

BEFORE THE HEARING BOARD OF THE AIR POLLUTION

CONTROL DISTRICT, COUNTY OF VENTURA

In the matter of the application of:

Vintage Production California LLC
270 Quail Court
Santa Paula, California 93060

For a variance from:

Rule 29.C, Conditions on Permits – Violation of
Federal Operating Permit No. 00004
Attachment 71.1N1, Condition 1

Rule 71.1, Crude Oil Production and Separation
Section B.1, Requirements – Storage Tanks
Section C.1, Requirements – Produced Gas

Hearing Board Case No.: 824

ORDER GRANTING
REGULAR VARIANCE

Granted: November 16, 2009
Effective to: March 15, 2010

INTRODUCTION

On August 10, 2009, PETITIONER, VINTAGE PRODUCTION CALIFORNIA, LLC (“Vintage”) filed petitions with this Hearing Board for interim and regular variances pursuant to California Health and Safety Code section 42350(a). The petitioner requested that the Hearing Board grant a regular variance from District Rule 29, Conditions on Permits, Section C, Violation of Permit Conditions, for Federal Operating Permit No. 00004, Attachment 71.1N1, Condition 1, and District Rule 71.1, Crude Oil Production and Separation, Section B.1, Requirements – Storage Tanks, and Section C.1, Requirements – Produced Gas.

Vintage has been operating unpermitted emergency flares under variance since July 21, 2009. On July 21, 2009, the Hearing Board Chair granted Emergency Variance No. 822 that authorized Vintage to operate unpermitted flares at four facilities: the Ojai Oil Field Leases, Timber Canyon Leases, South Mountain Field, and Bardsdale Field. The variance allowed Vintage to continue producing oil and gas while their sales pipeline was repaired. On September 28, 2009, the Hearing Board granted Interim Variance Order No. 823 which allowed Vintage to continue operating unpermitted flares at the Ojai Oil Field Leases while they repaired an out-of-service gas line that would replace their old high-pressure pipeline.

Vintage is requesting authorization to continue operating two unpermitted flares at the Ojai Oil Field Leases, which will allow them to continue producing oil and gas while a pipeline is repaired. Notice of the application and regular hearing was given for at least 30 days.

On November 16, 2009, a hearing on the petition for regular variance was held. Keith Duval, Deputy Air Pollution Control Officer, and Ms. Chris Cote, Air Quality Specialist II, represented the District. The Petitioner was represented by Mr. Jim Lovins, Senior Environmental Advisor, and Mr. Kern Hankins, Facilities and Construction Lead. All persons, including the public, were given the opportunity to give testimony or make comment.

The Hearing Board declared the hearing closed after receiving testimony and took the matter under submission for decision. The Hearing Board made the following findings of fact.

EQUIPMENT AND LOCATION

1. Petitioner is in the business of producing and separating crude oil and natural gas.
2. Vintage operates the Ojai Oil Field Leases, which includes the Ojai Fee, Silverthread, and Hamp Leases. These operations are located between Ojai and Santa Paula, California, in an area known as "Upper Ojai".

Vintage also operates the following leases and facilities that are or have been affected by the pipeline rupture:

- a. Shiells Canyon Gas Plant, located south of Fillmore.
 - b. Santa Clara Valley Gas Plant, located at 3824 Guiberson Road, Fillmore, CA.
 - c. Timber Canyon Lease, located north of Santa Paula.
 - d. South Mountain Field, located south of Santa Paula.
 - e. Bardsdale Field, located south of Fillmore.
3. The equipment that is the subject of this variance includes a gas gathering system and two unpermitted emergency flares located at the Ojai Oil Field Leases; one at the Ojai Fee Lease and one at the Silverthread Lease. (A third flare, located on the Hamp Lease, is permitted and rarely operates so the emissions from the Hamp flare are not included in this discussion.) The oil and gas production equipment is authorized by Federal Operating Permit No. 00004 ("the Permit").
 4. The flares are used to combust produced gas that cannot be sent to the Shiells Canyon Gas Plant because the pipeline cannot ship high pressure gas to the Shiells Canyon Gas Plant. Flaring gas releases excess emissions of reactive organic compounds (ROC), oxides of nitrogen (NOx), particulate matter (PM), sulfur oxides (SOx) and carbon monoxide (CO). The excess emissions are the subject of this variance.
 5. Petitioner intends to come into compliance by repairing an out-of-service pipeline to replace their pipeline.

