



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

APR 23 2012

Mr. Joey Barulich
Vintage Production California LLC
9600 Ming Ave, Suite 300
Bakersfield, CA 93311

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1326
Project # 1120328**

Dear Mr. Barulich:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. The applicant is requesting that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes an increase in annual flow to an air-assisted process flare.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

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

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

DW: RE/cm

Enclosures

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 23 2012

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

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1326
Project # 1120328**

Dear Mr. Tollstrup:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. The applicant is requesting that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes an increase in annual flow to an air-assisted process flare.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authority to Construct # S-1326-382-2 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 30-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

DW: RE/cm

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San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

APR 23 2012

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

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1326
Project # 1120328**

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for Vintage Production California LLC in the heavy oil production stationary source within the the central Kern County fields, which has been issued a Title V permit. Vintage Production California LLC is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The project authorizes an increase in annual flow to an air-assisted process flare.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authority to Construct # S-1326-382-2 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

DW: RE/cm

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

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed significant modification of Vintage Production California LLC for its light oil production stationary source in the heavy oil production stationary source within the the central Kern County fields, California. The project authorizes an increase in annual flow to an air-assisted process flare.

The District's analysis of the legal and factual basis for this proposed action, project #1120328, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. There are no emission increases associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested by the public, the District will hold a public hearing regarding issuance of this modification. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.

California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The flare is located within VPC's heavy oil central stationary source SW Section 15, T29S, R29E. There is no school within 1,000 feet of the lease. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

Applicant has requested that the annual flow rate limit of process gas to an air-assisted flare be increased from 9.2 MMscf/yr to 20 MMscf/yr. Additionally, applicant has pointed out that PTO S1326-382-1 conditions # 3 and #6 are redundant (with condition #5) and has requested that they be deleted. Condition #9 of PTO S1326-382-1 is revised to reflect an increase in annual gas flow rate. The changes are as follows (strikeout deleted text and underlined added text):

- ~~3. Flare air assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann. [District Rule 2201] Y~~
5. Flare shall operate in a smokeless manner (no greater than 5% opacity) except for three minutes in any one hour. [District Rule 2201] Y
- ~~6. Operator shall immediately utilize air assisted combustion if flare exhibits visible emissions greater than 0% opacity. [District Rule 2201] Y~~
9. Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed ~~9.2~~ 20.0 MMscf/year. [District Rule 2201] Y

Please note that flare S-1326-382 was transferred from Stockdale Oil & Gas (previously permitted under S-1342-111) in project S1326, 1074864. Reference to heavy and light oil stationary source gas quantities in previous permit conditions is no longer relevant for the new owner, VPC, and was deleted. Additionally, VPC requested and the District approved the reporting of the annual sulfur content analysis of the gas only if requested by the District. Specific permit condition changes are as follows:

~~Flare shall be equipped with total waste gas volume flow meter. [District Rule 2201] Y (measuring gas from the Heavy Oil Central and Light Oil Central Stationary Source). Gas line from Light Oil Central Stationary Source (Section 34) shall be equipped with waste gas volume flow meter. [District Rule 2201] Y~~

~~Volume of gas flared from Heavy Oil Central Stationary Source (Section 15) shall be determined as the difference between the total volume of gas flared (from Light Oil and Heavy Oil Central Stationary Source) and the volume of gas flared from the Light Oil Central Stationary Source (Section 34). [District Rule 2201] Y~~

~~Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 150,000 scf/day. [District Rule 2201] Y~~

~~Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 20.0 MMscf/year. [District Rule 2201] Y~~

Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District ~~within 60 days of sample collection~~ upon request. [District Rule 2201 and District Rule 4801] Y

V. Equipment Listing

Pre-Project Equipment Description:

S-1326-382-1: 25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6 INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION

Proposed Modification:

S-1326-382-2: MODIFICATION OF 25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6 INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION: INCREASE THE ANNUAL GAS FLOW LIMIT FROM 9.2 MMSCF/YR TO 20 MMSCF/YR

Post Project Equipment Description:

S-1326-382-2: 25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6 INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION

VI. Emission Control Technology Evaluation

The flare is a commercial, engineered design that is expected to meet the FYI 83 emissions limits for NO_x of 0.068 lb/MMBtu, VOC 0.063 lb/MMBtu, PM₁₀ 0.008 lb/MMBtu, and CO of 0.37 lb/MMBtu. The sulfur content of the flared gas is restricted to 19 ppmv by Condition #7 PTO S-1326-382-1. The flare is equipped with a continuous pilot and pilot flame monitoring.

