Higinio Barraza  
General Testing Services  
1605 Glacier Way  
Wasco, CA 93280

Re: Notice of Preliminary Decision - Authority to Construct  
Project Number: S-1122732

Dear Mr. Barraza:

Enclosed for your review and comment is the District's analysis of General Testing Services's application for an Authority to Construct for six transportable well test flares, at various unspecified locations, SJVAPCD.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Richard Edgehill of Permit Services at (661) 392-5617.

Sincerely,

David Warner  
Director of Permit Services

DW: RUE/cm

Enclosures
Re: Notice of Preliminary Decision - Authority to Construct
Project Number: S-1122732

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of General Testing Services's application for an Authority to Construct for six transportable well test flares, at various unspecified locations, SJVAPCD.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Richard Edgehill of Permit Services at (661) 392-5617.

Sincerely,

David Warner
Director of Permit Services

DW: RUE/cm

Enclosure
NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED ISSUANCE OF
AN AUTHORITY TO CONSTRUCT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Authority to Construct to General Testing Services for six transportable well test flares, at various unspecified locations, SJVAPCD.

The analysis of the regulatory basis for this proposed action, Project #S-1122732, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.
San Joaquin Valley Air Pollution Control District
Authority to Construct
Application Review
Well Test Flare

Facility Name: General Testing Services
Mailing Address: 1605 Glacier Way, Wasco, CA 93280
Contact Person: Higinio Barraza
Telephone: (661) 746-1042

Date: October 3, 2012
Engineer: Richard Edgehill
Lead Engineer: Steve Leonard

Application #s: S-7581-2-0 through '7-0
Project #: S-1122732
Deemed Complete: July 18, 2012

I. Proposal

General Testing Services has requested Authorities to Construct (ATCs) for six (6) well testing flares. The flares will be operated at various unspecified locations within the District. Please note that District Policy SSP 1915 requires that portable flares be permitted according to District Policy APR 1020 which states that “an emissions unit with various unspecified locations must be prevented (by permit condition) from becoming part of another stationary source.” The following condition from APR 1020 will be placed on the permit to reflect this requirement:

Unit must not be located and operated at an existing facility or operation such that it becomes part of an existing stationary source as defined by District Rule 2201. [District Rule 2201]

The project triggers BACT for VOCs and public notice. Offsets are not required.

II. Applicable Rules

Rule 2020 Exemptions (12/20/07)
Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520 Federally Mandated Operating Permits (6/21/01) — Not Applicable: See Compliance Section for Explanation
Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4201 Particulate Matter Concentration (12/17/92)
Rule 4311 Flares (6/15/06)
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)
III. Project Location

The equipment will be located at various unspecified locations within the District. The equipment will not be located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

After drilling petroleum production wells are tested to establish flow rates and pressure. The proposed well test flares are equipped with a propane pilot and automatic ignition system and is used to combust gas produced during testing. A three phase separator is included to separate oil, water, and gas.

V. Equipment Listing

S-7581-2-0: WELL TESTING OPERATION WITH PORTABLE 5.0 MMSCF/DAY FLARE WITH AIR-ASSIST, PROPANE PILOT, AUTOMATIC IGNITION SYSTEM, AND PHASE SEPARATOR(S) OPERATED AT VARIOUS UNSPECIFIED LOCATIONS, SJVUAPCD

S-7581-3-0: WELL TESTING OPERATION WITH PORTABLE 5.0 MMSCF/DAY FLARE WITH AIR-ASSIST, PROPANE PILOT, AUTOMATIC IGNITION SYSTEM, AND PHASE SEPARATOR(S) OPERATED AT VARIOUS UNSPECIFIED LOCATIONS, SJVUAPCD

S-7581-4-0: WELL TESTING OPERATION WITH PORTABLE 5.0 MMSCF/DAY FLARE WITH AIR-ASSIST, PROPANE PILOT, AUTOMATIC IGNITION SYSTEM, AND PHASE SEPARATOR(S) OPERATED AT VARIOUS UNSPECIFIED LOCATIONS, SJVUAPCD

S-7581-5-0: WELL TESTING OPERATION WITH PORTABLE 5.0 MMSCF/DAY FLARE WITH AIR-ASSIST, PROPANE PILOT, AUTOMATIC IGNITION SYSTEM, AND PHASE SEPARATOR(S) OPERATED AT VARIOUS UNSPECIFIED LOCATIONS, SJVUAPCD

S-7581-6-0: WELL TESTING OPERATION WITH PORTABLE 5.0 MMSCF/DAY FLARE WITH AIR-ASSIST, PROPANE PILOT, AUTOMATIC IGNITION SYSTEM, AND PHASE SEPARATOR(S) OPERATED AT VARIOUS UNSPECIFIED LOCATIONS, SJVUAPCD

S-7581-7-0: WELL TESTING OPERATION WITH PORTABLE 5.0 MMSCF/DAY FLARE WITH AIR-ASSIST, PROPANE PILOT, AUTOMATIC IGNITION SYSTEM, AND PHASE SEPARATOR(S) OPERATED AT VARIOUS UNSPECIFIED LOCATIONS, SJVUAPCD
VI. Emission Control Technology Evaluation

The well being tested is considered the emissions unit, while the flare controlling the VOCs is considered the control device. However, to ensure that the flare operates correctly, and is designed properly, the District requires well testing flares to be permitted and they are subject to applicable rules and regulations. Flares typically achieve greater than 99% destruction efficiency of VOCs. The proposed flare operates with a pilot light and automatic ignition system and is equipped with air assist system for use as necessary to prevent smoking.

Rule 1020, Section 3.46 excludes air pollution abatement operation from the definition of "source operation". Since the test flare is designed to control the VOC and H₂S emissions from the well, the flare is considered an air pollution abatement operation and is not an emissions unit. Therefore, the testing operation may be subject to BACT but the control device selected as BACT is not.

VII. General Calculations

A. Assumptions

- The heating value of the flared gas is 1,000 Btu/scf.
- Maximum hourly flared gas flow rate: 0.208 MMscf/hr (208 MMBtu/hr)
- Maximum daily flared gas flow rate, 5.0 MMscf/day (5,000 MMBtu/day)
- Maximum annual flared gas flow rate, 288 MMscf/yr (288,000 MMBtu/yr)
- Propane pilot gas combustion emissions are insignificant and neglected.
- The flared natural gas will have a H₂S content less than 5 gr/100 scf, measured as sulfur (proposed by applicant).
- The three-phase separator associated with the flare does not require a separate permit but is associated with the flare permit unit as a source of fugitive emissions which are assumed to be insignificant (and neglected) relative to the flare VOC emissions.