BACKGROUND

A gas gathering system collects produced and recovered gas. In most cases, the collected gas is compressed, and discharged into a sales gas system. However, natural gas produced at the Ojai Oil Field Leases contains high levels of carbon dioxide (CO₂) that must be removed before the gas can be sold. The high CO₂ gas is sent to the Shiells Canyon Gas Plant (Shiells CO₂ Plant) for treatment to remove the CO₂ and then shipped to the Santa Clara Valley Gas Plant for sale to the Gas Company.

On July 19, 2009, Vintage's 8 inch gas line near the South Mountain Field entrance ruptured and started leaking. Vintage shut in the sales line, began curtailment at their leases, and notified third party gas producers that they would be unable to process gas from the third parties. Vintage also started routing their gas production to unpermitted emergency flares rated at more than 1 million British thermal units per hour (MMBtu/Hr).

Rule 23.A.4 exempts safety (emergency) flares from requiring a permit to operate. The District's policy on emergency flares is that an unpermitted flare of any size can be used for maintenance or emergency situations for up to 24 hours. If flaring is required for more than 24 hours, a company should apply for an emergency variance. The Hearing Board will determine whether the company qualifies for an emergency variance.

On July 20, 2009, Vintage contacted the District regarding an emergency variance. At that time gas production from four facilities (the Ojai Oil Field Leases, Timber Canyon Leases, South Mountain Field, and Bardsdale Field) was affected by the leaking gas line. Vintage stated that the four facilities collectively produced approximately 4.243 MMCF (million cubic feet) of gas per day. Vintage had reduced natural gas production by about 10 percent and planned to increase curtailment as they checked more wells.

On July 21, 2009, Vintage submitted an emergency variance petition and a hearing was conducted via conference call. During the conference call Vintage stated that the pipeline had been tested for corrosion and the cause of the failure was not foreseen. Vintage also stated that their gas line is located under South Mountain Road. Therefore, Vintage had to obtain an emergency excavation permit from the County of Ventura to close a County road before they could start repairs. The repairs were also regulated by the U.S. Department of Transportation (DOT).

During the emergency variance hearing Vintage reported that they had been able to route gas from Timber Canyon to a permitted flare at the Hamp Lease and that they had ordered a portable flare to install at the South Mountain Field. The flare was on-site at South Mountain and they hoped to have it operating the next day.

The following table shows normal daily gas production at the time of the emergency variance hearing and the volumes being flared or curtailed at each location.

(MCF/D = thousand cubic feet per day)

Permit	Facility Name	Production MCF/D	To Flare MCF/D	Curtailed MCF/D
00004	Ojai Oil Field Leases	2,083	1,942	141
00053	South Mountain Field	1,541	1,376	165
00939	Timber Canyon	376	360	16
00984	Bardsdale Field	243	120	123
	Total	4,243	3,798	445

Vintage estimated that the revenue losses of curtailing gas production and flaring gas from all the leases would be approximately \$14,850 per day (\$3.50/MCF x 4,243 MCF). If immediate compliance were required and Vintage had to cease producing oil, there would be additional revenue losses of approximately \$129,000 per day due to lost oil revenues.

Vintage stated that they hoped to be able to ship some low pressure gas through the line during the variance period. This would minimize emissions and reduce their revenue losses.

On July 21, 2009, Hearing Board Chair Gary Gasperino granted Emergency Variance No. 822, which authorized Vintage to operate unpermitted flares at the Ojai Oil Field Leases, Timber Canyon Leases, the South Mountain Field, and Bardsdale Field, and allowed Vintage to continue producing oil and gas while the pipeline was repaired.