VII. General Calculations

A. Assumptions

Flared Gas

- Flare is rated at 150,000 scf/day (150 MMBtu/day, 6.25 MMBtu/hr).
- Sulfur (as H₂S) content of the flared gas will not exceed 19 ppmv.
- Higher heating value of the flared gas is 1000 Btu/scf. Gas analyses are provided in **Attachment II**.
- Daily flared volume is 150 mscf/day.
- Annual flared volume is 9.2 MMscf/yr – pre-project.
- Annual flared volume is 20 MMscf/yr – post-project.
- Emissions from combustion of pilot gas are neglected

B. Emission Factors

Pollutant	Emission Factor (lb/MMBtu)	Source
NOx	0.068	AP-42/FYI-83
SOx*	0.0034	19 ppmv S, PTO S-1326-382-1
PM10	0.008	AP-42/FYI-83-BACT
CO	0.37	AP-42/FYI-83
VOC	0.0063	AP-42/FYI-83

$$\frac{19 \text{ scf } H_2S}{1 \text{ MM scf gas}} \times \frac{\text{scf gas}}{940 \text{ Btu}} \times \frac{\text{lb.mol}}{379.4 \text{ scf } H_2S} \times \frac{64 \text{ lb } SO_x}{\text{lb.mol}} \times \frac{1 \text{ MMBtu}}{1 \text{ MM Btu}} = 0.0034 \frac{\text{lb}}{\text{MM Btu}}$$

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Flared gas daily emissions

NOx: (0.068 lb/MMBtu)(150 mscf/day)(MMBtu/mscf) = 10.2 lb/day
 SOx: (0.0034 lb/MMBtu) (150 mscf/day)(MMBtu/mscf) = 0.5 lb/day
 PM10: (0.008 lb/MMBtu) (150 mscf/day)(MMBtu/mscf) = 1.2 lb/day
 CO: (0.37 lb/MMBtu) (150 mscf/day)(MMBtu/mscf) = 55.5 lb/day
 VOC: (0.063 lb/MMBtu) (150 mscf/day)(MMBtu/mscf) = 9.5 lb/day

Flared gas annual emissions

NOx: (0.068 lb/MMBtu)(9200 mscf/yr)(MMBtu/mscf) = 626 lb/yr
 SOx: (0.0034 lb/MMBtu)(9200 mscf/yr)(MMBtu/mscf) = 31 lb/yr
 PM10: (0.008 lb/MMBtu)(9200 mscf/yr)(MMBtu/mscf) = 74 lb/yr
 CO: (0.37 lb/MMBtu)(9200 mscf/yr) (MMBtu/mscf) = 3,404 lb/yr
 VOC: (0.063 lb/MMBtu)(9200 mscf/yr)(MMBtu/mscf) = 580 lb/yr

Pre-Project Potential to Emit (PE1)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	10.2	626
SO _x	0.5	31
PM ₁₀	1.2	74
CO	55.5	3,404
VOC	9.5	580

2. Post Project Potential to Emit (PE2)

Flared gas annual emissions

NOx: (0.068 lb/MMBtu)(20,000 mscf/yr)(MMBtu/mscf) = 1360 lb/yr
 SOx: (0.0034 lb/MMBtu)(20,000 mscf/yr)(MMBtu/mscf) = 68 lb/yr

PM10: $(0.008 \text{ lb/MMBtu})(20,000 \text{ mscf/yr})(\text{MMBtu/mscf}) = 160 \text{ lb/yr}$
 CO: $(0.37 \text{ lb/MMBtu})(20,000 \text{ mscf/yr})(\text{MMBtu/mscf}) = 7,400 \text{ lb/yr}$
 VOC: $(0.063 \text{ lb/MMBtu})(20,000 \text{ mscf/yr})(\text{MMBtu/mscf}) = 1,260 \text{ lb/yr}$

Post Project Potential to Emit (PE2)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	10.2	1360
SO _x	0.5	68
PM ₁₀	1.2	160
CO	55.5	7,400
VOC	9.5	1,260

Greenhouse Gas Emissions (District Policy APR 2015)

Flare S-2918-22

CO2 Emissions: $(20,000 \text{ MMBtu/yr} - 9,200 \text{ MMBtu/yr}) \times 116.7 \text{ lb/MMBtu}$

= 1,260,360 lb-CO2e/day

÷ 2,000 lb/ton = 630 tons-CO2e/year

630 short tons-CO2e/year x 0.9072 metric tons/short ton

= **572 metric tons/yr > 230 tons-CO2e/year (significant increase)**

The emissions profiles are included in **Attachment III**.

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

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. The facility has no ERC s for onsite reductions.

Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
Pre-Project SSPE (SSPE1*)	102,299	36,853	35,850	212,295	1,020,680

*SSPE2 for project 1114230

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

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for

Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Post-Project Stationary Source Potential to Emit [SSPE2] (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	102,299	36,853	35,850	212,295	1,020,680
S-1326-382-1	-626	-31	-74	-3,404	-580
S-1326-382-2	1360	68	160	7,400	1,260
SSPE2	103,033	36,890	35,936	216,291	1,021,360

5. Major Source Determination

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

Major Source Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
Pre-Project SSPE (SSPE1 _{Permit Unit})	102,299	36,853	35,850	212,295	1,020,680
Post Project SSPE (SSPE2 _{Permit Unit})	103,033	36,890	35,936	216,291	1,021,360
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	No	No	Yes	Yes

This source is an existing Major Source for NO_x, CO, and VOC emissions and will remain a Major Source for these air contaminants. The increase in SO_x and PM₁₀ emissions associated with the project does not result in the source becoming a major source for these air contaminants.