B. Emission Factors

Per District FYI 83, the following emission factors shall be used for the flares:

<table>
<thead>
<tr>
<th>Flare Emission Factors</th>
<th>lb/MMBtu</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOₓ</td>
<td>0.068</td>
<td>FYI 83 (AP 42 Sec 13.5)</td>
</tr>
<tr>
<td>™SOₓ</td>
<td>0.0143</td>
<td>Mass Balance Equation</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>0.008</td>
<td>FYI 83 –BACT (AP 42 Sec 13.5)</td>
</tr>
<tr>
<td>CO</td>
<td>0.37</td>
<td>FYI 83 (AP 42 Sec 13.5)</td>
</tr>
<tr>
<td>VOC</td>
<td>0.063</td>
<td>FYI 83(AP 42 Sec 13.5)</td>
</tr>
</tbody>
</table>

*The emission factor is based on a sulfur concentration of 5 gr/100 scf.
(5 gr/0.0001 MMscf)/(lb/7000 gr)/(64 lb-SO2/32 lb S)(MMscf/f,000 MMBtu) =0.0143 lb/MMBtu
C. Calculations

1. Pre-Project Potential to Emit (PE1)

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

2. Post Project Potential to Emit (PE2)

Daily PE2

S-7581-2-0 through '7-0 (each):
The daily potential to emit for the flare is calculated as follows, and summarized in the table below:

\[
\begin{align*}
PE_{2\text{NO}_x} &= (0.068 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (5.0 \text{ MMscf/day}) \\
&= 340.0 \text{ lb-NO}_x/\text{day} \\
PE_{2\text{SO}_x} &= (0.0143 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (5.0 \text{ MMscf/day}) \\
&= 71.5 \text{ lb-}\text{SO}_x/\text{day} \\
PE_{2\text{PM}_{10}} &= (0.008 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (5.0 \text{ MMscf/day}) \\
&= 40.0 \text{ lb-PM}_{10}/\text{day} \\
PE_{2\text{CO}} &= (0.37 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (5.0 \text{ MMscf/day}) \\
&= 1850.0 \text{ lb-CO/day} \\
PE_{2\text{VOC}} &= (0.063 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (5.0 \text{ MMscf/day}) \\
&= 315.0 \text{ lb-VOC/day}
\end{align*}
\]

Annual PE2

The annual potential to emit for the flare is calculated as follows, and summarized in the table below:

S-7581-2-0 through '7-0 (each):

\[
\begin{align*}
PE_{2\text{NO}_x} &= (0.068 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (288 \text{ MMscf/year}) \\
&= 19,584 \text{ lb-NO}_x/\text{year} \\
PE_{2\text{SO}_x} &= (0.0143 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (288 \text{ MMscf/year}) \\
&= 4,118 \text{ lb-}\text{SO}_x/\text{year} \\
PE_{2\text{PM}_{10}} &= (0.008 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (288 \text{ MMscf/year}) \\
&= 2,304 \text{ lb-PM}_{10}/\text{year} \\
PE_{2\text{CO}} &= (0.37 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (288 \text{ MMscf/year}) \\
&= 106,560 \text{ lb-CO/year}
\end{align*}
\]
PE2_{VOC} = (0.063 \text{ lb/MMBtu}) \times (1,000 \text{ MMBtu/MMscf}) \times (288 \text{ MMscf/year})
= 18,144 \text{ lb-VOC/year}

<table>
<thead>
<tr>
<th>Post Project Potential to Emit (PE2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Daily Emissions</strong></td>
</tr>
<tr>
<td>(lb/day)</td>
</tr>
<tr>
<td>NO\textsubscript{X}</td>
</tr>
<tr>
<td>SO\textsubscript{X}</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
</tr>
<tr>
<td>CO</td>
</tr>
<tr>
<td>VOC</td>
</tr>
</tbody>
</table>

The emissions profiles are included in Attachment I.

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.

<table>
<thead>
<tr>
<th>Pre Project Stationary Source Potential to Emit [SSPE1] (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit Unit</td>
</tr>
<tr>
<td>S-7045-1-0</td>
</tr>
<tr>
<td>Post Project SSPE (SSPE1)</td>
</tr>
</tbody>
</table>

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. Since each flare is considered its own stationary source, the SSPE2 will be calculated for each unit.
S-7045-2-0 though '-7-0 (each)

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NOx</th>
<th>SOx</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-7045-2-0 though '-7-0 (each)</td>
<td>19,584</td>
<td>4,118</td>
<td>2,304</td>
<td>106,560</td>
<td>18,144</td>
</tr>
<tr>
<td>Post Project SSPE (SSPE2)</td>
<td>19,584</td>
<td>4,118</td>
<td>2,304</td>
<td>106,560</td>
<td>18,144</td>
</tr>
</tbody>
</table>

5. **Major Source Determination**

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

S-7045-2-0 though '-7-0 (each)

<table>
<thead>
<tr>
<th>Major Source Determination (lb/year)</th>
<th>NOx</th>
<th>SOx</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Project SSPE (SSPE1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Post Project SSPE (SSPE2)</td>
<td>19,584</td>
<td>4,118</td>
<td>2,304</td>
<td>106,560</td>
<td>18,144</td>
</tr>
<tr>
<td>Major Source Threshold</td>
<td>50,000</td>
<td>140,000</td>
<td>140,000</td>
<td>200,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Major Source?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

As seen in the table above, the well test flare is not a Major Source.

6. **Baseline Emissions (BE)**

BE = Pre-project Potential to Emit for:
- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.23
As shown in Section VII.C.5 above, the facility is not a Major Source for any criteria pollutant.

Therefore Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1).

Since the units are all new emissions units, BE = PE1 = 0 for all criteria pollutants.

7. **SB 288 Major Modification**

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

Since this facility is not a major source for any of the pollutants addressed in this project, this project does not constitute an SB 288 major modification.

