San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

FEB 0 5 2014

Mr. Phil Acosta
Vintage Production Company
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1737
Project # S-1132866

Dear Mr. Acosta:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. Vintage proposed to increase flare S-1737-180-2's daily throughput and change its emission limit units from lb/MMBtu to lb/Mscf.

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

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

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures

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

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Flare

Facility Name:	Vintage Production California, LLC	Engineer:	Steve Davidson
Mailing Address:	9600 Ming Ave, Suite 300 Bakersfield, CA 93311	Date:	September 16, 2013
		Lead Engineer:	Dan Klevann
Contact Person:	Phil Acosta		DK 9-24-13
Telephone:	661-869-8065		
E-mail:	Phil_acosta@oxy.com		
Application #(s):	S-1737-180-2		
Project #:	S-1132866		
Deemed Complete:	7/23/13		

I. Proposal

Vintage Production California, LLC (Vintage) requests an Authority to Construct (ATC) permit to increase flare S-1737-180-2's daily throughput and change its emission limit units from lb/MMBtu to lb/Mscf.

Vintage has a Title V Permit. This modification can be classified as a Title V significant modification pursuant to Rule 2520, 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. Vintage 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 2410	Prevention of Significant Deterioration (6/16/11)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4311	Flares (06/18/2009)
Rule 4801	Sulfur Compounds (12/17/92)
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 flare is authorized to operate at various unspecified locations in Vintage's Light Oil Central stationary source. The equipment is precluded from operating within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

The flare is used as a vapor control device for oilfield equipment. Currently, only the tank vapor control system listed on permit S-1737-168-2 and portable tanks S-1737-181-0, '-182, '-183, and '-184 are authorized to use the flare as a control device. The flare is also allowed to operate as a well test flare. An ATC is required to authorize additional equipment to use the flare as a control device.

V. Equipment Listing

Pre-Project Equipment Description (see PTO in Appendix B):

S-1737-180-1: 49 MMBTU/HR FLARE APPROVED FOR USE IN WELL TESTING, TANK AND WELL VENT CONTROL, EQUIPMENT SHUTDOWN, EMERGENCIES AND OTHER SITUATIONS REQUIRING A SAFETY FLARE AT VARIOUS UNSPECIFIED LOCATIONS

Proposed ATC:

S-1737-180-2: MODIFICATION OF 49 MMBTU/HR FLARE APPROVED FOR USE IN WELL TESTING, TANK AND WELL VENT CONTROL, EQUIPMENT SHUTDOWN, ~~EMERGENCIES AND OTHER SITUATIONS REQUIRING A SAFETY FLARE~~ AT VARIOUS UNSPECIFIED LOCATIONS: INCREASE DAILY THROUGHPUT AND CHANGE EMISSION LIMIT UNITS FROM LB/MMBTU TO LB/MSCF

Additionally, the applicant proposes to delete condition # 15 on the current permit because the requirement is include in current permit condition # 16 (see conditions below):

> ~~15. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Y~~
>
> 16. The 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] Y

Post Project Equipment Description:

S-1737-180-2: 49 MMBTU/HR FLARE APPROVED FOR USE IN WELL TESTING, TANK AND WELL VENT CONTROL, EQUIPMENT SHUTDOWN, EMERGENCIES AND OTHER SITUATIONS REQUIRING A SAFETY FLARE AT VARIOUS UNSPECIFIED LOCATIONS

VI. Emission Control Technology Evaluation

The flare is designed to incinerate produced gas in a safe manner and without creating a nuisance. Engineered flares, such as these are designed to achieve a greater than 98% destruction efficiency of VOC and H_2S and to operate without visible emissions. Air-assist promotes complete combustion of gases.

VII. General Calculations

A. Assumptions

- The facility operates 24 hours per day, 7 days per week, and 52 weeks per year.
- The proposed modification will not affect fugitive VOC emissions associated with the flare
- Pre-project flare emission are based on 700 Mscf of gas flared per day
- Post-project flare emission are based on 1.4 MMscf of gas flared per day
- Pre and post-project flare emissions are based on 255.5 MMscf/yr (700 Mscf x 365 days)
- Produced gas heating value: 1,000 Btu/scf

B. Emission Factors

Pre and Post-Project Emission Factors		
Pollutant	Emission Factor (lb/MMBtu)	Source
NO_X	0.068	PTO and FYI 83
SO_X*	0.00071	PTO
PM_{10}	0.008	PTO
CO	0.370	PTO and FYI 83
VOC	0.063	PTO and FYI 83

*SOx = (0.25 gr-S/100 scf)(10^6scf fuel/MMSCF)(lb/7000 gr)(MMSCF/1,000 MMBtu)(64 lb-SO_2/32 lb-S) = **0.00071 lb/MMBtu**

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Flared gas daily emissions

NOx: (0.068 lb/MMBtu)(700 Mscf/day)(MMBtu/Mscf) = 47.6 lb/day

Flared gas annual emissions

NOx: (0.068 lb/MMBtu)(255,500 Mscf/yr)(MMBtu/Mscf) = 17,374 lb/yr

Pre-Project Potential to Emit (PE1)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO_X	47.6	17,374
SO_X	0.5	181
PM_{10}	5.6	2044
CO	259.0	94,535
VOC	44.1	16,097