6. Baseline Emissions (BE)

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

Pursuant to Section 3.7 of Rule 2201, BE = Pre-project Potential to Emit for:

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

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.22 of District Rule 2201.

a. BE SO_x and PM₁₀

As shown in Section VII.C.5 above, the facility is not a Major Source for SO_x and PM₁₀. Therefore BE = PE1 for these air contaminants.

b. BE NO_x, CO, and VOC

Clean Emissions Unit, Located at a Major Source

Pursuant to Rule 2201, Section 3.12, a Clean Emissions Unit is defined as an emissions unit that is "equipped with an emissions control technology with a minimum control efficiency of at least 95% or is equipped with emission control technology that meets the requirements for achieved-in-practice BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application.

This flare meets the requirements for achieved-in-practice BACT for NO_x, CO, and VOC listed in current BACT Guideline 1.4.2 "Waste Gas Flare – Incinerating Produced Gas." (See **Attachment V**)

Therefore, Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1) for NO_x, CO, and VOC.

As calculated in Section VII.C.1 above, PE1 is summarized in the following table:

Baseline Emissions [BE] (lb/year)					
	NO_x	SO_x	PM₁₀	CO	VOC
S-1326-282	1360	68	160	7,400	1,260

7. SB 288 Major Modification

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

Since this facility is not a major source for SO_x and PM₁₀ addressed in this project, this project does not constitute an SB 288 major modification for these air contaminants.

Since this facility is a major source for NO_x and VOCs, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO _x	1,360	50,000	No
VOC	1,260	50,000	No

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

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a “Major Modification” as defined in 40 CFR 51.165 and part D of Title I of the CAA.

SO_x and PM₁₀

Since this facility is not a Major Source for SO_x and PM₁₀, this project does not constitute a Federal Major Modification for these air contaminants. Additionally, since the facility is not a major source for PM₁₀ (140,000 lb/year), it is not a major source for PM_{2.5} (200,000 lb/year).

NO_x and VOCs

Pursuant to the District’s major modification policy, the first step is to determine if the project itself results in a significant emission increase greater than 0 lb/yr for NO_x and VOC. In this determination, only emission increases are counted. Applicant did not provide a specific calculation of the emissions increase for the project but has acknowledged that the proposed annual gas flow rate increase to the flare will result in an emissions increase exceeding 0 lb/yr for NO_x and VOC; therefore the project will be processed as a Federal Major Modification for NO_x and VOCs.

9. Quarterly Net Emissions Change (QNEC)

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

QNEC = PE2 - 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, the QNEC is calculated and listed in the table below.

S-1326-282

	PE2 (lb/yr)	BE (lb/yr)	QNEC (lb/qtr)
NOx	1360	626	184
SOx	68	31	9
PM10	160	74	22
CO	7,400	3,404	999
VOC	1,260	580	170

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

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

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

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

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

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

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

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

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

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

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)
PE2 = Post-Project Potential to Emit, (lb/day)

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

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

Where,

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

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

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

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

There is no change in emissions factors or daily emissions from the flare. However, District policy APR-1350-1 states that BACT is triggered if AIPE exceeds 2.0 lb/day on any given day. Note that pre-project permit conditions allow 61 days of operation (9.2 MMscf/yr/0.15 MMscf/day) and post-project permit conditions allow 133 days of operation (20 MMscf/yr/0.15 MMscf/day). Therefore, on "any given day" daily emissions could increase from 0 lb/day (i.e. on a day when the flare couldn't operate under pre-project annual restriction) to PE2 which exceeds 2 lb/day for NO_x, CO, and VOC. Therefore BACT is triggered for these air contaminants.

d. SB 288/Federal Major Modification

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

2. BACT Guidance

BACT Guideline 1.4.2, applies to waste gas flare – Incinerating Produced Gas (See **Attachment IV**)

3. Top-Down BACT Analysis

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

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

NO_x, CO, and VOC: Air-assisted flare

B. Offsets

1. Offset Applicability

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

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	PM ₁₀	CO	VOC
Post Project SSPE (SSPE2)	103,033	36,890	35,936	216,291	1,021,360
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	No	Yes	Yes	Yes

2. Quantity of Offsets Required

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

Per Sections 4.7.1 and 4.7.3, 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.

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

Where,

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

BE = Baseline Emissions, (lb/year)

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

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = Pre-project Potential to Emit for:

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

otherwise,

BE = Historic Actual Emissions (HAE)

As calculated in Section VII.C.6 above, the Baseline Emissions (BE) from this unit are equal to the Pre-Project Potentials to Emit (PE1), since the source is non-major (PM10 and SOx) and is a Clean Emissions Unit (NOx, CO, and VOC).

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:

NOx:

Unit	PE2 – BE (lb/yr)
S-1326-382	1360 – 626 = 734

The project is a Federal Major Modification for NOx. Therefore the NOx ERCs are required at a DOR = 1.5. The applicant has stated that the facility plans to use ERC certificate S-3697-2 to offset the increases in NOx emissions associated with this project. The quarterly amounts of ERCs reserved are $734 \times 1.5/4 = 275$.