During the emergency variance period Vintage submitted progress reports and achieved the following:

- 7-23-09 Vintage informed various agencies of their flaring, as required by the emergency variance.
- 7-26-09 Vintage resumed shipping gas from South Mountain (Permit No. 00053), and Bardsdale (Permit No. 00984) to the Santa Clara Valley Gas Plant via an 8 inch gas line, known as the "B" line.
- 7-31-09 The "B" line was repaired and de-rated to 100 pounds per square inch (PSI) service. The "B" line is presently in service and can ship low pressure gas to the Santa Clara Valley Gas Plant. However, produced gas from the Ojai Oil Field Leases requires a high pressure line so the "B" line cannot accommodate the gas.

Vintage resumed shipping gas from Timber Canyon (Permit No. 00939) to the Santa Clara Valley Gas Plant. A small volume of high CO₂ gas from the Hamp Lease can be shipped to the Santa Clara Valley Gas Plant through the low pressure "B" line where it is diluted with other gas at the gas plant. The rest of the Hamp gas is either re-injected or flared.

Another pipeline, known as the "Unocal" line, runs roughly parallel to Vintage's "B" line. This line is currently out of service. Vintage plans to repair the Unocal line and use it to send the Ojai Oil Field gas to the Shiells CO₂ Plant.

8-7-09 Vintage stated that they worked on expediting the repairs of the idle Unocal gas line.

8-10-09 Vintage filed petitions for interim and regular variances.

Since Emergency Variance Order No. 822 was granted, the Timber Canyon Leases, South Mountain Field, and Bardsdale Field have resumed shipping gas to the Santa Clara Valley Gas Plant. Only the Ojai Oil Field Leases are still flaring gas in two unpermitted flares rated at more than 1 MMBtu/hr.

When Vintage submitted the interim and regular variance petition, they estimated that they would be flaring approximately 2.0 MMCF of gas per day. This was based on gas production from only the Ojai Fee and Silverthread Leases.

On September 28, 2009, the Hearing Board granted Interim Variance Order No. 823 which allowed Vintage to continue operating two unpermitted flares at the Ojai Oil Field Leases while they repaired the old Unocal line. Vintage plans to place the Unocal pipeline back into service as soon as possible.

RULE REQUIREMENTS AND VIOLATIONS

The operations at the facility are subject to California statutes and District Rules and Regulations. The following District Rules are applicable to this Regular Variance:

District Rule 29.C, Conditions on Permits, requires permit holders to comply with the conditions on their permits. Vintage's Federal Operating Permit No. 00004, Attachment 71.1N1, Condition 1, states:

Pursuant to Rule 71.1.B.1.a, all tanks shall be equipped with a properly installed, maintained and operated vapor recovery system. The vapor disposal portion of the vapor recovery system shall consist of either a system which directs all vapors to a fuel gas system, a sales gas system, or to a flare that combusts reactive organic compounds.

District Rule 71.1, Crude Oil Production and Separation, (Sections B.1 and C.1) require that vapors from crude oil storage and produced gas be controlled by specified methods.

B. Requirements - Storage Tanks

- 1. No person shall place, hold or store any crude oil in any tank battery unless all storage tanks in the tank battery, including wash tanks, produced water tanks and wastewater separators are equipped with a properly installed, maintained, and operated vapor recovery system. The*

vapor disposal portion of the vapor recovery system shall consist of one of the following:

- a. *A system which directs all vapors to a fuel gas system, a sales gas system, or to a flare that combusts reactive organic compounds.*

C. *Requirements - Produced Gas*

1. *The emissions of produced gas shall be controlled at all times using a properly maintained and operated system that directs all produced gas, except gas used in a tank battery vapor recovery system, to one of the following:*
 - a. *A fuel or sales gas system*
 - b. *A flare that combusts reactive organic compounds*
 - c. *A device with an ROC destruction or removal efficiency of at least 90 percent by weight.*

In order to continue producing oil, Vintage has to dispose of the natural gas production. Vintage cannot ship natural gas that contains a high level of CO₂ through the sales gas line that runs from Ojai Oil Field to the Shiells CO₂ Plant and no alternate gas lines are available. The best option for disposing of the gas is flaring until Vintage can resume shipping high level CO₂ gas.