2. Post Project Potential to Emit (PE2)

Flared gas daily emissions

NOx: (0.068 lb/MMBtu)(1,400 Mscf/day)(MMBtu/Mscf) = 95.2 lb/day

Flared gas annual emissions

NOx: (0.068 lb/MMBtu)(255,500 Mscf/yr)(MMBtu/Mscf) = 17,374 lb/yr

Post-Project Potential to Emit (PE2)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO_X	95.2	17,374
SO_X	1.0	181
PM_{10}	11.2	2044
CO	518.0	94,535
VOC	88.2	16,097

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

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source

and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

The SSPE was calculated in Project S1737, 1123486 and is found in the table below:

SSPE1 (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE1	69,037	1,133	12,952	164,459	57,795

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

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

There are no increases in annual emissions for any criteria pollutant associated with this project; therefore, SSPE2 = SSPE1 for all criteria pollutants. The SSPE2 is listed in the table below:

SSPE2 (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	69,037	1,133	12,952	164,459	57,795

5. Major Source Determination

Rule 2201 Major Source Determination:

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

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

Rule 2201 Major Source Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE1	69,037	1,133	12,952	164,459	57,795
SSPE2	69,037	1,133	12,952	164,459	57,795
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	No	No	No	Yes

As seen in the table above, the facility is an existing Major Source for NOx and VOC. It is not becoming a Major Source for any other criteria pollutants as a result of this project.

Rule 2410 Major Source Determination:

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

PSD Major Source Determination (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	$CO2e^1$
Estimated Facility PE before Project Increase	34.5	28.9	0.6	82.2	6.5	6.5	58,937
PSD Major Source Thresholds	250	250	250	250	250	250	100,000
PSD Major Source ? (Y/N)	N	N	N	N	N	N	N

[1]See GHG alcualtions in Appendix C

As shown above, the facility is not an existing major source for PSD for any pollutant. Therefore the facility is not an existing major source for PSD.

6. Baseline Emissions (BE)

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

Pursuant to District Rule 2201, BE = PE1 for:

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

otherwise,

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

a. BE NO_X

Pursuant to Rule 2201, 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.

The flare is equipped with a Coanda effect burner, which meets the requirements for achieved-in-practice BACT for all pollutants. Therefore, BE=PE1.

b. BE SO_X

As shown in Section VII.C.5 above, the facility is not a major source for SO_X emissions.

Therefore BE=PE1.

c. BE PM_{10}

As shown in Section VII.C.5 above, the facility is not a major source for PM_{10} emissions.

Therefore BE=PE1.

d. BE CO

As shown in Section VII.C.5 above, the facility is not a major source for CO emissions.

Therefore BE=PE1.

e. BE VOC

Pursuant to Rule 2201, 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.

The flare is equipped with a Coanda effect burner, which meets the requirements for achieved-in-practice BACT for all pollutants. Therefore, BE=PE1.

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."

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO_x	17,374	50,000	No
VOC	16,097	50,000	No

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

8. Federal Major Modification

District Rule 2201 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.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

Step 1

For existing emissions units, the increase in emissions is calculated as follows.

Emission Increase = PAE – BAE - UBC

Where: PAE = Projected Actual Emissions, and
BAE = Baseline Actual Emissions
UBC = Unused baseline capacity

If there is no increase in design capacity or potential to emit, the PAE is equal to the annual emission rate at which the unit is projected to emit in any one year, selected by the operator, within 5 years after the unit resumes normal operation. If detailed PAE are not provided, the PAE is equal to the PE2 for each permit unit.

The BAE is calculated based on historical emissions and operating records for any 24 month period, selected by the operator, within the previous 10 year period (5 years for electric utility steam generating units). The BAE must be adjusted to exclude any non-compliant operation emissions and emissions that are no longer allowed due to lower applicable emission limits that were in effect when this application was deemed complete.

The project's combined total emission increases are calculated in Appendix C and compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO_x*	338	0	Yes
VOC*	1952	0	Yes
PM_{10}	244	30,000	No
$PM_{2.5}$	244	20,000	No
SO_x	21	80,000	No

*If there is any emission increases in NO_x or VOC, this project is a Federal Major Modification and no further analysis is required.

Since there is an increase in NO_x and VOC emissions, this project constitutes a Federal Major Modification, and no further analysis is required.

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

Rule 2410 applies to pollutants for which the District is in attainment or for unclasssified, 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.

The project's combined total emission increases are calculated in Appendix C and compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO_x*	17,036	0	Yes
VOC*	15,784	0	Yes
PM_{10}	2004	30,000	No
$PM_{2.5}$	2004	20,000	No
SO_x	177	80,000	No

*If there is any emission increases in NO_x or VOC, this project is a Federal Major Modification and no further analysis is required.

Since there is an increase in NO_x and VOC emissions, this project constitutes a Federal Major Modification, and no further analysis is required.