<u>Pollutant</u>	<u>1st</u> <u>Quarter</u>	<u>2nd</u> <u>Quarter</u>	<u>3rd</u> <u>Quarter</u>	<u>4th</u> <u>Quarter</u>
NOx	275	275	275	275

PM10:

Unit	PE2 – BE (lb/yr)
S-1326-382	160 – 74 = 86

The applicant has stated that the facility plans to use ERC certificate ERC S-3061-4 with reductions at S-1342 Stockdale Oil & Gas (Section 15 T29S R29E) which is within 15 miles of the flare (DOR = 1.2:1). The quarterly offsets requirement is $(1.2 \times 86)/4 = 26$ lb/qtr.

The quarterly amounts of ERCs reserved are as follows

ERC S-3036-4

<u>Pollutant</u>	<u>1st</u> <u>Quarter</u>	<u>2nd</u> <u>Quarter</u>	<u>3rd</u> <u>Quarter</u>	<u>4th</u> <u>Quarter</u>
PM10	26	26	26	26

VOCs:

Unit	PE2 – BE (lb/yr)
S-1326-382	1260 – 580 = 680

The project is a Federal Major Modification for VOC. Therefore the NOx ERCs are required at a DOR = 1.5. The applicant has stated that the facility plans to use ERC certificate S-3699-1 to offset the increase in VOC emissions associated with this project. The quarterly amounts of ERCs reserved are $680 \times 1.5/4 = 255$.

<u>Pollutant</u>	<u>1st</u> <u>Quarter</u>	<u>2nd</u> <u>Quarter</u>	<u>3rd</u> <u>Quarter</u>	<u>4th</u> <u>Quarter</u>
VOC	255	255	255	255

The following offset conditions are included on the ATCs:

Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 275 lb/quarter, PM10: 26 lb/qtr, and VOC: 255 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Y

ERC Certificate Numbers S-3697-2, S-3061-4, and S-3699-1 (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Y

CO:

Unit	PE2 – BE (lb/yr)
S-1326-382	7400 - 3404 = 3,996

Notwithstanding the above, Section 4.6.1 of Rule 2201 states that emissions offsets are not required for increases in carbon monoxide in attainment areas provided the applicant demonstrates to the satisfaction of the APCO that the Ambient Air Quality Standards are not violated in the areas to be affected, and such emissions will be consistent with Reasonable Further Progress, and will not cause or contribute to a violation of Ambient Air Quality Standards. The District performed an Ambient Air Quality Analysis (discussed later) and determined that this project will not result in or contribute to a violation of an Ambient Air Quality Standard for CO (see **Attachment VI**). Therefore, CO offsets are not 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 is a Federal Major Modification. Therefore, public noticing for SB 288 or Federal Major Modification purposes is required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. 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 SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	102,299	103,033	20,000 lb/year	No
SO _x	36,853	36,890	54,750 lb/year	No
PM ₁₀	35,850	35,936	29,200 lb/year	No
CO	212,295	216,291	200,000 lb/year	No
VOC	1,020,680	1,021,360	20,000 lb/year	No

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

d. SSIPE > 20,000 lb/year

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

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	103,033	102,299	734	20,000 lb/year	No
SO _x	36,890	36,853	37	20,000 lb/year	No
PM ₁₀	35,936	35,850	86	20,000 lb/year	No
CO	216,291	212,295	3996	20,000 lb/year	No
VOC	1,021,360	1,020,680	680	20,000 lb/year	No

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

2. Public Notice Action

As discussed above, public noticing is required for this project for Federal Major Modification purposes. Therefore, public notice documents will be submitted to the

California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

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

Proposed Rule 2201 (DEL) Conditions:

Total sulfur (as H₂S) concentration of gas incinerated in flare shall not exceed 19 ppmv. [District Rule 2201 and District Rule 4801] Y

Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 150,000 scf/day. [District Rule 2201] Y

E. Compliance Assurance

1. Source Testing

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

2. Monitoring

The following monitoring conditions will be included on the ATC:

Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District Rule 2201 and District Rule 4801] Y

The net heating value of the gas being combusted in a flare shall be determined annually, pursuant to 40 CFR 60.18(f)(3) using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3) and District Rule 4311, 5.6] Y

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offsets, public notification and daily emission limit requirements of Rule 2201. The following condition(s) will appear on the ATC:

Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted, and such records shall be retained for a period of five years and made readily available for District inspection upon request. [District NSR Rule] Y

4. Reporting

There are no reporting requirements for Rule 2201.

F. Ambient Air Quality Analysis

Section 4.14.1 of this Rule requires that an ambient air quality analysis (AAQA) be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The Technical Services Division of the SJVAPCD conducted the required analysis.

As shown by the AAQA summary sheet (**Attachment VI**) the proposed equipment will not cause a violation of an air quality standard for NO_x, CO, SO_x, or PM₁₀

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Values are in µg/m³

Steam Generator	1 Hour	3 Hours	8 Hours.	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass ¹	X	X	X	Pass
SO _x	Pass ²	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass ³	Pass ³
PM2.5	X	X	X	Pass ³	Pass ³

*Results were taken from the attached PSD spreadsheet.

¹The project was compared to the 1-hour NO₂ National Ambient Air Quality Standard that became effective on April 12, 2010 using the District's approved procedures. The criteria pollutant 1-hour value passed using TIER I NO₂ NAAQS modeling

²The project was compared to the 1-hour SO₂ National Ambient Air Quality Standard that became effective on August 23, 2010 using the District's approved procedures.