Any operation of the Ojai Oil Field Leases would require the operation of unpermitted flares rated at more than 1.00 MMBtu per hour, which violates Federal Operating Permit No. 00004, Attachment 71.1N1, and District Rule 71.1, Sections B.1 and C.1.

Vintage is seeking a variance to continue flaring their produced gas in two unpermitted emergency flares until the Unocal pipeline is repaired and put back in service.

FINDINGS OF FACT

Pursuant to Health and Safety Code Section 42352, Findings prerequisite to grant of variance, and District Rule 123, Findings, Variance or Abatement Order, state: "No variance shall be granted unless the Hearing Board makes all of the following findings:"

1. That the petitioner for a variance is, or will be, in violation of [H&SC] Section 41701 or of any rule, regulation, or order of the district.

The petitioner is operating in violation of the following District Rules:

- a) Rule 29.C, Conditions on Permits, Violation of Federal Operating Permit No. 00004, Attachment 71.1N1, Condition 1.

- b) Rule 71.1, Crude Oil Production and Separation, Section B.1, Requirements - Storage Tanks, and Section C.1, Requirements - Produced Gas.

On July 19, 2009, the main gas line that transports gas from Vintage's production facilities in Ojai, Santa Paula, and Fillmore to the Shiells Canyon Gas Plant and the Santa Clara Valley Gas Plant ruptured and was shut down. Gas was re-directed to unpermitted flares rated at more than 1 MMBtu/hr.

On July 21, 2009, the Hearing Board Chair granted Emergency Variance No. 822. Since the emergency variance was granted, all of the facilities except the Ojai Oil Field Leases have resumed shipping gas to the Santa Clara Valley Gas Plant. On September 28, 2009, the Hearing Board granted Interim Variance No. 823, which allowed Vintage to continue flaring produced gas from the Ojai Oil Field Leases. Any production of the oil and gas at the Ojai Fee or Silverthread Leases will violate Federal Operating Permit No. 00004, Attachment 71.1N1, Condition 1, and Rule 71.1, Sections B.1 and C.1.

2. That, due to conditions beyond the reasonable control of the petitioner, requiring compliance would result in either (A) an arbitrary or unreasonable taking of property, or (B) the practical closing and elimination of a lawful business.

The main natural gas sales line failed and there is no alternate gas line available to transport the high CO₂ gas to the Shiells CO₂ Plant. Vintage stated that the line is tested routinely for corrosion. The testing did not show any weakness in the line so the failure was unexpected.

Vintage has no financial incentive to flare gas; as flaring gas results in lost revenues of approximately \$5,950 per day (\$3.50/MCF x 1700 MCF).

3. That the closing or taking would be without a corresponding benefit in reducing air contaminants.

Requiring immediate compliance would cause Vintage to shut-in all production at the Ojai Oil Field Leases. This would result in additional financial losses of \$43,290 per day from lost oil revenues.

The following excess emissions are based on flaring approximately 2.0 MMCF of gas per day. The total volume of gas is split approximately 56 percent to 44 percent between the flare on the Ojai Fee Lease and the flare on the Silverthread Lease. The two flares are located approximately 1.6 miles apart, so the emissions are dispersed rather than concentrated in one area.

Vintage provided records of actual daily gas production which showed reductions of up to 15 to 20 percent of the estimated 2.0 MMCF.

Ojai Fee Lease Emissions (56 percent of Total)

Pollutant	Pounds/MMCF	Lbs/Hr	Lbs/Day	Tons/Mo
ROC	54.398	2.54	60.93	0.91
NO _x	71.40	3.33	79.97	1.20
PM	5.25	0.25	5.88	0.09
SO _x	0.6	0	0	0
CO	388.50	18.13	435.12	6.53

Silverthread Lease Emissions (44 percent of Total)

Pollutant	Pounds/MMCF	Lbs/Hr	Lbs/Day	Tons/Mo
ROC	54.398	1.99	47.87	0.72
NO _x	71.40	2.62	62.80	0.94
PM	5.25	0.19	4.62	0.07
SO _x	0.6	0	0	0
CO	388.50	14.25	341.88	5.13

Ceasing production will not eliminate emissions because shut-in oil wells will pressure up and release emissions of ROC that could be gathered and sent to flares.