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

Rule 2410 applies to pollutants for which the District is in attainment or for unclasssified, 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. Potential to Emit for New or Modified Emission Units vs PSD Major Source Thresholds

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

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

PSD Major Source Determination: Potential to Emit (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Total PE from New and Modified Units	8.7	8.0	0.1	47.3	1.0	1.0	25,112
PSD Major Source threshold	250	250	250	250	250	250	100,000
New PSD Major Source?	N	N	N	N	N	N	N

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

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix A.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

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

a. Any new emissions unit with a potential to emit exceeding two pounds per day,

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

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

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

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

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

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

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

AIPE = PE2 – 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)

HAPE = PE1 x (EF2/EF1)

Where,
PE1 = The emissions unit's PE prior to modification or relocation, (lb/day)
EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1
EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

AIPE = PE2 – (PE1 * (EF2 / EF1))

Since EF1 = EF2, AIPE = PE2 – PE1

	PE1	PE2	PE2 – PE1	BACT Triggered?
NO_X	47.6	95.2	47.6	Yes
SO_X	0.5	1.0	0.5	No
PM_{10}	5.6	11.2	5.6	Yes
CO	259.0	518.0	259	No[2]
VOC	44.1	88.2	44.1	Yes

[2] SSPE2 of less than 200,000 pounds per year of CO

As demonstrated above, the AIPE is greater than 2.0 lb/day for NOx, PM10, and VOC emissions. Therefore BACT is triggered for these pollutants.

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 VOC for all emissions units in the project for which there is an emission increase.

2. BACT Guideline

BACT Guideline 1.4.2, applies to the produced gas flare. [Waste Gas Flare – Incinerating Produced Gas] (See **Appendix D)**

3. Top-Down BACT Analysis

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

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

NOx, CO and VOC: Coanda Effect Burner

PM10: Coanda Effect Burner & natural gas pilot fuel

B. Offsets

1. Offset Applicability

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

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

Offset Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	69,037	1,133	12,952	164,459	57,795
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	No	No	No	Yes

2. Quantity of Offsets Required

As seen above, the facility is an existing Major Source for all pollutants and the SSPE2 is greater than the offset thresholds. Therefore offset calculations will be required for this project.

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) = (Σ[PE2 – BE] + ICCE) x 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 the PE1 since the unit is a Clean Emissions Unit.

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 (lb/year) = ([PE2 – BE] + ICCE) x DOR

Since the BE = PE2 for all pollutants offsets are not required.

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 Federal Major Modification purposes is required.

As demonstrated in VII.C.7, this project is not a SB 288 Major Modification. Therefore, public noticing for SB 288 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 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	69,037	69,037	20,000 lb/year	No
SO_X	1133	1133	54,750 lb/year	No
PM_{10}	12,952	12,952	29,200 lb/year	No
CO	164,459	164,459	200,000 lb/year	No
VOC	57,795	57,795	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	69,037	69,037	0	20,000 lb/year	No
SO_x	1133	1133	0	20,000 lb/year	No
PM_{10}	12,952	12,952	0	20,000 lb/year	No
CO	164,459	164,459	0	20,000 lb/year	No
VOC	57,795	57,795	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.

2. Public Notice Action

As discussed above, public noticing is required for this project. 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:

- The flare shall not incinerate more than 1.4 MMscf/day nor 262.8 MMscf/year of gas. [District Rule 2201] Y
- Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 0.068 lb/MMBtu; VOC (as methane) - 0.063 lb/MMBtu; CO - 0.37 lb/MMBtu or PM10 - 0.008 lb/MMBtu. [District Rule 2201] Y
- Gas sulfur content shall not exceed 0.25 gr/100 scf. [District Rules 2201 and 4801] 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

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

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

- Permittee shall maintain accurate daily records of volume, type, higher heating value, and sulfur content and of gas flared. [District Rule 2201] Y
- Permittee shall maintain accurate records of location and duration of operation at each stationary source. [District Rule 2201] Y
- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 22001] Y

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to Appendix E of this document for the AAQA summary sheet.

Technical Services performed modeling for criteria pollutants CO, NOx, SOx and PM_{10}; as well as a RMR. The emission rates used for criteria pollutant modeling were 1.08 lb/hr CO, 1.98 lb/hr NOx, 0.02 lb/hr SOx, and 0.23 lb/hr PM_{10}. The engineer supplied the maximum fuel rate for the IC engine used during the analysis.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Diesel ICE	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	Pass	X	Pass	Pass
PM_{10}	X	X	X	Pass[2]	Pass[2]
$PM_{2.5}$	X	X	X	Pass[2]	Pass[2]

*Results were taken from the attached PSD spreadsheet.
[1]The 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.
[2]The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165

G. Compliance Certification

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

H. Alternate Siting Analysis

The current project occurs at an existing facility.

Since the project will provide flaring capacity to be used at the same locations, the existing sites will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2520 Federally Mandated Operating Permits

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

Section 3.20.2 states that a minor permit modifications are not Title I modifications (Federal Major Modifications) as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act. This project is a Federal Major Modification; consequently, the proposed project constitutes a Significant Modification to the Title V Permit pursuant to Section 3.29.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. However, no subparts of 40 CFR Part 60 apply to produced gas-fired flares.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to flare operations.

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.