8. **Federal Major Modification**

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

Since this facility is not a Major Source for any pollutants, this project does not constitute a Federal Major Modification. Additionally, since the facility is not a major source for PM$_{10}$ (140,000 lb/year), it is not a major source for PM$_{2.5}$ (200,000 lb/year).

9. **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.

QNEC (lb/qtr) = PE2 (lb/qtr) – QBE (lb/qtr)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/qtr)</th>
<th>QBE (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO$_x$</td>
<td>4896</td>
<td>0</td>
<td>4896</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>1030</td>
<td>0</td>
<td>1030</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>576</td>
<td>0</td>
<td>576</td>
</tr>
<tr>
<td>CO</td>
<td>26,640</td>
<td>0</td>
<td>26,640</td>
</tr>
<tr>
<td>VOC</td>
<td>4536</td>
<td>0</td>
<td>4536</td>
</tr>
</tbody>
</table>
VIII. Compliance

Rule 2020 Exemptions

Section 6.14 states that "fugitive emissions sources and pressure vessels that are associated with an emissions unit for which a written permit is required shall be included as part of such emissions unit. A separate permit for the fugitive source or pressure vessel is not required. Therefore the three phase separator does not require a separate permit.

Compliance is expected.

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

Rule 1020, Section 3.46 excludes air pollution abatement operations from the definition of "source operation". Since the well test flare is designed to control the VOC and H$_2$S emissions from the well, the flare is considered an air pollution abatement operation and is not an emissions unit. Therefore, the well drilling and testing operation may be subject to BACT, but the flare used as a control device is not.

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 seen in Section VII.C.2 of this evaluation, the applicant is proposing to install a well drilling and testing operation with PE greater than 2 lb/day for NO$_x$, SO$_x$, PM$_{10}$, CO, and VOC. As discussed in Section VI above, the flare is a VOC control device (not emissions units) and therefore BACT is triggered only for VOC only.
b. Relocation of emissions units – PE > 2 lb/day

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

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

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

d. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does not constitute an SB 288 and/or Federal Major Modification for NOx emissions. Therefore BACT is not triggered for any pollutant.

2. BACT Guideline

BACT Guideline 1.4.7, applies to waste gas flares used for oilfield well drilling and testing [Waste Gas Flare – Oilfield Well Drilling and Testing Operation, < 50 MMscf/day]. (See Attachment II)

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 III), BACT has been satisfied with the following:

- NOx: Not applicable
- SOx: Not applicable
- PM10: Not applicable
- VOC: Elevated flare with automatic ignition system (equivalent to propane fueled pilot light)

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 or 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.
<table>
<thead>
<tr>
<th>Offset Determination (lb/year)</th>
<th>( \text{NO}_x )</th>
<th>( \text{SO}_x )</th>
<th>( \text{PM}_{10} )</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Project SSPE (SSPE2)</td>
<td>19,584</td>
<td>4,118</td>
<td>2,304</td>
<td>106,560</td>
<td>18,144</td>
</tr>
<tr>
<td>Offset Threshold</td>
<td>20,000</td>
<td>54,750</td>
<td>29,200</td>
<td>200,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Offsets triggered?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

2. **Quantity of Offsets Required**

As seen above, the SSPE2 is not greater than the offset thresholds for any pollutant; therefore offset calculations are not necessary and offsets will not be required for this project.

C. **Public Notification**

1. **Applicability**

Public noticing is required for:
   a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
   b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
   c. Any project which results in the offset thresholds being surpassed, and/or
   d. Any project with an SSPE 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. As shown in Section VII.C.5 above, the SSPE2 is not greater than the Major Source threshold for any pollutant. Therefore, public noticing is not required for this project for new Major Source purposes.

   As demonstrated in VII.C.7, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.
b. PE > 100 lb/day

The PE2 for the new units are compared to the daily PE Public Notice thresholds in the following table:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/day)</th>
<th>Public Notice Threshold</th>
<th>Public Notice Triggered?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOX</td>
<td>340.0</td>
<td>100 lb/day</td>
<td>Yes</td>
</tr>
<tr>
<td>SOX</td>
<td>71.5</td>
<td>100 lb/day</td>
<td>No</td>
</tr>
<tr>
<td>PM10</td>
<td>40.0</td>
<td>100 lb/day</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>1850.0</td>
<td>100 lb/day</td>
<td>Yes</td>
</tr>
<tr>
<td>VOC</td>
<td>315.0</td>
<td>100 lb/day</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Therefore, public noticing for PE > 100 lb/day purposes is required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE1 (lb/year)</th>
<th>SSPE2 (lb/year)</th>
<th>Offset Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOX</td>
<td>0</td>
<td>19,584</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>SOX</td>
<td>0</td>
<td>4,118</td>
<td>54,750 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>PM10</td>
<td>0</td>
<td>2,304</td>
<td>29,200 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>0</td>
<td>106,560</td>
<td>200,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>0</td>
<td>18,144</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
</tbody>
</table>

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.
As demonstrated above, the SSIPE for CO was greater than 20,000 lb/year; therefore public noticing for SSIPE purposes is required.

2. Public Notice Action

As discussed above, public noticing is required for this project for daily emissions in excess of 100 lb/day and SSIPE greater than 20,000 lb/year. 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 ATCs for this equipment.

D. Daily Emission Limits (DELS)

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

**Proposed Rule 2201 (DEL) Conditions:**

S-7581-2-0 though ‘-7-0:

Emission rates shall not exceed any of the following: 0.008 lb-PM10/Mscf, 0.068 lb-NOx/Mscf (as NO2), 0.063 lb-VOC/Mscf, or 0.37 lb-CO/Mscf. [District Rule 2201]

Sulfur compound concentration of gas flared shall not exceed 5 gr/100 scf. [District Rule 2201]

Daily and annual amounts of gas flared shall not exceed 5.0 MMscf/day and 288 MMscf/yr. [District rule 2201]

E. Compliance Assurance

1. Source Testing

The following testing condition is included on the proposed ATC:

Permittee shall document compliance with well gas sulfur compound concentration limit by performing sulfur content analysis of well gas upon startup at each new location of operation of flare. [District Rule 2201]
2. Monitoring

The following monitoring condition is included:

Permittee shall inspect the flare in operation for visible emissions no less frequently than once every two weeks. If visible emissions are observed, corrective action shall be taken. If visible emissions persist, an EPA Method 9 test shall be performed within 72 hours. [District Rule 2201] N

3. Recordkeeping

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

Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content at each location, and daily and annual rates of gas flared; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201] N

4. Reporting

The facility is required to report the location at which the flare is operating. The following condition will be placed on the permit to show compliance with this section.

