



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



MAR 10 2014

Joey Barulich
Vintage Production California, LLC
9600 Ming Ave
Bakersfield, CA 93311

RE Notice of Final Action - Authority to Construct
Facility Number S-1738
Project Number S-1134305

Dear Mr Barulich

The Air Pollution Control Officer has issued the Authority to Construct (ATC) permit to Vintage Production California, LLC for increasing a flare's daily heat input limit, at the South Belridge Facility within the SE/4 of Section 12, Township 29S, Range 21E, California. Enclosed are the Authority to Construct permit and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permit was published on 1/13/14. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on 1/8/14.

Comments were received by the District during the public notice period. The comments and the District's responses to the comments are attached.

Additionally, Rule 4311 (Flares) monitoring requirements that became effective in July 2011 and July 2012 have been administratively added to the ATC.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356 8718
Tel: (209) 557 6400 FAX: (209) 557 6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726 0244
Tel: (559) 230 6000 FAX: (559) 230 6061

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

Mr Barulich
Page 2

Thank you for your cooperation in this matter. If you have any questions, please contact
Mr Leonard Scandura at (661) 392-5500

Sincerely,

A handwritten signature in black ink, appearing to read 'David Warner', with a long horizontal flourish extending to the right.

David Warner
Director of Permit Services

DW DBT/st

Enclosures

cc Mike Tollstrup, CARB (w/enclosure) via email
cc Gerardo C Rios, EPA (w/enclosure) via email
cc Tom Frantz
Association of Irrigated Residents
29389 Fresno Ave
Shafter CA 93263



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO S-1738-455-2

ISSUANCE DATE 02/20/2014

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

LOCATION LIGHT OIL WESTERN STATIONARY SOURCE
KERN COUNTY
CA

SECTION SE12 TOWNSHIP 29S RANGE 21E

EQUIPMENT DESCRIPTION

MODIFICATION OF 750 BBL WASH TANK WITH VAPOR CONTROL SHARED WITH FIVE TANKS (S-1738-455 THROUGH -459) AND OIL/WATER SUMP S-1738-460 VENTED TO VAPOR CONTROL SYSTEM INCLUDING THREE PHASE SEPARATOR FREE WATER KNOCK OUT GAS SCRUBBER SALES GAS SCRUBBER AND COMPRESSORS DISCHARGING INTO BLANKET GAS SYSTEM SALES PIPELINE OR 256 3 MMBTU/HR GBA-CORONA-CSF SONIC FLARE INCREASE FLARE S DAILY FLOW RATE LIMIT

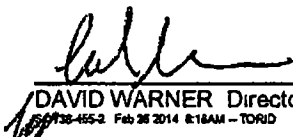
CONDITIONS

- 1 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 Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4 [District Rule 2520 5.3.4] Federally Enforceable Through Title V Permit
- 3 The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.6 [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin Executive Director / APCO



DAVID WARNER Director of Permit Services

S-1738-455-2 Feb 26 2014 8:18AM - TORID Joint Inspection NOT Required

- 4 All piping valves and fittings shall be constructed and maintained in a leak free condition [District Rule 4623] Federally Enforceable Through Title V Permit
- 5 A leak free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10 000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10 000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation [District Rule 4623] Federally Enforceable Through Title V Permit
- 6 Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling [District Rule 4623] Federally Enforceable Through Title V Permit
- 7 Except as otherwise provided in this permit, operator shall ensure that the vapor control system is functional and is operating as designed at all times [District Rule 2201] Federally Enforceable Through Title V Permit
- 8 Wash tank, 3 phase separators, gas scrubber, and sales gas scrubber shall vent to low use flare, sales gas line or gas blanketing system [District Rule 2201] Federally Enforceable Through Title V Permit
- 9 VOC emission rate from vapor, light liquid, and light crude oil service components associated with wash tank, up to the tie-in with the vapor control trunk-line shall not exceed 0.25 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
- 10 VOC emission rate from vapor, light liquid, and light crude oil components associated with vapor control piping to the flare, gas scrubber, and blanket gas header shall not exceed 0.15 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
- 11 VOC emission rate from vapor, light liquid, and light crude oil components associated with vapor control piping to the sales gas scrubber shall not exceed 0.15 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
- 12 VOC emission rate from vapor, light liquid, and light crude oil components associated with the two 3 phase separators shall not exceed 0.67 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
- 13 VOC emission rate from vapor, light liquid, and light crude oil components associated with tanks vapor control system and associated gas compressors shall not exceed 0.62 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
- 14 VOC emission rate from vapor, light liquid, and light crude oil components associated with the sales gas pipeline and associated gas compressors shall not exceed 2.8 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
- 15 VOC emission rate from vapor, light liquid, and light crude oil components associated with flare, flare liquid knockout, and associated equipment shall not exceed 4.1 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
- 16 VOC content of hydrocarbons in vapor collection piping serving the wash tank and all associated vessels and systems shall not exceed 65% by weight [District Rule 2201] Federally Enforceable Through Title V Permit
- 17 VOC content of gas shall be determined at startup and annually thereafter by ASTM D1945, EPA Method 18, referenced as methane, or equivalent test method with prior District approval [District Rule 2201] Federally Enforceable Through Title V Permit
- 18 There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with wash tank, 3 phase separators, gas scrubber and blanket header, sales gas scrubber, and vapor control system (with compressor) [District Rule 2201] Federally Enforceable Through Title V Permit
- 19 Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from wash tank, 3-phase separators, gas scrubber and blanket header, sales gas scrubber, and vapor control system (with compressor) calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C, Oil and Gas Production Screening Value Ranges (<10 000 ppmv) Emission Factors with 100% VOC content in components [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