The flare is equipped with air assist and is expected to continue to operate without visible emissions dark as, or darker than, Ringelmann 1 or 20% opacity as stated in the following ATC condition:

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

Rule 4102 Nuisance

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

California Health & Safety Code 41700 (Health Risk Assessment)

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 (**Appendix E**), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

RMR Summary			
Categories	**Waste Gas Flare (Unit 449-2)**	**Project Totals**	**Facility Totals**
Prioritization Score	0.09	0.9	>1.0
Acute Hazard Index	0.03	0.02	0.43
Chronic Hazard Index	NA	N/A[1]	0.06
Maximum Individual Cancer Risk (10^{-6})	NA	N/A[1]	**2.3**
T-BACT Required?	**No**		
Special Permit Conditions?	**Yes**		

[1]The Acute Hazard Index and Maximum Individual Cancer Risk were not calculated since there are no risk factors associated with any of the Hazardous Air Pollutants (HAPs) under analysis.

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.

Special Permit Condition Unit # 180-2

The flare must not operate within 100 meter from the facility boundary. [District Rule 4102]

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

The concentration of particulate matter in the flare's exhaust can be calculated given the following data:

F-Factor for Flared Gas: 8,604 dscf/MMBtu at 60 °F
PM_{10} Emission Factor: 0.026 lb-PM_{10}/MMBtu
Percentage of PM as PM_{10} in Exhaust: 100%
Exhaust Oxygen (O_2) Concentration: 3%
Excess Air Correction to F Factor = 20.9 ÷ (20.9 - 3) = 1.17

$$\frac{\left(\frac{0.026\,lb\cdot PM}{MMBtu}\times\frac{7{,}000\,grain}{lb}\right)}{\frac{8{,}604\,ft^3}{MMBtu}\times 1.17}=0.01\frac{grain\cdot PM}{ft^3}$$

Since 0.01 grain/dscf is less than 0.1 grain/dscf, compliance with District Rule 4201 is expected and the following condition will be listed on the flare's permit to ensure compliance.

- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

Rule 4301 Fuel Burning Equipment

This rule specifies maximum emission rates in lb/hr for SO_2, NO_2, and combustion contaminants (defined as total PM in Rule 1020). This rule also limits combustion contaminants to ≤ 0.1 gr/scf. According to AP 42 (Table 1.4-2, footnote c), all PM emissions from natural gas and LPG combustion are less than 1 μm in diameter.

The following table compares the Flare's emissions with Rule 4301 limits.

Rule 4301 Limits			
Pollutant	Flare Emissions (lb/hr)	Rule 4301 Limits (lb/hr)	Compliant?
NO_2	4.0	140	Yes
SO_2	0.1	200	Yes
Total PM	1.5	200	Yes

Since none of the Rule 4301 limits are exceeded, compliance with Rule 4301 is expected. Since the proposed emission limits already placed on the flare permit are much more stringent, no additional conditions will be listed.

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.

Section 6.5.3 requires the applicant to submit an updated Flare Minimization Plan (FMP) when:

- The equipment change would require an ATC and would impact the emissions from the flare, and
- The ATC is deemed complete after June 18, 2009, and
- The modification is not solely the removal or decommissioning of equipment that is listed in the FMP, and has no associated increase in flare emissions.

This project requires an updated flare minimization plan. The applicant has submitted an approved plan; therefore, this project meets this requirement of the FMP.

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 SOx) 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 District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

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

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

Greenhouse Gas (GHG) Significance Determination

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

The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

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

projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATC S-1737-180-2 subject to the permit conditions on the attached draft ATC in **Appendix G**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1737-180-2	3020-02-H	49 MMBtu/hr	$1030

APPENDIX A
Quarterly Net Emissions Change (QNEC)

Quarterly Net Emissions Change (QNEC)

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

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

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

$PE2_{quarterly}$ = $PE2_{annual}$ ÷ 4 quarters/year
= 17,374 lb-NOx/year ÷ 4 qtr/year
= 4344 lb-NOx/qtr

$PE1_{quarterly}$= $PE1_{annual}$ ÷ 4 quarters/year
= 17,374 lb/year ÷ 4 qtr/year
= 4344 lb PM_{10}/qtr

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO_X	4344	4344	0
SO_X	45	45	0
PM_{10}	511	511	0
CO	23,634	26,634	0
VOC	4024	4024	0

Permit #: S-1737-180-2 **Last Updated**
Facility: VINTAGE PRODUCTION CALIFORNIA 07/26/2013 DAVIDSOS

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	19806.0	175.0	2330.0	107770.0	18350.0
Daily Emis. Limit (lb/Day)	95.2	1.0	11.2	518.0	88.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

APPENDIX B
PTO

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1737-180-1 **EXPIRATION DATE:** 02/28/2014