Permittee shall notify the District Compliance Division of each location at which the operation 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 2201] N

F. Ambient Air Quality Analysis

Section 4.14 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. Technical Services Division performed modeling for criteria pollutants CO, NOx, SOx and PM10. The results from the Criteria Modeling are as follows:

The results from the Criteria Pollutant Modeling are as follows:
Criteria Pollutant Modeling Results*

<table>
<thead>
<tr>
<th>Flares 2-0 thru 7-0</th>
<th>1 Hour</th>
<th>3 Hours</th>
<th>8 Hours.</th>
<th>24 Hours</th>
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<tbody>
<tr>
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<tr>
<td>NOx</td>
<td>Pass*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Pass</td>
</tr>
<tr>
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<td>Pass</td>
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<td>X</td>
<td>Pass</td>
<td>Pass</td>
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<tr>
<td>PM$_{10}$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Pass*</td>
<td>Pass*</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Pass*</td>
<td>Pass*</td>
</tr>
</tbody>
</table>

*Results were taken from the attached PSD spreadsheet.

1The project was compared to the 1-hour NO$_2$ National Ambient Air Quality Standard that became effective on April 12, 2010 using the District's approved procedures.

2The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2). Each flare constitutes its own separate stationary source. The results are all per flare.

As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO$_x$, CO, PM$_{10}$, or SO$_x$. Refer to Attachment IV of this document for the full AAQA report from Technical Services.

Rule 2520 Federally Mandated Operating Permits

Since this facility's potential emissions do not exceed any major source thresholds of Rule 2201, this facility is not a major source, and Rule 2520 does not apply.

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). Per FYI 83, when BACT is required for PM$_{10}$ the visible emissions will be limited to less than Ringelmann ¼ and less than 5% opacity. As long as the flaring system is operating correctly, compliance with this rule is expected.

Rule 4102 Nuisance

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

California Health & Safety Code 41700 (Health Risk Assessment)

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.

BACT for toxic emission control (T-BACT) was not required as the prioritization scores for the facility and project were less than 1.0. However the following conditions are required:

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

The flare can not operate within 450 meters of the nearest receptor. [District Rule 4102] N
The flare can not operate within 25 meters of the property boundaries. [District Rule 4102] N

The results of the HRA are included in Attachment IV.

**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. For natural gas the EPA F-factor (adjusted to 60°F) is 8710 dscf/MMBtu (40 CFR 60 Appendix B).

\[
PM_{10} \text{ Emission Factor: } 0.008 \text{ lb-PM}_{10}/\text{MMBtu} \\
\text{Percentage of PM as PM}_{10} \text{ in Exhaust: } 100\% \\
\text{Exhaust Oxygen (O}_2\text{) Concentration: } 3\% \\
\text{Excess Air Correction to F Factor } = \frac{20.9}{(20.9 - 3)} = 1.17
\]

\[
GL = \left( \frac{0.008 \text{ lb-PM}}{\text{MMBtu}} \times \frac{7,000 \text{ grain}}{\text{lb-PM}} \right) / \left( \frac{8,710 \text{ ft}^3}{\text{MMBtu}} \times 1.17 \right)
\]

\[GL = 0.0055 \text{ grain/dscf} < 0.1 \text{ grain/dscf}\]

**Rule 4311 Flares**

This rule limits VOC and NOx emissions from flares. The flare is a separate stationary source which has a potential to emit less than 10 tons/yr NOx and 10 tons/yr VOCs. Therefore the facility is exempt from all requirements of the rule except the record-keeping requirements of Section 6.2.4. Section 6.2.4 states that “beginning January 1, 2007 facilities claiming an exemption pursuant to Section 4.3 shall record annual throughput, material usage, or other information necessary to demonstrate an exemption under that section.” Facility will keep records of annual volumes of gas combusted in the flares to ensure that NOx and VOC emissions remain below 10 tons/yr. Therefore compliance is expected.

**Rule 4801 Sulfur Compounds**

Rule 4801 requires that a person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: two-tenths (0.2) percent by volume calculated as sulfur dioxide (SO2), on a dry basis averaged over 15 consecutive minutes.

Emission calculations were calculated using a fuel with a 5 gr/100 dscf sulfur content. Therefore, the maximum SOx ppmv are calculated to be:

\[
SO_x = (5 \text{ gr/100 dscf fuel}) \times (1 \text{ lb/7000 gr S}) \times (1 \text{ mol/32 lb S}) \times (379.5 \text{ dscf S/1 mol S}) \times (1 \text{ dscf fuel}/1000 \text{ Btu}) \times (1 \times 10^8 \text{ Btu/8710 dscf}) \times (1 \times 10^6)
\]

\[= 9.7 \text{ ppmv} < 2,000 \text{ ppmv}\]
California Health & Safety Code 42301.6  (School Notice)

Pursuant to California Health and Safety Code 42301.6, a school notice is required for sites located within 1,000 of a school. This flare will be operating at various sites throughout the District. To insure that the flare is not located within 1,000 feet of a school the following condition will be placed on the permits,

The equipment shall not be located within 1000 ft. of any K-12 school. [District Rule 2201]

California Environmental Quality ACT (CEQA)

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

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

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the project consists of issuing a permit for a piece of transportable equipment to be used at various locations within the District. The District makes the following findings regarding this project: 1) Issuance of the permit does not have a significant environmental impact. 2) Assessment of potential environmental effects resulting from the use of the permitted transportable equipment is the responsibility of the Lead Agency approving the specific project, and will be determined on a project specific basis. The District has determined that no additional findings are required.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue Authorities to Construct S-7581-2-0 through '7-0 subject to the permit conditions on the attached draft Authority to Construct in Attachment V.
The fee schedule is based on the proposed throughput of the flare.