- 20 Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from low use flare and flare liquid knockout calculated using EPA Document Table 2-4 Oil and Gas Production Operations Average Value Ranges Emission Factors [District Rule 2201] Federally Enforceable Through Title V Permit
- 21 Except during tank cleaning tank roof appurtenances shall be maintained leak free [District Rule 4623] Federally Enforceable Through Title V Permit
- 22 Except as otherwise provided in this permit, all piping, valves and fittings shall be constructed and maintained in a leak free condition [District Rule 4623, 5 6 3] Federally Enforceable Through Title V Permit
- 23 A leak free condition is defined as a condition without a gas leak A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21 [District Rule 4623, 3 9 and 6 4 8] Federally Enforceable Through Title V Permit
- 24 Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling [District Rule 4623, 5 6 2] Federally Enforceable Through Title V Permit
- 25 To avoid the potential unsafe conditions associated with heat radiation from an ignited flare, all fugitive components such as pipe connections fittings and valves associated with the low use flare shall be inspected only during maintenance or other times when the flare is offline and flare pilot are not lit These components shall be inspected by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit [District Rule 4623, 5 7 (Table 3)] Federally Enforceable Through Title V Permit
- 26 During a District inspection fugitive components, such as pipe connections, fittings and valves, associated with the low use flare that are found to leak will not be a violation of this permit provided the facility records tags and repairs leaks to a leak-free condition within fifteen (15) calendar days of detection The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period [District Rule 2201] Federally Enforceable Through Title V Permit
- 27 All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane to ensure compliance with the leaking provisions of this permit [District Rule 4623 5 7 (Table 3)] Federally Enforceable Through Title V Permit
- 28 If any of the tank components are found to be leaking operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5 7 (Table 3)] Federally Enforceable Through Title V Permit
- 29 Upon detection of any leaking components (having a gas leak >10 000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall (a) eliminate or minimize the leak within 8 hours after detection, (b) if the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after detection In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection [District Rule 4623, 5 7 9 (Table 3)] Federally Enforceable Through Title V Permit
- 30 Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623 However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines shall constitute a violation of SJVUAPCD Rule 4623 [District Rule 4623, 5 7 (Table 3)] Federally Enforceable Through Title V Permit
- 31 If a component type is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections [District Rule 4623, 5 7 (Table 3)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