EQUIPMENT DESCRIPTION:
49 MMBTU/HR FLARE APPROVED FOR USE IN WELL TESTING, TANK AND WELL VENT CONTROL, EQUIPMENT SHUTDOWN, EMERGENCIES AND OTHER SITUATIONS REQUIRING A SAFETY FLARE AT VARIOUS UNSPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Flare shall not be located within 1000 feet of any K-12 school. [CH&SC 42301.6]
2. Flare shall always operate at least 500 feet away from the closest receptor. [District Rule 4102]
3. Flare shall always operate at least 500 feet away from the facility's fenceline. [District Rule 4102]
4. Permittee shall notify the District Compliance Division of each location at which the flare is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
6. Flare shall operate in a smokeless manner (0% opacity) except for three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Flare gas inlet line shall be equipped with operational volumetric totalizing flowrate indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Gas flowrate to flare (not including pilot gas) shall not exceed 700,000 cubic feet per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 0.068 lb/MMBtu; VOC (as methane) - 0.063 lb/MMBtu; CO - 0.37 lb/MMBtu or PM10 - 0.008 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas sulfur content shall not exceed 0.25 gr/100 scf. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
11. Gas shall be tested quarterly for sulfur content. Upon transfer of location or change in the method of operation of the flare (excluding emergencies), gas shall be tested weekly for sulfur content. If compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks then the fuel testing frequency shall be quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The sulfur content of the gas being flared shall be determined using ASTM D1072, D3031, D4084, D3246, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. A trained observer, as defined in EPA Method 22, shall check visible emissions at least once every two weeks for a period of 15 minutes. If visible emissions are detected at any time during this period, the observation period shall be extended to two hours. A record containing the results of these observations shall be maintained, which also includes company name, process unit, observer's name and affiliation, date, estimated wind speed and direction, sky condition, and the observer's location relative to the source and sun. [District Rules 2080 and 4101] Federally Enforceable Through Title V Permit
15. 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
16. The 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
17. Permittee shall obtain an ATC to modify any permit unit which authorizes this flare as a control device prior to this flare operating as a control device for that permit unit. [District Rule 2201] Federally Enforceable Through Title V Permit
18. 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
19. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
20. 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
21. The flare 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 2201] Federally Enforceable Through Title V Permit
22. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Permittee shall maintain accurate daily records of volume, type, higher heating value, and sulfur content of gas flared [District Rule 2201 & 1070] Federally Enforceable Through Title V Permit
24. Permittee shall maintain accurate records of location and duration of operation at each stationary source. [District Rule 2201, 4311 & 4409] Federally Enforceable Through Title V Permit
25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 2201, 4311 & 4409] Federally Enforceable Through Title V Permit

APPENDIX C
Federal Major Modification Calculations
&
Facility GHG Calculations

Emission Increase = PAE – BAE - UBC

Where: PAE = Projected Actual Emissions, and
BAE = Baseline Actual Emissions

Historic Actual Annual Flow Rate: 4.97 MMscf/yr

Projected Actual Annual gas Flow Rate: 35.5 MMscf/yr (2013 total + 20%)