³The maximum predicted concentration for emissions of these criteria pollutants from the proposed unit are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a SB 288/Federal Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Sections VIII-Rule 2201-C.1.a and VIII-Rule 2201-C.1.b, this project does constitute a SB 288/Federal Major Modification, therefore this requirement is applicable. The Statewide Compliance Certification and Title V Compliance Certification forms are included in **Attachment VII**.

H. Alternative Siting Analysis

The current project occurs at an existing facility. The applicant proposes to increase the annual flare gas flow rate of an existing flare.

Since the project will occur at the same location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2520 Federally Mandated Operating Permits

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

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

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity).

The flare is equipped with air assist and is expected to continue to operate without visible emissions as stated in the following ATC condition:

Flare shall operate in a smokeless manner (no greater than 5% opacity) except for three minutes in any one hour. [District Rule 2201] Y

Continued compliance with the requirement of this rule is expected.

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 – Health Risk Analysis

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.

A HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (**Attachment VI**), the total facility prioritization score including this project was less than or equal to one. Therefore, no future analysis is required to determine the impact from this project and compliance with the

District's Risk Management Policy is expected. However, the following special condition is required:

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

Rule 4201 Particulate Matter Concentration

This rule requires that the release or discharge of dust, fumes, or total suspended particulate matter emissions into the atmosphere from any single source operation not exceed 0.1 grain per cubic foot of gas at dry standard conditions.

Based on the observed past operation of this flare and the requirement that it operate with visible emissions not exceeding 5% in opacity, compliance with this rule is expected.

Rule 4311 Flares

The current PTO and ATC include conditions ensuring compliance with the rule and operational standards of subpart CFR 40 Subpart 60.18. This project is not expected to affect the compliance status. Continuous compliance is expected.

Rule 4801 Sulfur Compounds

The rule limits sulfur compound emission (as SO_x) concentrations to no more than 2000 ppmv, measured at the point of discharge. The flare is currently operating in compliance with the rule. Continuous compliance is expected.

California Health & Safety Code 42301.6 (School Notice)

The applicant has stated and the District has confirmed that the equipment is not located within 1000 feet of a K-12 school. Therefore the equipment is not subject to public notice requirements listed in CH&SC, section 42301.6.

California Environmental Quality Act (CEQA)

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

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

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project. Project specific impacts on global climate change were evaluated consistent with the adopted District policy – *Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. The District's engineering evaluation (this document – **Attachment VIII**) demonstrates that the project includes Best Performance Standards (BPS) for each class and category of greenhouse gas emissions unit. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue Authority to Construct S-1326-382-2 subject to the permit conditions on the attached draft Authority to Construct in **Attachment IX**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1326-382	3020-02-G	6.25 MMBtu/hr	\$815.00

ATTACHMENTS

- I: Current PTO S-1326-382-1
- II: Gas Analyses
- III: Emissions Profiles
- IV: BACT Guideline
- V: BACT Analysis
- VI: HRA
- VII: Compliance Certification Forms
- VIII: Best Performance Standards for Flare
- IX: Draft ATC

ATTACHMENT I
Current PTO S-1326-382-1

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-382-1

EXPIRATION DATE: 03/31/2016

SECTION: SW15 TOWNSHIP: 29S RANGE: 29E

EQUIPMENT DESCRIPTION:

25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6 INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION

PERMIT UNIT REQUIREMENTS

1. Flare shall be equipped with total waste gas volume flow meter (measuring gas from the Heavy Oil Central and Light Oil Central Stationary Source). Gas line from Light Oil Central Stationary Source (Section 34) shall be equipped with waste gas volume flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Volume of gas flared from Heavy Oil Central Stationary Source (Section 15) shall be determined as the difference between the total volume of gas flared (from Light Oil and Heavy Oil Central Stationary Source) and the volume of gas flared from the Light Oil Central Stationary Source (Section 34). [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This permit does not authorize the utilization of any IC engine, or other combustion device requiring a separate permit, for powering the air assist to the flare. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Flare shall operate in a smokeless manner (no greater than 5% opacity) except for three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall immediately utilize air assisted combustion if flare exhibits visible emissions greater than 0% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total sulfur (as H₂S) concentration of gas incinerated in flare shall not exceed 19 ppmv. [District Rule 2201] and District Rule 4801] Federally Enforceable Through Title V Permit
8. Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 150,000 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 9.2 MMScf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions from the flare shall not exceed any of the following (based on total gas combusted): NO_x (as NO₂): 0.068 lb/MMBtu; PM₁₀: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201] 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. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District Rule 2201 and District Rule 4801] Federally Enforceable Through Title V Permit
19. Permittee shall determine sulfur content of gas flared using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted, and such records shall be retained for a period of five years and made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Flare shall only be used with the net heating value of the gas being combusted being 300 Btu/scf or greater. [40 CFR 60.18 (c)(3) and District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
24. The net heating value of the gas being combusted in a flare shall be determined annually, pursuant to 40 CFR 60.18(f)(3) using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3) and District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
25. 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
26. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] 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.