- 32 Any component affixed to the tank or within 5 feet of the tank that is found to be leaking on two consecutive annual inspections is in violation of SJVUAPCD Rule 4623, even if it is under the voluntary inspection and maintenance program [District Rule 4623, 5 7 (Table 3)] Federally Enforceable Through Title V Permit
- 33 Operator shall maintain an inspection log containing the following 1) type of component leaking, 2) date and time of leak detection, and method of detection, 3) date and time of leak repair and emission level of recheck after leak is repaired, 4) method used to minimize the leak to lowest possible level within 8 hours after detection [District Rule 1070]
- 34 The operator shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request [District Rule 4409] Federally Enforceable Through Title V Permit
- 35 By January 30 of each year the operator shall submit to the APCO for approval, in writing an annual report indicating any changes to the existing, approved OMP [District Rule 4409] Federally Enforceable Through Title V Permit
- 36 In accordance with the approved OMP, the operator shall meet all applicable operating inspection and re-inspection maintenance process pressure relief device (PRD), component identification record keeping, and notification requirements of Rule 4409 for all components containing or contacting VOC's at this facility except for those components specifically exempted in Sections 4 1 and 4 2 of Rule 4409 [District Rule 4409] Federally Enforceable Through Title V Permit
- 37 The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log The inspection log shall contain, at a minimum, all of the following information 1) The total number of components inspected, and the total number and percentage of leaking components found by component types 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found 3) Date of the leak detection and method of the leak detection, 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) The date of repair replacement, or removal from operation of the leaking component(s), 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first, 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, 8) The date of re inspection and the leak concentration in ppmv after the component is repaired or is replaced 9) The inspector's name, business mailing address, and business telephone number [District Rule 4409, 6 2 1] Federally Enforceable Through Title V Permit
- 38 Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request [District Rule 4409, 6 2 2] Federally Enforceable Through Title V Permit
- 39 Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration [District Rule 4409 6 2 3] Federally Enforceable Through Title V Permit
- 40 The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b [District Rule 4623, 6 4 7] Federally Enforceable Through Title V Permit
- 41 Flare's flame shall be present at all times when combustible gases are vented through the flare [District Rule 4311] Federally Enforceable Through Title V Permit
- 42 Flare's 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

- 43 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
- 44 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
- 45 The permittee shall maintain and make available for District inspection all records of required monitoring data and support information for inspection at any time for a period of five years [District Rule 4311] Federally Enforceable Through Title V Permit
- 46 This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance but occurs as a routine maintenance activity [District Rule 2020] Federally Enforceable Through Title V Permit
- 47 Permittee shall comply with all applicable Tank Interior Cleaning Program requirements specified in Rule 4623 Section 5 7 [District Rule 4623, 5 7] Federally Enforceable Through Title V Permit
- 48 Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program and maintain the records of annual tank inspections, maintenance and cleaning to document the participation in the program [District Rule 4623, 5 7] Federally Enforceable Through Title V Permit
- 49 A flame shall be present at all times when combustible gases are vented through flare [District Rule 2201] Federally Enforceable Through Title V Permit
- 50 Sulfur compound concentration of gas combusted shall not exceed 3 0 gr S/100 scf (50 7 ppmv H₂S) [District Rule 2201] Federally Enforceable Through Title V Permit
- 51 Flare shall not operate with visible emissions darker than 5% opacity or 1/4 Ringelmann for a period or periods aggregating more than three minutes in any one hour [District Rules 2201] Federally Enforceable Through Title V Permit
- 52 Flare shall be equipped with total gas volume flow measuring system [District Rule 2201] Federally Enforceable Through Title V Permit
- 53 Maximum heat input shall not exceed 10,080 MMBtu/day nor 81,600 MMBtu/yr [District Rule 2201] Federally Enforceable Through Title V Permit
- 54 Emissions from the flare shall not exceed any of the following limits (based on total gas combusted) NO_x (as NO₂) 0 068 lb/MMBtu, PM₁₀ 0 008 lb/MMBtu, CO 0 37 lb/MMBtu, or VOC 0 063 lb/MMBtu [District Rule 2201] Federally Enforceable Through Title V Permit
- 55 Permittee shall measure sulfur content of gas incinerated in flare within 60 days of startup [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
- 56 Operator shall conduct quarterly sampling of the sulfur content of the gas flared If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually [District Rule 2201] Federally Enforceable Through Title V Permit
- 57 Permittee shall determine sulfur content of gas flared using ASTM method D3246 or double GC for H₂S and mercaptans Sulfur content of waste gas shall be measured within one day of restarting unit if the unit has not been in use for more than 7 days [District Rule 1081 and 2201]
- 58 The higher heating value of the flared gas shall be monitored at least quarterly [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 59 Measured heating value and quantity of gas flared shall be used to determine compliance with heat input limits [District Rule 2201] Federally Enforceable Through Title V Permit
- 60 Permittee shall keep accurate records of daily and annual heat input to the flare in MMBtu/day and MMBtu/yr [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