Unused Baseline Annual Gas Flow Rate: 0 MMscf/yr

Projected Actual Emissions = PE1

NOx: (0.068 lb/MMBtu)(35.5 MMscf/yr)(MMBtu/Mscf) = 2,414 lb/yr

SOx: (0.00071 lb/MMBtu)(35.5 Mscf/yr)(MMBtu/Mscf) = 25.2 lb/yr

PM_{10}: (0.008 lb/MMBtu)(35.5 Mscf/yr)(MMBtu/Mscf) = 284 lb/yr

VOC: (0.0638 lb/MMBtu)(35.5 Mscf/yr)(MMBtu/Mscf) = 2265 lb/yr

Baseline Actual Emissions

NOx: (0.068 lb/MMBtu)(4.97 Mscf/yr)(MMBtu/Mscf) = 338 lb/yr

SOx: (0.00071 lb/MMBtu)(4.97 Mscf/yr)(MMBtu/Mscf) = 4 lb/yr

PM_{10}: (0.008 lb/MMBtu)(4.97 Mscf/yr)(MMBtu/Mscf) = 40 lb/yr

VOC: (0.0638 lb/MMBtu)(4.97 Mscf/yr)(MMBtu/Mscf) = 313 lb/yr

Emission Increase

NOx: 2,414 lb/yr - 338 lb/yr = 2076 lb/yr

SOx: 25 lb/yr - 4 lb/yr = 21 lb/yr

PM_{10}: 284 lb/yr - 40 lb/yr = 244 lb/yr

VOC: 2265 lb/yr - 313 lb/yr = 1952 lb/yr

2012 ANNUAL FLARING AT ROSE
PTO # 1737-168, Condition # 19 & SJVUAPCD Rule 4311

Date	Volume Flared (MSCF)	Duration of Flare Event (hrs:min)		Permitted Maximum Daily Limit (MSCF)
2/1/12	20.00	2	0	700
2/28/12	40.00	8	0	700
3/7/12	45.00	7	0	700
3/20/12	43.00	6	0	700
3/21/12	150.00	24	0	700
3/22/12	86.00	12	45	700
5/19/12	40.00	5	25	700
6/17/12	60.00	6	30	700
6/18/12	50.00	6	0	700
6/28/12	20.00	2	0	700
7/2/12	80.00	7	0	700
7/17/12	30.00	0	45	700
7/19/12	21.00	17	0	700
7/20/12	9.00	7	0	700
7/21/12	120.00	10	0	700
7/22/12	120.00	11	30	700
7/23/12	40.00	3	45	700
7/25/12	58.00	6	0	700
7/26/12	100.00	8	0	700
7/28/12	50.00	4	0	700
7/29/12	35.00	3	0	700
7/30/12	150.00	24	0	700
7/31/12	50.00	3	30	700
8/1/12	100.00	8	0	700
8/10/12	90.00	6	0	700
8/11/12	140.00	9	30	700
8/16/12	160.00	13	0	700
8/27/12	100.00	5	30	700
8/28/12	20.00	1	0	700
8/29/12	80.00	6	0	700
8/30/12	120.00	11	30	700
9/2/12	50.00	4	0	700
9/6/12	40.00	3	0	700
10/25/12	30.00	2	0	700
11/7/12	63.00	5	15	700
11/10/12	40.00	12	0	700
11/11/12	60.00	12	0	700
11/12/12	46.00	12	0	700
11/13/12	45.00	12	0	700
11/26/12	35.00	2	15	700
12/14/12	15.00	1	30	700
12/17/13	90.00	8	30	700
12/19/12	165.00	8	30	700

YTD Total MSCF Flared	Annual Flare Limit	Difference
2906	NA	NA

328.7

2013 ANNUAL FLARING AT ROSE
PTO # 1737-168 (formerly)/-180, Condition #10 & SJVUAPCD Rule 4311

Date	Volume Flared (MSCF)	Duration of Flare Event (hrs:min)		Permitted Maximum Daily Limit (MSCF)
1/15/13	38.00	3	0	700
1/21/13	19.00	4	30	700
3/13/13	54.00	1	15	700
3/14/13	27.00	24	0	700
3/16/13	32.00	24	0	700
3/25/13	33.00	24	0	700
3/26/13	48.00	24	0	700
3/27/13	49.00	24	0	700
3/28/13	146.00	24	0	700
3/29/13	246.00	24	0	700
3/30/13	20.00	24	0	700
4/3/13	13.00	24	0	700
4/4/13	23.00	24	0	700
4/5/13	45.00	24	0	700
4/6/13	58.00	24	0	700
4/7/13	29.00	24	0	700
4/8/13	80.00	24	0	700
4/9/13	88.00	24	0	700
4/10/13	136.00	24	0	700
4/11/13	80.00	24	0	700
4/12/13	49.00	24	0	700
4/13/13	77.00	24	0	700
4/14/13	37.00	24	0	700
4/15/13	25.00	24	0	700
4/16/13	32.00	24	0	700
4/17/13	98.00	24	0	700
4/18/13	75.00	24	0	700
4/19/13	80.00	24	0	700
4/20/13	152.00	24	0	700
4/21/13	116.00	24	0	700
4/22/13	105.00	24	0	700
4/23/13	139.00	24	0	700
4/24/13	133.00	24	0	700
4/25/13	115.00	24	0	700
4/26/13	115.00	24	0	700
4/27/13	105.00	24	0	700
4/28/13	135.00	24	0	700
4/29/13	135.00	24	0	700
4/30/13	100.00	24	0	700
5/1/13	79.00	24	0	700
5/2/13	96.00	24	0	700
5/3/13	100.00	24	0	700
5/4/13	86.00	24	0	700
5/5/13	58.00	24	0	700
5/6/13	55.00	24	0	700

5/7/13	83.00	24	0	700
5/8/13	110.00	24	0	700
5/9/13	89.00	24	0	700
5/10/13	70.00	24	0	700
5/11/13	85.00	24	0	700
5/12/13	79.00	24	0	700
5/13/13	62.00	24	0	700
5/14/13	55.00	24	0	700
5/15/13	145.00	24	0	700
5/16/13	31.00	1	30	700
5/17/13	25.00	1	30	700
5/18/13	69.00	3	0	700
5/19/13	106.00	4	0	700
5/20/13	116.00	5	30	700
5/21/13	115.00	5	30	700
5/22/13	225.00	11	0	700
5/23/13	79.00	4	0	700
5/24/13	52.00	3	0	700
5/25/13	64.00	3	30	700
5/26/13	84.00	4	0	700
5/27/13	20.00	1	30	700
5/28/13	4.00	0	30	700
5/29/13	6.00	0	30	700
5/30/13	64.00	2	0	700
5/31/13	229.00	11	0	700
6/1/13	2.00	0	30	700
6/2/13	43.00	2	0	700
6/3/13	100.00	5	0	700
6/4/13	3.00	0	30	700
6/5/13	49.00	2	30	700
6/6/13	123.00	6	0	700
6/7/13	88.00	4	0	700
6/8/13	52.00	3	0	700
6/10/13	455.00	24	0	700
6/11/13	226.00	11	0	700
6/12/13	7.00	0	30	700
6/13/13	10.00	0	30	700
6/14/13	93.00	5	0	700
6/17/13	81.00	4	30	700
6/18/13	78.00	4	30	700
				700
				700

YTD Total MSCF Flared	Annual Flare Limit	Difference
7038	NA	NA

1368.3

GHG Calculations

Permit Unit	Rating (MMBtu)
S-1737-146	4.2
S-1737-157	41.7
S-1737-167	14.6
S-1737-177	0.5
S-1737-178	5.0
S-1737-180	49.0
Total Capacity	115.0 MMBtu