ATTACHMENT II
Gas Analyses



E-mail pgtech@earthlink.net

4100 Burr Street
 P.O. Box 80847
 Bakersfield, CA 93380-0847
 Telephone (661) 324-1317
 Fax (661) 324-2746

Attention: Rick Green
 Vintage Petroleum LLC
 P.O. Box 82576
 Bakersfield, CA 93308

Sampled 9/19/2011
 Submitted 9/19/2011
 Analyzed 9/21/2011
 Reported 9/23/2011

Gas Analysis by Chromatography - ASTM D 3588-91

Description: Ant Hill Flare Lab No.: 110857-1
 Meter: 6099 Pressure
 Facility: Ant Hill Temperature:

Component	Mole %	Weight %	G/MCF
Oxygen	0.46	0.88	
Nitrogen	2.32	3.89	
Carbon Dioxide	0.91	2.40	
Hydrogen	ND	0.00	
Carbon Monoxide	ND	0.00	
Methane	95.89	92.05	
Ethane	0.39	0.70	
Propane	0.03	0.08	0.008
iso-Butane	ND	0.00	0.000
n-Butane	ND	0.00	0.000
iso-Pentane	ND	0.00	0.000
n-Pentane	ND	0.00	0.000
Hexanes Plus	ND	0.00	0.000
Totals	100.00	100.00	0.008

Specific Volume, ft ³ /lb	22.71	Values Corrected	CHONS	Weight %
Compressibility (Z) Factor	0.9980	for Compressibility		
Specific Gravity, Calculated	0.5770	0.5779	Carbon	70.198
			Hydrogen	23.290
GROSS			Oxygen	2.623
BTU/ft ³ Dry	976.1	976.1	Nitrogen	3.889
BTU/ft ³ Wet	959.1	960.9	Sulfur	0.000
BTU/lb Dry	22165.9	22209.4	F FACTOR @	8623
BTU/lb Wet	21778.0	21820.7	68 deg F, dsc/AMMSTU	
NET			F FACTOR @	8494
BTU/ft ³ Dry	879.0	880.8	68 deg F, dsc/AMMSTU	
BTU/ft ³ Wet	863.6	865.3		
BTU/lb Dry	19860.6	19999.8		
BTU/lb Wet	19611.3	19649.8		

Hydrogen Sulfide ppm	TR<1	Method	GC/FPO
Total Sulfur as H ₂ S, ppm	TR<1	Method	ASTM D3248
Hydrocarbon Dew Point, deg F	Not Tested	Method	Bureau of Mines
Moisture, lbs H ₂ O/MMCF	Not Tested	Method	Bureau of Mines

ND: None Detected

Tr: Trace

**ATTACHMENT III
Emissions Profile**

Permit #: S-1326-382-2	Last Updated
Facility: VINTAGE PRODUCTION CALIFORNIA	03/28/2012 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	1360.0	68.0	160.0	7400.0	1260.0
Daily Emis. Limit (lb/Day)	10.2	0.5	1.2	55.5	9.5
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	183.0	9.0	21.0	999.0	170.0
Q2:	183.0	9.0	21.0	999.0	170.0
Q3:	184.0	9.0	22.0	999.0	170.0
Q4:	184.0	10.0	22.0	999.0	170.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio	1.5		1.2		1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:	275.0		26.0		255.0
Q2:	275.0		26.0		255.0
Q3:	275.0		26.0		255.0
Q4:	275.0		26.0		255.0

**ATTACHMENT IV
BACT Guideline**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 1.4.2*

Last Update 12/31/1998

Waste Gas Flare - Incinerating Produced Gas

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
CO	Steam assisted or Air-assisted or Coanda effect burner, when steam unavailable		
NOx	Steam assisted or Air-assisted or Coanda effect burner, when steam unavailable		
PM10	Steam assisted or Air-assisted or Coanda effect burner, when steam unavailable Pilot Light fired solely on LPG or natural gas.		
SOx	Steam assisted or Air-assisted or Coanda effect burner, when steam unavailable Pilot Light fired solely on LPG or natural gas.	Precombustion SOx scrubbing system (non-emergency flares only.)	
VOC	Steam assisted or Air-assisted or Coanda effect burner, when steam unavailable		

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

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

ATTACHMENT V BACT Analysis

BACT Guideline 1.4.2, applies to Waste Gas Flare – Incinerating Produced Gas

Top Down BACT Analysis for NO_x, CO, and VOC emissions:

Step 1 - Identify All Control Technologies

Steam assisted or air-assisted or Coanda effect burner, when steam unavailable
(Achieved in Practice)

Step 2 - Eliminate Technologically Infeasible Options

None eliminated.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Steam assisted or air-assisted or Coanda effect burner, when steam unavailable
(Achieved in Practice)

Step 4 - Cost Effectiveness Analysis

Applicant has proposed the one remaining option from Step 1, air-assisted when steam unavailable. Therefore, a cost analysis is not required.

Step 5 - Select BACT

The flare is air-assisted and steam is unavailable. Therefore BACT is satisfied.