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Fee Schedule</th>
<th>Fee Description</th>
<th>Annual Fee</th>
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<td>S-7581-2-0 through '7-0</td>
<td>3020-02-H</td>
<td>208 MMBtu/hr</td>
<td>$1030.00</td>
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Attachments

I: Emissions Profiles
II: BACT Guideline
III: Top Down BACT Analysis
IV: AAQA Summary and HRA
V: Draft ATCs
ATTACHMENT I
Emissions Profile
<table>
<thead>
<tr>
<th></th>
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<th>SOX</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
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<td>4118.0</td>
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Offset Ratio

Quarterly Offset Amounts (lb/Qtr)

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### Application Emissions

**Permit #:** S-7581-5-0  
**Last Updated:**  
**Facility:** GENERAL TESTING  
**SERVICES**

**Last Updated:** 10/03/2012  
**EDGEHILR SERVICES**

#### Equipment Pre-Baselined: NO

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<th>PM10</th>
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Offset Ratio:

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### Application Emissions

**Permit #:** S-7581-6-0  
**Last Updated:**  
**Facility:** GENERAL TESTING  
**SERVICES**

**Equipment Pre-Baselined:** NO

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<td>Q4:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Permit #:** S-7581-7-0  
**Last Updated**  
**Facility:** GENERAL TESTING  
**10/03/2012**  
**EDGEHILR SERVICES**

---

**Equipment Pre-Baselined:** NO

<table>
<thead>
<tr>
<th></th>
<th>NOX</th>
<th>SOX</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Potential to Emit (lb/Yr):</strong></td>
<td>19584.0</td>
<td>4118.0</td>
<td>2304.0</td>
<td>106560.0</td>
<td>18144.0</td>
</tr>
<tr>
<td><strong>Daily Emissions Limit (lb/Day):</strong></td>
<td>340.0</td>
<td>71.5</td>
<td>40.0</td>
<td>1850.0</td>
<td>315.0</td>
</tr>
<tr>
<td><strong>Quarterly Net Emissions Change (lb/Quarter):</strong></td>
<td>4896.0</td>
<td>1029.0</td>
<td>576.0</td>
<td>26640.0</td>
<td>4536.0</td>
</tr>
<tr>
<td>Q1:</td>
<td>4896.0</td>
<td>1029.0</td>
<td>576.0</td>
<td>26640.0</td>
<td>4536.0</td>
</tr>
<tr>
<td>Q2:</td>
<td>4896.0</td>
<td>1030.0</td>
<td>576.0</td>
<td>26640.0</td>
<td>4536.0</td>
</tr>
<tr>
<td>Q3:</td>
<td>4896.0</td>
<td>1030.0</td>
<td>576.0</td>
<td>26640.0</td>
<td>4536.0</td>
</tr>
<tr>
<td>Q4:</td>
<td>4896.0</td>
<td>1030.0</td>
<td>576.0</td>
<td>26640.0</td>
<td>4536.0</td>
</tr>
</tbody>
</table>

**Check if offsets are triggered but exemption applies:**  
- NOX: N  
- SOX: N  
- PM10: N  
- CO: N  
- VOC: N

---

**Offset Ratio**

**Quarterly Offset Amounts (lb/Quarter):**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>NOX</th>
<th>SOX</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ATTACHMENT II
BACT Guideline 1. 4. 7
**San Joaquin Valley**  
**Unified Air Pollution Control District**

**Best Available Control Technology (BACT) Guideline 1.4.7**

*Last Update 8/27/1999*

**Waste Gas Flare - Oilfield Well Drilling and Testing Operation, < 50 MMscf/day**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>Elevated Flare with propane fueled pilot light</td>
<td>Feasible</td>
<td></td>
</tr>
</tbody>
</table>

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 III
Top Down BACT Analysis

Top Down BACT Analysis for NO\textsubscript{x}, SO\textsubscript{x} and PM\textsubscript{10}

The SJVUAPCD BACT Clearinghouse Guideline 1.4.7, 1st quarter 2006, does not identify technologically feasible or achieved in practice BACT for NO\textsubscript{x}, SO\textsubscript{x} and PM\textsubscript{10} emissions from Waste Gas Flares – Oilfield well drilling and testing operation < 50 MMscf/day.

"Emission unit " is defined in Section 3.15 of Rule 2201 as "an identifiable operation or piece of process equipment such as a source operation which emits, may emit, or result in the emissions of any affected pollutant directly or as fugitive emissions."

The gas must be disposed of after flow measurement to prevent safety hazard from the release of volatile organic compounds (VOC) and H\textsubscript{2}S. The flare is expected to control VOC emissions by at least 99% over uncontrolled venting of the produced gas. H\textsubscript{2}S in the produced gas is expected to be entirely converted to SO\textsubscript{x}. In this case, the oil production well that produces the gas is the emissions unit, and the flare is an emission control device.

Rule 1020, Section 3.46 excludes air pollution abatement operations from the definition of "source operation". Since the well test flare is designed to control the VOC and H\textsubscript{2}S emissions from the well, the flare is considered an air pollution abatement operation and is exempt from the definition of emissions unit. The well drilling and testing operation may be subject BACT, the control device selected as BACT is not. Therefore, BACT is not required for NO\textsubscript{x}, SO\textsubscript{x} and PM\textsubscript{10}.

Top Down BACT Analysis for VOC

1. BACT Analysis for VOC Emissions:

   a. Step 1 - Identify all control technologies

   The SJVUAPCD BACT Clearinghouse Guideline 1.4.7, 1st quarter 2006, identifies technologically feasible and achieved in practice BACT for VOC emissions from Waste Gas Flares – Oilfield well drilling and testing operation < 50 MMscf/day, as follows:

   1. Elevated Flare with propane fueled pilot light

   b. Step 2 - Eliminate technologically infeasible options

      There are no technologically feasible options.

   c. Step 3 - Rank remaining options by control effectiveness

      1. Elevated Flare with propane fueled pilot light
d. Step 4 - Cost effectiveness analysis

Because the applicant is proposing the control technology shown to be effective in step 3 above, a cost effectiveness analysis is not required.

e. Step 5 - Select BACT

VOC emissions control using Elevated Flare with propane fueled pilot light control method is selected as BACT.
ATTACHMENT IV
AAQA Summary and HRA
San Joaquin Valley Air Pollution Control District
Risk Management Review