- 61 Copies of approved flare minimization plan pursuant to Rule 4311 Section 6 5 shall be made readily available to the APCO, ARB and EPA upon request for a minimum of 5 years [District Rule 4311, 6 1] Federally Enforceable Through Title V Permit
- 62 Copies of compliance determination pursuant to 40 CFR 60 18 shall be made readily available to the APCO, ARB, and EPA upon request for a minimum of 5 years [District Rule 4311, 6 1 and 40 CFR 60 18] Federally Enforceable Through Title V Permit
- 63 Copies of monitoring data collected pursuant to Rule 4311 Section 5 10 shall be made readily available to the APCO, ARB, and EPA upon request for a minimum of 5 years [District Rule 4311 6 1] Federally Enforceable Through Title V Permit
- 64 The operator shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first The notification shall include the flare source identification, the start date and time and the end date and time [District Rule 4311, 6 2] Federally Enforceable Through Title V Permit
- 65 The operator of a flare subject to flare minimization plans pursuant to Section 5 8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Rule 4311 Section 3 0 that occurred during the previous 12 month period The report shall be submitted within 30 days following the end of the twelve month period of the previous year [District Rule 4311, 6 2] Federally Enforceable Through Title V Permit
- 66 The operator of a flare subject to flare monitoring requirements pursuant to Sections 5 10, 6 6, 6 7, 6 8, 6 9, and 6 10 as appropriate, shall submit an annual report to the APCO as specified in Rule 4311 Section 6 2 3 within 30 days following the end of each 12 month period [District Rule 4311, 6 2] Federally Enforceable Through Title V Permit
- 67 Pursuant to Rule 4311 Section 6 6 the operator shall monitor vent gas composition using one the methods pursuant to Section 6 6 1 through Section 6 6 5 as appropriate [District Rule 4311 6 6] Federally Enforceable Through Title V Permit
- 68 The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices [District Rule 4311, 6 7] Federally Enforceable Through Title V Permit
- 69 If the flare is equipped with a water seal the operator shall monitor and record the water level and pressure of the water seal that services each flare daily [District Rule 4311 6 8] Federally Enforceable Through Title V Permit
- 70 Periods of flare monitoring system in operation greater than 24 continuous hours shall be reported by the following working day followed by notification of resumption of monitoring Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating [District Rule 4311, 6 9] Federally Enforceable Through Title V Permit
- 71 During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6 6 operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6 3 4 During periods of inoperation of flow monitors required by Section 5 10, flow shall be calculated using good engineering practices [District Rule 4311, 6 9] Federally Enforceable Through Title V Permit
- 72 Operator shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure [District Rule 4311, 6 9] Federally Enforceable Through Title V Permit
- 73 All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages Flow monitoring data shall be recorded as one-minute averages [District Rule 4311, 6 9] Federally Enforceable Through Title V Permit
- 74 All records required by this permit shall be retained on-site for a minimum of five years and shall be made available to the APCO, ARB, and EPA upon request [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit

Summary of comments received from Association of Irrigated residents and District responses

Comment 1

The increased use of the subject flare will result in increased emissions especially on days of poor air quality, and will negatively impact air quality in the Valley. The permit should restrict or prohibit flaring on days when there are high pollution levels.

Response 1

The emission increase due to this modification is subject to the requirements of Rule 2201 New and Modified Stationary Source Review. Rule 2201 imposes stringent requirements on emissions from all new and modified stationary sources, ensures that there is no overall net increase in emissions from stationary sources in the Valley. Rule 2201 has been approved by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency, and is designed specifically to accommodate new and expanding businesses, while subjecting them to the strictest control and mitigation requirements in the nation.

Rule 2201 requirements are protective of air quality in the Valley on all days, including days when air pollution levels may exceed ambient air quality standards.

The flare meets the District's Best Available Control Technology requirements. Annual emissions are not increasing. The emissions of the flare were also evaluated to determine whether a health risk was being created, and to determine the impact on ambient air quality standards for CO, NO₂, SO₂, PM₁₀, and PM_{2.5}. Our analysis determined that the emission increases will not cause a significant health risk, nor will they result in a violation of the CO, NO₂, and SO₂ ambient air quality standards. The modelled increases in PM₁₀ and PM_{2.5} concentrations are so low that they are below EPA established de-minimus levels.

Comment 2

A revised Rule flare minimization plan (FMP), per Rule 4311 – Flares, should have been required as part of the proposal, and be available for public review.