**ATTACHMENT VI
HRA/AAQA**

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Rob Rinaldi, AQE – Permit Services
 From: Trevor Joy, AQS – Technical Services
 Date: March 13, 2012
 Facility Name: Vintage Production CA
 Location: HOC
 Application #(s): S-1326-382-2
 Project #: 1120328

A. RMR SUMMARY

Categories	Units 382-2 Flare	Project Totals	Facility Totals
Prioritization Score	0.3	0.3	0.4
Acute Hazard Index	N/A ¹	N/A ¹	N/A ¹
Chronic Hazard Index	N/A ¹	N/A ¹	N/A ¹
Maximum Individual Cancer Risk (10 ⁻⁶)	N/A ¹	N/A ¹	N/A ¹
T-BACT Required?	No		
Special Permit Conditions?	Yes		

1. The prioritization score is less than 1 so no further analysis is required.

Proposed Permit Conditions

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

Unit # 382

{1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] N

B. RMR REPORT

I. Project Description

Technical Services received a revised request on February 23, 2012 to perform an Ambient Air Quality Analysis and a Risk Management Review for the proposed modification to unit 382 – the increased yearly flare usage.

II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Emissions were calculated using "Oilfield Natural Gas-Fired + Waste Gas Flare" emission factors. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for this proposed unit was less than 1 (see RMR Summary Table). Therefore, no further analysis was necessary. AERMOD was used for the AAQA analysis, with the parameters outlined below and meteorological data for Bakersfield 2005 – 2009 to determine the maximum dispersion factors.

The following parameters were used for the review:

Analysis Parameter Units 382-2			
Closest Receptor - Business (m)	1647	Closest Receptor – Resident (m)	640
NG and Waste Gas Usage (MMScf/hr)	0.15	NG and Waste Gas Usage (MMScf/yr)	9.2
Effective Release Height (m)	7.6	Gas Exit Temperature (K)	1273
Stack Inside Diameter (m)	2.1	Gas Exit Velocity (m/s)	20

Technical Services also performed modeling for criteria pollutants CO, NO_x, SO_x and PM₁₀; as well as a RMR. The emission rates used for criteria pollutant modeling were

	NO _x	Sox	CO	PM10	PM2.5
Lbs/hr	0	0	0	0	0
Lbs/yr	772	34	4,200	91	91

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*
Values are in µg/m³

Steam Generator	1 Hour	3 Hours	8 Hours.	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO _x	Pass	X	X	X	Pass
SO _x	Pass	Pass	X	Pass	Pass
PM ₁₀	X	X	X	Pass	Pass
PM2.5	X	X	X	Pass	Pass

*Results were taken from the attached PSD spreadsheet.

¹The project was compared to the 1-hour NO₂ National Ambient Air Quality Standard that became effective on April 12, 2010 using the District's approved procedures. The criteria pollutant 1-hour value passed using TIER I NO₂ NAAQS modeling

²The project was compared to the 1-hour SO₂ National Ambient Air Quality Standard that became effective on August 23, 2010 using the District's approved procedures.

³The maximum predicted concentration for emissions of these criteria pollutants from the proposed unit are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

III. Conclusion

The prioritization score is less than 1.0. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

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

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

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. Prioritization score with toxic emissions summary
- C. HEARTS – Facility Summary
- D. AAQA spreadsheet

ATTACHMENT VII
Compliance Certification

**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
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: Vintage Production California, LLC	FACILITY ID: S - 1326
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name:	
3. Agent to the Owner:	

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

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

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

Denny Brown
Signature of Responsible Official

2-3-12
Date

Denny Brown
Name of Responsible Official (please print)

Operations Lead
Title of Responsible Official (please print)

Increase Ant Hill Flare annual throughput limits.

CERTIFICATION

OXY USA Inc. hereby certifies as follows:

1. OXY USA Inc. owns or operates certain major stationary sources in the State of California. Such sources are comprised of a vast number of emission points. As used in this certification, the term "major stationary source" shall, with respect to OXY USA Inc. stationary sources in the SJVUAPCD, have the meaning ascribed thereto in SJVUAPCD Rule 2201, Section 3.23, and shall, with respect to all of OXY USA Inc.'s other stationary sources in the State of California, have the meaning ascribed thereto in section 302(J) of the Clean Air Act (42 U.S.C. Section 7602 (J)).

2. Subject to paragraphs 3 and 4 below, all major stationary sources owned or operated by OXY USA Inc. in the State of California are either in compliance, or on an approved schedule of compliance, with all applicable emission limitations and standards under the Clean Air Act and all of the State Implementation Plan approved by the Environmental Protection Agency.

3. This certification is made on information and belief and is based upon a review of OXY USA Inc.'s major stationary sources in the State of California by those employees of OXY USA Inc. who have operational responsibility for compliance. In conducting such reviews, OXY USA Inc. and its employees have acted in good faith and have exercised best efforts to identify any exceedance of the emission limitations and standards referred to in paragraph 2 thereof.

4. This certification shall speak as of the time and date of its execution.

CERTIFICATION

By: Denny Brown
Denny Brown

Date: 2-3-12

Title: Operations Lead

Time: 6:30 Am

ATTACHMENT VIII
Best Performance Standards for Flare S-1326-382

**Draft BPS Policy for VOC Control/Gas Disposal Oil and gas
Production, Processing, and Refining**

The flare is to be used only if disposal wells, a sales gas line, combustion sources creating useful work i.e. steam generator or permit exempt heater are not available. The flare must have a destruction efficiency > 98% and be steam assist or air assist if steam is unavailable, or Coanda effect and equipped with non-automatic or electronic or ballistic ignition. The draft policy follows.