Basis and Assumptions

- Total facility capacity is 115.0 MMbty/hr
- The equipment operates 8,760 hours per year
- Emission factors and global warming potentials (GWP) are taken from the California Climate Change Action Registry (CCAR), Version 3.1, January, 2009 (Appendix C, Tables C.7 and C.8):

  CO2 53.06 kg/MMBtu (HHV) natural gas (116.7 lb/MMBtu)
  CH4 0.005 kg/MMBtu (HHV) natural gas (0.011 lb/MMBtu)
  N2O 0.0001 kg/MMBtu (HHV) natural gas (0.00022 lb/MMBtu)

  GWP for CH4 = 21 lb-CO_2e per lb-CH4
  GWP for N2O = 310 lb-CO_2e per lb-N2O

Calculations

Hourly Emissions

CO2 Emissions = 115.0 MMBtu/hr x 116.7 lb/MMBtu = 13,421 lb-CO_2e/hour
CH4 Emissions = 115.0 MMBtu/hr x 0.011 lb/MMBtu x 21 lb-CO_2e per lb-CH4 = 28 lb-CO_2e/hour
N2O Emissions = 115.0 MMBtu/hr x 0.00022 lb/MMBtu x 310 lb-CO_2e per lb-N2O = 7 lb-CO_2e/hour

Total = 13421 + 28 + 7 = 13,456 lb-CO_2e/hour

Annual Emissions

13,456 lb-CO_2e/hour x 8,760 hr/year ÷ 2,000 lb/ton = 58,937 tons-CO_2e/year

Metric Conversion

58,937 short tons-CO_2e/year x 0.9072 metric tons/short ton = **53,468 metric tons**

APPENDIX D
BACT Guideline and
BACT Analysis

INSTRUCTIONS: click on "Details" for Permit Specific BACT Determinations.

Back Details Page

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 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 s 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 - Permit Specific BACT Determinations on Details Page.

NOx and VOC

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 1.4.2 (current version), identifies Achieved in Practice BACT for NOx, CO and VOC from Waste Gas Flare – Incinerating Produced Gas as steam assisted, air assisted or Coanda effect when steam is unavailable.

b. Step 2 - Eliminate technologically infeasible options

Steam is not available at the site. Therefore steam assisted flare is not technologically feasible.

c. Step 3 - Rank remaining options by control effectiveness

Air assisted, or Coanda effect flare

d. Step 4 - Cost effectiveness analysis

The flare is equipped with a air assist; therefore, a cost effectiveness analysis is not required.

e. Step 5 - Select BACT

Air assist flare

PM10

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 1.4.2 (current version), identifies Achieved in Practice BACT for PM10 from Waste Gas Flare – Incinerating Produced Gas as steam assisted, air assisted or Coanda effect when steam is unavailable. Pilot Light Fired Solely on LPG or Natural Gas.

b. Step 2 - Eliminate technologically infeasible options

Steam is not available at the site. Therefore steam assisted flare is not technologically feasible.

c. Step 3 - Rank remaining options by control effectiveness

Air assisted, or Coanda-effect flare. Pilot light fired solely on LPG or natural gas (Achieved-in-Practice). Pilot Light Fired Solely on LPG or Natural Gas

d. Step 4 - Cost effectiveness analysis

The flare is equipped with a air assist and uses LPG or natural gas pilot fuel; therefore, a cost effectiveness analysis is not required.

e. Step 5 - Select BACT

Applicant has proposed the above two alternatives:

~~Coanda effect flare with smokeless combustion and pilot light fired solely on natural gas~~

BACT is satisfied.

APPENDIX E
HRA/AAQA

San Joaquin Valley Air Pollution Control District
Risk Management Review

To: Steve Davidson – Permit Services

From: Leland Villalvazo – Technical Services

Date: September 13, 2013

Facility Name: Vintage Production California LLC

Location: Various HOC

Application #(s): S-1737-180-2

Project #: S-1132866

A. RMR SUMMARY

RMR Summary				
Categories	**Flare (Unit 180-2)**		**Project Totals**	**Facility Totals**
Prioritization Score	0.09		0.09	>1.0
Acute Hazard Index	0.03		0.03	0.08
Chronic Hazard Index	NA		0.0	0.06
Maximum Individual Cancer Risk (10^{-6})	NA		0.0	2.3
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 # 180-2

The flare must not operate within 100 meter from the facility boundary.

B. RMR REPORT

I. Project Description

Technical Services received a request on to perform an Ambient Air Quality Analysis and a Risk Management Review for a Flare operating at various unspecified location with HOC..

The following parameters were used for the review:

Analysis Parameters Unit 180-2			
Source Type	Point	**Location Type**	Rural
Stack Height (m)	9.06	**Closest Receptor (m)**	Various
Stack Diameter. (m)	1.34	**Type of Receptor**	---
Stack Exit Velocity (m/s)	20	**Max Hours per Year**	8760
Stack Exit Temp. (°K)	1273	**Fuel Type**	NG
Burner Rating (MMBtu/hr)	58		

II. Analysis

Technical Services performed modeling for criteria pollutants CO, NOx, SOx and PM_{10}; as well as a RMR. The emission rates used for criteria pollutant modeling were 1.08 lb/hr CO, 1.98 lb/hr NOx, 0.02 lb/hr SOx, and 0.23 lb/hr PM_{10}. The engineer supplied the maximum fuel rate for the IC engine used during the analysis.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Diesel ICE	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	Pass	X	Pass	Pass
PM_{10}	X	X	X	Pass[2]	Pass[2]
$PM_{2.5}$	X	X	X	Pass[2]	Pass[2]

*Results were taken from the attached PSD spreadsheet.
[1]The 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.
[2]The criteria pollutants are below EPA's level of significance as found In 40 CFR Part 51.165 (b)(2).