The flare minimization plan for this facility should have specific requirements to requirements to minimize flaring, possibly as a percentage of the amount of gas produced, as is required in the Santa Barbara air basin.

Response 2

The applicant has complied with Rule 4311 – Flares by submitting a revised FMP prior to making the proposed modifications (see attached revised FMP) District staff has reviewed the revised FMP and has determined that it satisfies the requirements of Rule 4311

Please note that rather than including absolute limits on the amounts of gas that can be flared, Rule 4311 dictates that the feasibility of reducing flaring be determined on a case by case basis using facility specific operating characteristics and constraints Vintage has committed to using the flare only during gas sale interruptions by end purchaser, during maintenance of compression equipment, and when the gas quality is below minimum specifications

During gas sales line interruptions and maintenance of compression equipment gas production may be curtailed to minimize flaring Additionally, the gas process equipment will be maintained to minimize low gas quality that subsequently must be flared

Comment 3

The effect of fracking fluids and other well stimulations on the gases being flared should be considered Chemicals contained in the fracking fluids and other fluids will be contained in the gases being flared The hazardous emissions due to combusting these chemicals must be evaluated

Response 3

The health risk due to the combustion of oilfield produced gas in the subject flare was evaluated by the District and determined to not cause a significant health impacts to nearby receptors In estimating the health risk, conservative (high) estimates of toxic air contaminant emissions were assumed Using this conservative estimate of toxic air contaminant emissions and conservative assumptions in the dispersion of the emissions, the estimated health risk is highly conservative, i.e. overestimates the actual health risk With these conservative procedures, the health risk due to the increase daily emissions from the flare were determined to not be significant

Further, we are not aware of any relationship between well stimulation activities (if the related wells were in fact “stimulated”), chemicals compounds that may be present in produced gas from such wells due to well stimulation, and resulting emissions from flaring of such gases

Comment 4

The District should impose incentives on Vintage to reduce flaring, possibly by imposing fees on the amount of gas flared, with such fees used to reduce a greater amount of pollution elsewhere in the Valley. Such a fee on flaring could be based on the cost of gas by consumers.

Response 4

When evaluating an application for Authority to Construct, the District can only impose conditions that are required by District rules, State laws and regulations, and Federal laws and regulations. Your proposal to require emission fees for the amount of gas flared is not contained in any rules applicable to the subject flare. As such, we cannot impose such a requirement on the applicant.



Vintage Production California LLC
A subsidiary of Occidental Petroleum Corporation

9600 Ming Avenue Suite 300
Bakersfield California 93311
Phone 661 869 8000 Fax 661.869 8170

January 31, 2014

Mr David Baldwin
San Joaquin Valley Unified APCD
34946 Flyover Ct
Bakersfield, CA 93308

**SUBJECT UPDATED FLARE MINIMIZATION PLAN (FMP) FOR
 VINTAGE PRODUCTION CALIFORNIA LLC**

Reference District Rule 4311 Section 6 5 3

Dear Mr Baldwin

Vintage Production California LLC (VPC) submits the attached FMP VPC recently submitted applications to modify permits to operate (PTO) S 1738-455 and S-1737 180 to increase their daily allowable flare volumes (annual PTE to remain unchanged)

Per the referenced rule section, updated FMP submittals are required for equipment changes requiring an authority to construct (ATC) that has been deemed complete after June 18, 2009 and the modification is not solely the removal or decommissioning of equipment having no associated increase in emissions

Please contact me at (661) 869-8075 if you have any questions or need additional information

Sincerely,

Joey Barulich
HES Team Leader
Vintage Production California LLC

Vintage Production California LLC
Rule 4311 - Flare Minimization Plan

**This FMP Includes the Four Stationary Sources in Which VPC
Operates Flares Subject to Rule 4311, Section 6 5 1**

Heavy Oil Central Source - S-1326

Heavy Oil Western Source - S-1327

Light Oil Central Source - S-1737

Light Oil Western Source - S-1738

Vintage Production California LLC - Source ID S-1326 (HOC)

