment shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rules 4801 and 2520] Federally Enforceable Through Title V Permit
85. The requirements of SJVUAPCD Rule 4407 (Adopted 5/19/94) and SJVUAPCD Rule 4801 (Adopted 12/17/92) do not apply to the well vents. For Rule 4801 applicability, well vent emissions are fugitive emissions not considered to come from a point source. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
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PERMIT NO: S-1372-412-0

LEGAL OWNER OR OPERATOR: PLAINS EXPLORATION & PRODUCTION COMPANY
MAILING ADDRESS: ATTN: KENNETH BORK
1200 DISCOVERY DRIVE, SUITE 500
BAKERSFIELD, CA 93309

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
CA

SECTION: NE06 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

1,265 BBL HEATER TREATER VESSEL VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1372-100 WITH TWO PERMIT EXEMPT BURNERS (NATURAL GAS FIRED, 5 MMBTU/HR OR LESS)

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. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. The unit shall not operate within 2,437 feet of the nearest receptor. [District Rule 4102]
5. The heater treater shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This heater treater shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2080] Federally Enforceable Through Title V Permit

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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-1372-412-0 : Mar 25 2013 8:11AM - TOMS : Joint Inspection NOT Required

8. The VOC content of heater treater vapor recovery gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
10. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All piping, fittings, and valves on this heater treater shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The heater treater 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 leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Rule 4623 Section 6.4.7. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Operator shall conduct quarterly gas sampling for the heater treater to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this heater treater at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this heater treater in order to maintain exemption from the rule. [District Rule 2080] Federally Enforceable Through Title V Permit
18. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the heater treater. The permittee shall also conduct an API gravity testing. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. Permittee shall maintain records of the tank identification number, Permit to Operate number, vapor VOC concentration, type of stored organic liquid, storage temperature, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 2080] Federally Enforceable Through Title V Permit
20. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products". [District Rule 2080] Federally Enforceable Through Title V Permit
21. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2080] Federally Enforceable Through Title V Permit

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22. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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