To: Steve Roeder – Permit Services
From: Kyle Melching – Technical Services
Date: September 28, 2012
Facility Name: General Testing Services
Location: Various Unspecified
Application #(s): S-7581-2-0 thru 7-0
Project #: S-1122732

A. RMR SUMMARY

<table>
<thead>
<tr>
<th>Categories</th>
<th>LPG/Propane Flare (Units 2-0 thru 7-0)</th>
<th>Project Totals</th>
<th>Facility Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritization Score</td>
<td>2.72^1</td>
<td>16.35</td>
<td>&gt;1.0</td>
</tr>
<tr>
<td>Acute Hazard Index</td>
<td>0.03^1</td>
<td>0.03</td>
<td>0.18</td>
</tr>
<tr>
<td>Chronic Hazard Index</td>
<td>0.00^1</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Maximum Individual Cancer Risk (10^-6)</td>
<td>9.54E-10</td>
<td>5.69E-09</td>
<td>5.69E-09</td>
</tr>
<tr>
<td>T-BACT Required?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Permit Conditions?</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^1Each flare constitutes its own separate stationary source. The values are all per flare.

Proposed Permit Conditions

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

Units # 2-0 thru 7-0

1. 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]
2. The flares must be used at least 25 M from the property boundaries and 450 M from the nearest receptor.

B. RMR REPORT

I. Project Description

Technical Services received a request on July 17, 2012, to perform an Ambient Air Quality Analysis and a Risk Management Review for six-209MMBtu/hr LPG/Propane well test flares. Each flare constitutes its own separate stationary source.
II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Since the total facility prioritization score was greater than one, a refined health risk assessment was required. Stack parameters were calculated utilizing the District approved Modeling Parameter Estimator for Flare Modeling. Emissions calculated using emission factors for LPG External Combustion-Flare were input into the HEARTs database. The AERMOD model was used, with the parameters outlined below and meteorological data for 2005-2009 from Bakersfield to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the Hot Spots Analysis and Reporting Program (HARP) risk assessment module to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

<table>
<thead>
<tr>
<th>Analysis Parameters</th>
<th>Units 2-0 thru 7-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Type</td>
<td>Point</td>
</tr>
<tr>
<td>Eff Stack Height (m)</td>
<td>10.43</td>
</tr>
<tr>
<td>Stack Diameter (m)</td>
<td>2.52</td>
</tr>
<tr>
<td>Stack Exit Velocity (m/s)</td>
<td>35.23</td>
</tr>
<tr>
<td>Stack Exit Temp. (°K)</td>
<td>1273</td>
</tr>
<tr>
<td>Location Type</td>
<td>Closest Receptor (m)</td>
</tr>
<tr>
<td>450</td>
<td></td>
</tr>
<tr>
<td>Type of Receptor</td>
<td>Residential/Bus</td>
</tr>
<tr>
<td>Max Hours per Year</td>
<td>8750</td>
</tr>
<tr>
<td>Fuel Type</td>
<td>LPG/Propane</td>
</tr>
</tbody>
</table>

Each flare constitutes its own separate stationary source. The values are all per flare.

Technical Services performed modeling for criteria pollutants CO, NOx, SOx and PM<sub>10</sub>; as well as a RMR. The emission rates used for criteria pollutant modeling were 76.96 lb/hr CO, 14.14 lb/hr NOx, 0.59 lb/hr SOx, and 5.41 lb/hr PM<sub>10</sub>. The engineer supplied the maximum fuel rate for the flares used during the analysis.

The results from the Criteria Pollutant Modeling are as follows:

<table>
<thead>
<tr>
<th>Criteria Pollutant Modeling Results*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flares 2-0 thru 7-0</td>
</tr>
<tr>
<td>CO</td>
</tr>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
</tr>
<tr>
<td>SO&lt;sub&gt;x&lt;/sub&gt;</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
</tr>
<tr>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

*Results were taken from the attached PSD spreadsheet.

<sup>1</sup>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 procedures.

<sup>2</sup>The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

Each flare constitutes its own separate stationary source. The results are all per flare.

III. Conclusion

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with the project is 5.69E-09, which is less than the 1 in a million threshold. In
accordance with the District’s Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

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 permit 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
F. AAQA Summary
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-7581-2-0

LEGAL OWNER OR OPERATOR: GENERAL TESTING SERVICES
MAILING ADDRESS: 1605 GLACIER WAY
WASCO, CA 93280

LOCATION: VARIOUS UNSPECIFIED LOCATIONS, SJVAPCD

EQUIPMENT DESCRIPTION: 208 MMBTU/HR PORTABLE SMOKELESS AIR-ASSISTED WELL-TEST FLARE WITH A MODEL 100-12-GTS TIP (FLARE #2)

CONDITIONS

1. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
2. Flare shall only be used to combust gas released during well testing. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Permittee shall notify the District Compliance Division of each location at which the operation 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 2201]
5. This permit shall 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]
6. The unit must not be located and operated at an existing facility or operation such that it becomes part of an existing stationary source as defined by District Rule 2201. [District Rule 2201]
7. 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]
8. The flare can not operate within 450 meters of the nearest receptor. [District Rule 4102]
9. The flare can not operate within 25 meters of the property boundaries. [District Rule 4102]
10. Flare shall be equipped with air assist which shall be utilized when needed to maintain visible emissions below Ringlemann 1/4 and 5% opacity. [District Rule 2201]

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
11. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rule 2201]

12. Daily and annual amounts of gas flared shall not exceed 5.0 MMscf/day and 288 MMscf/yr. [District Rule 2201]

13. Visible emissions shall not exhibit Ringelmann 1/4 or greater or equivalent 5% opacity or greater for more than three minutes in any one hour. [District Rule 2201]

14. Sulfur compound concentration of gas flared shall not exceed 5 gr/100 scf. [District Rule 2201]

15. Emission rates shall not exceed any of the following: 0.008 lb-PM10/MMBtu, 0.068 lb-NOx/MMBtu (as NO2), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201]

16. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2201]

17. Permittee shall inspect the flare in operation for visible emissions no less frequently than once every two weeks. If visible emissions are observed, corrective action shall be taken. If visible emissions persist, an EPA Method 9 test shall be performed within 72 hours. [District Rule 2201]