Rule 4311 - Flare Minimization Plan

Heavy Oil Central Source - S-1326

Flare PTO #	Rule 4311 Section	Compliance Description
S-1326-378 HOC	6 5 1 1	Air assist flare with liquid knockout vessel
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S 1326 373] --> D[Liquid KO Vessel] B[Test Facility VRS] --> D D --> C[Field Fuel] D --> E[Gas Sales] C --> F[FLARE] E --> F </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g., sales line repair and/or maintenance) and/or compression equipment R&M. Flaring frequency and gas volume flared is insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user, and/or major maintenance activities to the sales gas compressor, gas production will be curtailed to the extent possible without hampering oil production.
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g., knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser, most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor has a thorough regular maintenance schedule. Flaring may occur during prolonged compressor maintenance, but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1327 (HOW)

Rule 4311 - Flare Minimization Plan

Heavy Oil Western Source - S-1327

Flare PTO #	Rule 4311 Section	Compliance Description
S 1327 169 HOW	6 5 1 1	Sonic tip flare with liquid knockout and sulfur knockout vessels
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S-1327 79] --> C[Liquid KO Vessel] B[Well Casing VRS] --> C C --> D[Sulfur KO Vessel] D --> E[FLARE] </pre>
	6 5 1 3	No off site gas outlet Gas volume is insufficient to justify installation of pipeline or re injection system
	6 5 1 4	Flaring is constant (no gas outlet) not initiated by maintenance startup or shutdown of equipment
	6 5 1 5	Flaring is constant because there is no gas sales outlet flaring is not associated with gas quality or quantity
	6 5 1 6	Flaring is constant (no gas outlet), not initiated by any type of equipment failure

Vintage Production California LLC - Source ID S-1737 (LOC)
Rule 4311 - Flare Minimization Plan
Light Oil Central Source - S-1737

Flare PTO #	Rule 4311 Section	Compliance Description
S 1737 157 LOC	6 5 1 1	Coanda tip flare with liquid knockout and sulfur knockout vessels.
	6 5 1 2	<pre> graph LR Tank[Tank Facility VRS S 1737-157] --> LiquidKO[Liquid KO Vessel] Test[Test Facility VRS] --> LiquidKO LiquidKO --> SulfurKO[Sulfur KO Vessel] SulfurKO --> FieldFuel[Field Fuel] SulfurKO --> GasSales[Gas Sales] FieldFuel --> Flare[FLARE] GasSales --> Flare </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g. sales line repair and/or maintenance) and/or compression equipment R&M. Flaring frequency and gas volume flared is insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user and/or major maintenance activities to the sales gas compressor, gas production will be curtailed to the extent possible without hampering oil production.
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g. knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser; most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor has a thorough regular maintenance schedule. Flaring may occur during prolonged compressor maintenance, but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1737 (LOC)

Rule 4311 - Flare Minimization Plan

Light Oil Central Source - S-1737

Flare PTO #	Rule 4311 Section	Compliance Description
S 1737 167 LOC	6 5 1 1	Coanda tip flare with liquid knockout vessel
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S-1737 157] --> B[Liquid KO Vessel] B --> C[] D[Field Fuel] --> C E[Gas Sales] --> C C --> F[FLARE] </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g. sales line repair and/or maintenance) and/or compression equipment R&M. Flaring frequency and gas volume flared is insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user, and/or major maintenance activities to the sales gas compressor, gas production will be curtailed to the extent possible without hampering oil production.
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g. knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser, most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor has a thorough, regular maintenance schedule. Flaring may occur during prolonged compressor maintenance, but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1737 (LOC)

Rule 4311 - Flare Minimization Plan

Light Oil Central Source - S-1737

Flare PTO #	Rule 4311 Section	Compliance Description
S 1737 178 LOC	6 5 1 1	Air assist flare with liquid knockout and sulfur knockout vessels
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S 1737-172] --> C B[Test Facility VRS] --> C C[Liquid KO Vessel] --> D[Sulfur KO Vessel] D --> E[Field/Facility Fuel] E --> F[FLARE] </pre>
	6 5 1 3	No off site gas outlet. Gas volume is insufficient to justify installation of pipeline or re injection system
	6 5 1 4	Flaring is constant (no gas outlet) not initiated by maintenance startup or shutdown of equipment
	6 5 1 5	Flaring is constant because there is no gas sales outlet flaring is not associated with gas quality or quantity
	6 5 1 6	Flaring is constant (no gas outlet) not initiated by any type of equipment failure

Vintage Production California LLC - Source ID S-1737 (LOC)