III. Conclusion

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

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

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

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

IV. Attachments

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

APPENDIX F
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 AMENDMENT

☒ MINOR PERMIT MODIFICATION

COMPANY NAME: **Vintage Production California LLC**	FACILITY ID: **S – 1737**
1. Type of Organization: ☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility	
2. Owner's Name:	
3. Agent to the Owner:	

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

(1) 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).

(2) 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.

(3) Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

(4) 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

7-10-13
Date

Stephen Bartz
Name of Responsible Official (please print)

Operations Team Lead (Central)
Title of Responsible Official (please print)

Modification of existing flare, S-1737-180 to increase daily gas flow limit.

CERTIFICATION

OXY USA Inc. hereby certifies as follows:

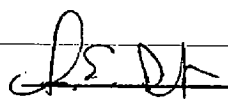
1. OXY USA Inc. owns or operates certain major stationary sources in the State of California. Such sources are comprised of a vast number of emission points. As used in this certification, the term "major stationary source" shall, with respect to OXY USA Inc. stationary sources in the SJVUAPCD, have 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: Stephen Bartz Date: 

Title: Operations Team Lead (Central) Time: 7-10-13

APPENDIX G
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-1737-180-2

ISSUANCE DATE: DRAFT

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

LOCATION: LIGHT OIL CENTRAL
KERN COUNTY, CA

EQUIPMENT DESCRIPTION:
MODIFICATION OF 49 MMBTU/HR FLARE APPROVED FOR USE IN WELL TESTING, TANK AND WELL VENT CONTROL, EQUIPMENT SHUTDOWN, EMERGENCIES AND OTHER SITUATIONS REQUIRING A SAFETY FLARE AT VARIOUS UNSPECIFIED LOCATIONS: INCREASE DAILY GAS FLOW RATE TO 1.4 MM SCF/DAY AND STATE EMISSIONS FACTOR IN LB/MMSCF

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. Flare shall not be located within 1000 feet of any K-12 school. [CH&SC 42301.6]
4. The flare must not operate within 100 meter from the facility boundary. [District Rule 4102]
5. Permittee shall notify the District Compliance Division of each location at which the flare is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
7. Flare shall operate in a smokeless manner (0% opacity) except for three minutes in any one hour. [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
8-1737-180-2 : Sep 23 2013 9:21AM – DAVIDSOS : Joint Inspection NOT Required

8. Flare gas inlet line shall be equipped with operational volumetric totalizing flowrate indicator. [District Rule 2201] Federally Enforceable Through Title V Permit

9. Gas flowrate to flare (not including pilot gas) shall not exceed 1.4 MMscf per day nor 255.5 MMscf/yr of gas. [District Rule 2201] Federally Enforceable Through Title V Permit

10. Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 0.068 lb/Mscf; VOC (as methane) - 0.063 lb/Mscf; CO - 0.37 lb/Mscf or PM10 - 0.008 lb/Mscf. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Gas sulfur content shall not exceed 0.25 gr/100 scf. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit

12. Gas shall be tested quarterly for sulfur content. Upon transfer of location or change in the method of operation of the flare (excluding emergencies), gas shall be tested weekly for sulfur content. If compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks then the fuel testing frequency shall be quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2201] Federally Enforceable Through Title V Permit

13. The sulfur content of the gas being flared shall be determined using ASTM D1072, D3031, D4084, D3246, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

14. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201] Federally Enforceable Through Title V Permit

15. A trained observer, as defined in EPA Method 22, shall check visible emissions at least once every two weeks for a period of 15 minutes. If visible emissions are detected at any time during this period, the observation period shall be extended to two hours. A record containing the results of these observations shall be maintained, which also includes company name, process unit, observer's name and affiliation, date, estimated wind speed and direction, sky condition, and the observer's location relative to the source and sun. [District Rules 2080 and 4101] Federally Enforceable Through Title V Permit

16. The 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

17. Permittee shall obtain an ATC to modify any permit unit which authorizes this flare as a control device prior to this flare operating as a control device for that permit unit. [District Rule 2201] Federally Enforceable Through Title V Permit

18. 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

19. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit

20. 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

21. The flare 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 2201] Federally Enforceable Through Title V Permit

22. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2080] Federally Enforceable Through Title V Permit

23. Permittee shall maintain accurate daily records of volume, type, higher heating value, and sulfur content of gas flared. [District Rule 2201 & 1070] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. Permittee shall maintain accurate records of location and duration of operation at each stationary source. [District Rule 2201, 4311 & 4409] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 2201, 4311 & 4409] Federally Enforceable Through Title V Permit