18. Permittee shall document compliance with well gas sulfur compound concentration limit by performing sulfur content analysis of well gas upon startup at each new location of operation of flare. [District Rule 2201]

19. The following test methods shall be used for well gas sulfur content: ASTM D3246 or double GC for H2S and mercaptan. [District Rule 1081]

20. Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content at each location, and daily and annual rates of gas flared; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-7581-3-0

LEGAL OWNER OR OPERATOR: GENERAL TESTING SERVICES
MAILING ADDRESS: 1605 GLACIER WAY
                          WASCO, CA 93280
LOCATION: VARIOUS UNSPECIFIED LOCATIONS, SJVAPCD

EQUIPMENT DESCRIPTION:
208 MMBTU/HR PORTABLE SMOKELESS AIR-ASSISTED WELL-TEST FLARE WITH A MODEL 100-12-GTS TIP
(FLARE #3)

CONDITIONS

1. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
2. Flare shall only be used to combust gas released during well testing. [District Rule 2201]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Permittee shall notify the District Compliance Division of each location at which the operation 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 2201]
5. This permit shall 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]
6. The unit must not be located and operated at an existing facility or operation such that it becomes part of an existing stationary source as defined by District Rule 2201. [District Rule 2201]
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9. The flare can not operate within 25 meters of the property boundaries. [District Rule 4102]
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CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
6-7581-3-0: Oct 1 2012 11:45AM - EDGEHILR : Join Inspection Requested with EDGEHILR
Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585
11. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rule 2201]

12. Daily and annual amounts of gas flared shall not exceed 5.0 MMscf/day and 288 MMscf/yr. [District Rule 2201]

13. Visible emissions shall not exhibit Ringelmann 1/4 or greater or equivalent 5% opacity or greater for more than three minutes in any one hour. [District Rule 2201]

14. Sulfur compound concentration of gas flared shall not exceed 5 gr/100 scf. [District Rule 2201]

15. Emission rates shall not exceed any of the following: 0.008 lb-PM10/MMBtu, 0.068 lb-NOx/MMBtu (as NO2), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201]

16. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2201]

17. Permittee shall inspect the flare in operation for visible emissions no less frequently than once every two weeks. If visible emissions are observed, corrective action shall be taken. If visible emissions persist, an EPA Method 9 test shall be performed within 72 hours. [District Rule 2201]

18. Permittee shall document compliance with well gas sulfur compound concentration limit by performing sulfur content analysis of well gas upon startup at each new location of operation of flare. [District Rule 2201]

19. The following test methods shall be used for well gas sulfur content: ASTM D3246 or double GC for H2S and mercaptan. [District Rule 1081]

20. Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content at each location, and daily and annual rates of gas flared; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201]
AUTHORITY TO CONSTRUCT

PERMIT NO: S-7581-4-0

LEGAL OWNER OR OPERATOR: GENERAL TESTING SERVICES
MAILING ADDRESS: 1605 GLACIER WAY
WASCO, CA 93280

LOCATION: VARIOUS UNSPECIFIED LOCATIONS, SJVAPCD

EQUIPMENT DESCRIPTION:
208 MMBTU/HR PORTABLE SMOKELESS AIR-ASSISTED WELL-TEST FLARE WITH A MODEL 100-12-GTS TIP
(FLARE #4)

CONDITIONS

1. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]

2. Flare shall only be used to combust gas released during well testing. [District Rule 2201]

3. (98) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

4. Permittee shall notify the District Compliance Division of each location at which the operation 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 2201]

5. This permit shall 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]

6. The unit must not be located and operated at an existing facility or operation such that it becomes part of an existing stationary source as defined by District Rule 2201. [District Rule 2201]

7. 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]

8. The flare can not operate within 450 meters of the nearest receptor. [District Rule 4102]

9. The flare can not operate within 25 meters of the property boundaries. [District Rule 4102]

10. Flare shall be equipped with air assist which shall be utilized when needed to maintain visible emissions below Ringlemann 1/4 and 5% opacity. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services
8·7581-4-0: Oct 4 2012 11:25AM - EDGEHILL: Joint Inspection Required with EDGEHILL
Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585
11. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rule 2201]

12. Daily and annual amounts of gas flared shall not exceed 5.0 MMscf/day and 288 MMscf/yr. [District Rule 2201]

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18. Permittee shall document compliance with well gas sulfur compound concentration limit by performing sulfur content analysis of well gas upon startup at each new location of operation of flare. [District Rule 2201]

19. The following test methods shall be used for well gas sulfur content: ASTM D3246 or double GC for H2S and mercaptan. [District Rule 1081]

20. Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content at each location, and daily and annual rates of gas flared; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-7581-5-0
LEGAL OWNER OR OPERATOR: GENERAL TESTING SERVICES
MAILING ADDRESS: 1605 GLACIER WAY
WASCO, CA 93280
LOCATION: VARIOUS UNSPECIFIED LOCATIONS, SJVAPCD
EQUIPMENT DESCRIPTION: 208 MMBTU/HR PORTABLE SMOKELESS AIR-ASSISTED WELL-TEST FLARE WITH A MODEL 100-12-GTS TIP (FLARE #5)

CONDITIONS

1. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
2. Flare shall only be used to combust gas released during well testing. [District Rule 2201]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Permittee shall notify the District Compliance Division of each location at which the operation 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 2201]
5. This permit shall 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]
6. The unit must not be located and operated at an existing facility or operation such that it becomes part of an existing stationary source as defined by District Rule 2201. [District Rule 2201]
7. 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]
8. The flare can not operate within 450 meters of the nearest receptor. [District Rule 4102]
9. The flare can not operate within 25 meters of the property boundaries. [District Rule 4102]
10. Flare shall be equipped with air assist which shall be utilized when needed to maintain visible emissions below Ringlemann 1/4 and 5% opacity. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services
8-7581-5-0 - Oct 4 2012 11:29AM - EDOCHELIR : Joint Inspection Required with EDOCHELIR
Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585
11. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rule 2201]

12. Daily and annual amounts of gas flared shall not exceed 5.0 MMscf/day and 288 MMscf/yr. [District Rule 2201]

13. Visible emissions shall not exhibit Ringelmann 1/4 or greater or equivalent 5% opacity or greater for more than three minutes in any one hour. [District Rule 2201]