Rule 4311 - Flare Minimization Plan

Light Oil Central Source - S-1737

Flare PTO #	Rule 4311 Section	Compliance Description
S 1737 180 LOC	6 5 1 1	Air assist flare with liquid knockout and sulfur knockout vessels
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S-1737-168] --> C[Liquid KO Vessel] B[Test Facility VRS] --> C C --> D[Sulfur KO Vessel] D --> E[Field Fuel] D --> F[Gas Sales] E --> G[FLARE] F --> G </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g. sales line repair and/or maintenance) and/or compression equipment R&M. Flaring frequency and gas volume flared is insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user and/or major maintenance activities to the sales gas compressor, gas production will be curtailed to the extent possible without hampering oil production.
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g. knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser, most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor has a thorough, regular maintenance schedule. Flaring may occur during prolonged compressor maintenance, but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1738 (LOW)

Rule 4311 - Flare Minimization Plan

Light Oil Western Source - S-1738

Flare PTO #	Rule 4311 Section	Compliance Description
S 1738 7 LOW	6 5 1 1	Air assist flare with liquid knockout and sulfur knockout vessels
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S 1738 7] --> C[Liquid KO Vessel] B[Test Facility VRS] --> C C --> D[Sulfur KO Vessel] D --> E[Field/Facility Fuel] E --> F[Gas Sales] F --> G[FLARE] </pre>
	6.5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g. sales line repair and/or maintenance) and/or compression equipment R&M. Gas volume insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user, and/or major maintenance activities to the sales gas compressor, gas production will be curtailed to the extent possible without hampering oil production.
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g. knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6.5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser, most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor is rented from a third party which has a thorough regular maintenance schedule. Flaring may occur during prolonged compressor maintenance but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1738 (LOW)

Rule 4311 - Flare Minimization Plan

Light Oil Western Source - S-1738

Flare PTO #	Rule 4311 Section	Compliance Description
S 1738 279 LOW	6 5 1 1	Open flare with liquid knockout vessel
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S 1738 38] --> C[Liquid KO Vessel] B[Test Facility VRS] --> C C --> D[Sales Gas Compressor S 1738 345] D --> E[Field Fuel] D --> F[Gas Sales] E --> G[FLARE] F --> G </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g. sales line repair and/or maintenance) and/or compression equipment R&M. Flaring frequency and gas volume flared is insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user and/or major maintenance activities to the sales gas compressor gas production will be curtailed to the extent possible without hampering oil production.
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g. knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser; most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor is rented from a third party which has a thorough regular maintenance schedule. Flaring may occur during prolonged compressor maintenance but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1738 (LOW)

Rule 4311 - Flare Minimization Plan

Light Oil Western Source - S-1738

Flare PTO #	Rule 4311 Section	Compliance Description
S 1738-347 LOW	6.5 1 1	Sonic tip flare with liquid knockout vessel
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S 1738 246] --> D[Liquid KO Vessel] B[Test Facility VRS] --> D D --> C[Field Fuel] D --> E[Gas Sales] C --> F[FLARE] E --> F </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g. sales line repair and/or maintenance) and/or compression equipment R&M. Flaring frequency and gas volume flared is insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user, and/or major maintenance activities to the sales gas compressor, gas production will be curtailed to the extent possible without hampering oil production.
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g. knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser, most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor has a thorough, regular maintenance schedule. Flaring may occur during prolonged compressor maintenance, but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1738 (LOW)

Rule 4311 - Flare Minimization Plan

Light Oil Western Source - S-1738

Flare PTO #	Rule 4311 Section	Compliance Description
S 1738 349 LOW	6 5 1 1	Coanda tip flare with liquid knockout vessel
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S 1738 290] --> D[Liquid KO Vessel] B[Well Casing VRS] --> D C[Test Facility VRS] --> D D --> E[Field Fuel] D --> F[Gas Sales] E --> G[FLARE] F --> G </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e g , sales line repair and/or maintenance) and/or compression equipment R&M Flaring frequency and gas volume flared is insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user, and/or major maintenance activities to the sales gas compressor gas production will be curtailed to the extent possible without hampering oil production
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality Repair and/or maintenance to gas process equipment (e g knockout vessels) disrupts gas from being used or sold and results in flaring The gas process equipment is operated in a manner to minimize these disruptions The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M Sales gas compressor has a thorough regular maintenance schedule Flaring may occur during prolonged compressor maintenance, but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring VPC cooperates with end user to minimize down time and flaring