**San Joaquin Valley
Unified Air Pollution Control District**

Best Performance Standard (BPS) x.x.xx

Date: 08/02/2011

Class	VOC Control/Gas Disposal	
Category	Oil and Gas Production, Processing, and Refining	
Best Performance Standard (in order of recommendation)	<p>1) -Incineration in existing engine, boiler, etc that creates useful work – provided that equipment is available and practically capable of incinerating vapors (see equipment specific BPS for standards and requirements for new fired equipment) and currently burning fossil fuel; or,</p> <p>-Transfer to Sales Gas Line – provided that access to sales gas line infrastructure is available; or,</p> <p>-Reinjection to Formation – provided that access to a disposal well is available.</p>	
	<p>The following options supersede the BPS requirements above if: a) equipment listed above is not available; or, b) gas cannot safely be transferred to equipment listed above; or, c) used to control emergency gas releases.</p> <p>2) -Incineration in new Thermal Oxidizer – see equipment specific Thermal Oxidizer BPS for standards and requirements for new equipment; or,</p> <p>-Incineration in New Flare with >98% TOC destruction efficiency, steam assist, air assist when steam is not available, or Coanda effect and equipped with non-continuous automatic electronic or ballistic ignition; or,</p> <p>-Incineration in Existing Thermal Oxidizer or Flare</p>	
Percentage Achieved GHG Emission Reduction Relative to Baseline Emissions	Gas-Fired Equipment	100%
	Transfer to Sales Gas Line	100%
	Reinjection to Formation	100%
	New Thermal Oxidizer	100%
	New Flare	1.5%
	Existing Thermal Oxidizer or Flare	0%
District Project Number	S-1103964	
Evaluating Engineer	Kristopher Rickards	
Lead Engineer	Leonard Scandura, P.E.	
Public Notice: Start Date	May 31, 2011	
Public Notice: End Date	June 30, 2011	
Determination Effective Date	August 2, 2011	

ATTACHMENT IX
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-1326-382-2

LEGAL OWNER OR OPERATOR: VINTAGE PRODUCTION CALIFORNIA LLC
MAILING ADDRESS: 9600 MING AVE, SUITE 300
BAKERSFIELD, CA 93311

LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW15 TOWNSHIP: 29S RANGE: 29E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6 INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION: INCREASE THE ANNUAL GAS FLOW LIMIT FROM 9.2 MMSCF/YR TO 20 MMSCF/YR

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. The "effective" stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. Stack shall vent vertically upward. [District Rule 4102]
4. The flare is to be used only if disposal wells, a sales gas line, combustion sources creating useful work or permit exempt heater are not available. The flare shall have a destruction efficiency > 98% and be air assist and equipped with non automatic or electronic or ballistic ignition. [Public Resources Code 21000-21177: California Environmental Quality Act, District Rule 4102, and CH&SC 41700]
5. Flare shall be equipped with total waste gas volume flow meter. [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

DRAFT
DAVID WARNER, Director of Permit Services

8-1326-382-2; Apr 6 2012 3:55PM - EDG:HLR : Joint Inspection NOT Required

6. This permit does not authorize the utilization of any IC engine, or other combustion device requiring a separate permit, for powering the air assist to the flare. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Flare shall operate in a smokeless manner (no greater than 5% opacity) except for three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Total sulfur (as H₂S) concentration of gas incinerated in flare shall not exceed 19 ppmv. [District Rule 2201 and District Rule 4801] Federally Enforceable Through Title V Permit
9. Maximum amount of gas combusted shall not exceed 150,000 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum amount of gas combusted shall not exceed 20.0 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions from the flare shall not exceed any of the following (based on total gas combusted): NO_x (as NO₂): 0.068 lb/MMBtu; PM₁₀: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flare shall comply with all of the applicable requirements of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. 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
16. 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
17. 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
18. 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
19. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District upon request. [District Rule 2201 and District Rule 4801] Federally Enforceable Through Title V Permit
20. Permittee shall determine sulfur content of gas flared using ASTM method D3246 or double GC for H₂S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
21. 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
22. 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

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CONDITIONS CONTINUE ON NEXT PAGE

23. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted, and such records shall be retained for a period of five years and made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
24. Flare shall only be used with the net heating value of the gas being combusted being 300 Btu/scf or greater. [40 CFR 60.18 (c)(3) and District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
25. The net heating value of the gas being combusted in a flare shall be determined annually, pursuant to 40 CFR 60.18(f)(3) using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3) and District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
26. 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, 6.2.1] Federally Enforceable Through Title V Permit
27. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Federally Enforceable Through Title V Permit
28. 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
29. 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
30. 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
31. 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

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CONDITIONS CONTINUE ON NEXT PAGE

32. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: NOx: 275 lb/quarter, PM10: 26 lb/qtr, and VOC: 255 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
33. ERC Certificate Numbers S-3697-2, S-3061-4, and S-3699-1 (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

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