14. Sulfur compound concentration of gas flared shall not exceed 5 gr/100 scf. [District Rule 2201]

15. Emission rates shall not exceed any of the following: 0.008 lb-PM10/MBtu, 0.068 lb-NOx/MMBtu (as NO2), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201]

16. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2201]

17. Permittee shall inspect the flare in operation for visible emissions no less frequently than once every two weeks. If visible emissions are observed, corrective action shall be taken. If visible emissions persist, an EPA Method 9 test shall be performed within 72 hours. [District Rule 2201]

18. Permittee shall document compliance with well gas sulfur compound concentration limit by performing sulfur content analysis of well gas upon startup at each new location of operation of flare. [District Rule 2201]

19. The following test methods shall be used for well gas sulfur content: ASTM D3246 or double GC for H2S and mercaptan. [District Rule 1081]

20. Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content at each location, and daily and annual rates of gas flared; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-7581-6-0
LEGAL OWNER OR OPERATOR: GENERAL TESTING SERVICES
MAILING ADDRESS: 1605 GLACIER WAY
WASCO, CA 93280
LOCATION: VARIOUS UNSPECIFIED LOCATIONS, SJVAPCD
EQUIPMENT DESCRIPTION: 208 MMBTU/HR PORTABLE SMOKELESS AIR-ASSISTED WELL-TEST FLARE WITH A MODEL 100-12-GTS TIP (FLARE #6)

CONDITIONS

1. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
2. Flare shall only be used to combust gas released during well testing. [District Rule 2201]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Permittee shall notify the District Compliance Division of each location at which the operation 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 2201]
5. This permit shall 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]
6. The unit must not be located and operated at an existing facility or operation such that it becomes part of an existing stationary source as defined by District Rule 2201. [District Rule 2201]
7. 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]
8. The flare can not operate within 450 meters of the nearest receptor. [District Rule 4102]
9. The flare can not operate within 25 meters of the property boundaries. [District Rule 4102]
10. Flare shall be equipped with air assist which shall be utilized when needed to maintain visible emissions below Ringlemann 1/4 and 5% opacity. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director APCO
11. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rule 2201]

12. Daily and annual amounts of gas flared shall not exceed 5.0 MMscf/day and 288 MMscf/yr. [District Rule 2201]

13. Visible emissions shall not exhibit Ringelmann 1/4 or greater or equivalent 5% opacity or greater for more than three minutes in any one hour. [District Rule 2201]

14. Sulfur compound concentration of gas flared shall not exceed 5 gr/100 scf. [District Rule 2201]

15. Emission rates shall not exceed any of the following: 0.008 lb-PM10/MMBtu, 0.068 lb-NOx/MMBtu (as NO2), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201]

16. The flare shall be operated according to the manufacturer’s specifications, a copy of which shall be maintained on site. [District Rule 2201]

17. Permittee shall inspect the flare in operation for visible emissions no less frequently than once every two weeks. If visible emissions are observed, corrective action shall be taken. If visible emissions persist, an EPA Method 9 test shall be performed within 72 hours. [District Rule 2201]

18. Permittee shall document compliance with well gas sulfur compound concentration limit by performing sulfur content analysis of well gas upon startup at each new location of operation of flare. [District Rule 2201]

19. The following test methods shall be used for well gas sulfur content: ASTM D3246 or double GC for H2S and mercaptan. [District Rule 1081]

20. Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content at each location, and daily and annual rates of gas flared; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-7581-7-0

LEGAL OWNER OR OPERATOR: GENERAL TESTING SERVICES
MAILING ADDRESS: 1605 GLACIER WAY
                        WASCO, CA 93280
LOCATION: VARIOUS UNSPECIFIED LOCATIONS, SJVAPCD

EQUIPMENT DESCRIPTION:
208 MMBTU/HR PORTABLE SMOKELESS AIR-ASSISTED WELL-TEST FLARE WITH A MODEL 100-12-GTS TIP
(FLARE #7)

CONDITIONS

1. The equipment shall not be located within 1000 ft. of any K-12 school. [CH&SC 42301.6]
2. Flare shall only be used to combust gas released during well testing. [District Rule 2201]
3. (98) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Permittee shall notify the District Compliance Division of each location at which the operation 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
   2201]
5. This permit shall 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]
6. The unit must not be located and operated at an existing facility or operation such that it becomes part of an existing
   stationary source as defined by District Rule 2201. [District Rule 2201]
7. 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]
8. The flare can not operate within 450 meters of the nearest receptor. [District Rule 4102]
9. The flare can not operate within 25 meters of the property boundaries. [District Rule 4102]
10. Flare shall be equipped with air assist which shall be utilized when needed to maintain visible emissions below
    Ringlemann 1/4 and 5% opacity. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services
5-7581-7-0 - Oct 4 2012 11:26AM - EDS:HLR - Joint Inspection Requested with EDS:HLR

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585
11. Gas line to flare shall be equipped with operational, volumetric flow rate indicator. [District Rule 2201]

12. Daily and annual amounts of gas flared shall not exceed 5.0 MMscf/day and 288 MMscf/yr. [District Rule 2201]

13. Visible emissions shall not exhibit Ringelmann 1/4 or greater or equivalent 5% opacity or greater for more than three minutes in any one hour. [District Rule 2201]

14. Sulfur compound concentration of gas flared shall not exceed 5 gr/100 scf. [District Rule 2201]

15. Emission rates shall not exceed any of the following: 0.008 lb-PM10/MMBtu, 0.068 lb-NOx/MMBtu (as NO2), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District Rule 2201]

16. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2201]

17. Permittee shall inspect the flare in operation for visible emissions no less frequently than once every two weeks. If visible emissions are observed, corrective action shall be taken. If visible emissions persist, an EPA Method 9 test shall be performed within 72 hours. [District Rule 2201]

18. Permittee shall document compliance with well gas sulfur compound concentration limit by performing sulfur content analysis of well gas upon startup at each new location of operation of flare. [District Rule 2201]

19. The following test methods shall be used for well gas sulfur content: ASTM D3246 or double GC for H2S and mercaptan. [District Rule 1081]

20. Permittee shall maintain accurate daily records indicating flare location, flared gas sulfur content at each location, and daily and annual rates of gas flared; and such records shall be made readily available for District inspection upon request for a minimum of 5 years. [District Rule 2201]