Vintage Production California LLC - Source ID S-1738 (LOW)
Rule 4311 - Flare Minimization Plan
Light Oil Western Source - S-1738

Flare PTO #	Rule 4311 Section	Compliance Description
S 1738 354 LOW	6.5 1 1	Open flare with liquid knockout vessel
	6.5 1 2	<pre> graph LR A[Tank Facility VRS S-1738-354] --> C[Liquid KO Vessel] B[Test Facility VRS] --> C C --> D[Sulfur KO Vessel] D --> E[Field/Facility Fuel] E --> F[FLARE] </pre>
	6.5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g., sales line repair and/or maintenance) and/or compression equipment R&M. Flaring frequency and gas volume flared is insufficient to economically justify installation of redundant equipment.
	6.5 1 4	In the event of a planned shut down by end user, and/or major maintenance activities to the sales gas compressor, gas production will be curtailed to the extent possible without hampering oil production.
	6.5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g., knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6.5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser; most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor has a thorough regular maintenance schedule. Flaring may occur during prolonged compressor maintenance, but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1738 (LOW)
Rule 4311 - Flare Minimization Plan
Light Oil Western Source - S-1738

Flare PTO #	Rule 4311 Section	Compliance Description
S-1738-449 LOW	6 5 1 1	Air assist flare with liquid knockout vessel
	6 5 1 2	<pre> graph LR A[Tank Facility VRS S-1738 444] --> D[Liquid KO Vessel] B[Test Facility VRS] --> D D --> C[Sales Gas Compressor S 1738-448] C --> E[Field Fuel] C --> F[Gas Sales] E --> G[FLARE] F --> G </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e.g. sales line repair and/or maintenance) and/or compression equipment R&M. Gas volume insufficient to economically justify installation of redundant equipment.
	6 5 1 4	In the event of a planned shut down by end user and/or major maintenance activities to the sales gas compressor, gas production will be curtailed to the extent possible without hampering oil production.
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality. Repair and/or maintenance to gas process equipment (e.g. knockout vessels) disrupts gas from being used or sold and results in flaring. The gas process equipment is operated in a manner to minimize these disruptions. The gas handling system is designed to handle the normal gas volumes produced. Gas surges may temporarily exceed handling capacities resulting in flaring.
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser, most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M. Sales gas compressor is rented from a third party which has a thorough regular maintenance schedule. Flaring may occur during prolonged compressor maintenance but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring. VPC cooperates with end user to minimize down time and flaring.

Vintage Production California LLC - Source ID S-1738 (LOW)

Rule 4311 - Flare Minimization Plan

Light Oil Western Source - S-1738

Flare PTO #	Rule 4311 Section	Compliance Description
S 1738-455 LOW	8 5 1 1	Sonic tip flare with liquid knockout vessel
	6 5 1 2	<pre> graph LR TFR[Tank Facility VRS] --> LKO[Liquid KO Vessel] WCR[Well Casing VRS] --> LKO LKO --> SGC[Sales Gas Compressor] SGC --> FF[Field Fuel] SGC --> GS[Gas Sales] FF --> FLARE[FLARE] GS --> FLARE </pre>
	6 5 1 3	Flare utilized in the event of a gas sales interruption by end purchaser (e g sales line repair and/or maintenance) and/or compression equipment R&M Gas volume insufficient to economically justify installation of redundant equipment
	6 5 1 4	In the event of a planned shut down by end user and/or major maintenance activities to the sales gas compressor gas production will be curtailed to the extent possible without hampering oil production
	6 5 1 5	Flaring may be initiated by end purchaser and/or VPC as a result of gas quality Repair and/or maintenance to gas process equipment (e g knockout vessels) disrupts gas from being used or sold and results in flaring The gas process equipment is operated in a manner to minimize these disruptions The gas handling system is designed to handle the normal gas volumes produced Gas surges may temporarily exceed handling capacities resulting in flaring
	6 5 1 6	Flare utilized in the event of a gas sales interruption by end purchaser most commonly due to sales line repair and routine maintenance and/or sales gas compressor R&M Sales gas compressor is rented from a third party which has a thorough regular maintenance schedule Flaring may occur during prolonged compressor maintenance but regular maintenance is necessary to prevent major malfunctions that result in longer periods of flaring VPC cooperates with end user to minimize down time and flaring