4. That the applicant for the variance has given consideration to curtailing operations of the source in lieu of obtaining a variance.

Vintage curtailed gas production from wells on the Ojai Oil Field Leases. Initial reductions ranged from 7 to 10 percent. Later reductions ranged from 15 to 20 percent.

5. During the period the variance is in effect, that the applicant will reduce excess emissions to the maximum extent feasible.

When Vintage's pipeline failed, the leases were producing approximately 4.0 MMCF of gas per day. Since the emergency variance was granted, Vintage repaired the leaking sales gas line and resumed shipping gas from South Mountain Field, Bardsdale Field, the Timber Canyon and Hamp Leases to the Santa Clara Valley Gas Plant. This reduced the volume of flared gas by about 50%.

Vintage also reduced their daily gas volumes from the Ojai Oil Field Leases during the emergency and interim variance periods. Records of Vintage's actual gas production show that the daily volumes ranged from 1.799 to 1.854 MMCF during the period of August 1, 2009, to September 24, 2009. This was a reduction of 7 to 10 percent. After the interim variance hearing on September 28, 2009, Vintage's records showed that the gas volumes ranged between 1.558 and 1.689 MMCF per day. This was a reduction of 15 to 20 percent.

In addition, the Shiells Canyon Gas Plant shut down on July 19, 2009, when the pipeline ruptured. Since the gas cannot be shipped from the Ojai Leases to the Shiells CO₂ Plant, the plant has been idle. Therefore, any emissions that would have been released by the gas plant can be considered as reduced emissions. Shiells Canyon Gas Plant is located south of Fillmore.

The following table shows actual emissions from the Shiells Canyon Gas Plant for 2008. The emissions are based on emission factors from source tests conducted in 2009.

Pollutant	Lbs/Day	Tons/Month
ROC	13.56	0.20
NO _x	2.94	0.04
PM	2.44	0.04
SO _x	0	0
CO	0.94	0.01

6. During the period the variance is in effect, that the applicant will monitor or otherwise quantify emission levels from the source, if requested to do so by the district, and report these emission levels to the district pursuant to a schedule established by the district.

Petitioner will monitor the volume of gas combusted in the flares during the variance period. Vintage will provide the District with a monthly report that includes the daily totals of the volume of gas combusted in each flare and calculate the excess emissions. The monthly report will be submitted by the 5th business day after the end of the month during the variance period.

7. That a nuisance as specified in Rule 51 may not occur.

The flare on the Ojai Fee Lease is located approximately one-quarter mile from the nearest residence and approximately three-quarters of a mile from the nearest school. The flare on the Silverthread Lease is located further from residences and the school.

The District has received one complaint from a resident who lives near the flare located on the Ojai Fee Lease. The complainant saw an article in the Ventura County Star (September 30) regarding the Interim Variance Hearing and contacted the District on October 20. The complainant stated that a family member had asthma and for the last several weeks had been having problems. The complainant wanted to know what was in the gas being flared and what air emissions were being emitted. One of the District's oilfield inspectors conducted an inspection of the area surrounding the Ojai Oil Field Lease's tanks, flare, an oil seep, and the property line between the complainant and the

lease. The inspector used a ThermoFisher 1000B FID (flame ionization detector) to measure the ROC levels at the various locations.

The inspector stated that he did not detect odors or vapors near Vintage's storage tanks, in the area around the flare, or along the complainant's property line. However, he did detect odors and ROC vapors in the area of a natural oil seep. At the origin of the seep the inspector's instrument detected ROC vapors at 30 to 50 parts per million (ppm) with spikes of 1000 to 1400 ppm; the inspector also detected a strong petroleum-like odor.

The inspector stated that the seep is located directly up-drainage from the complainant and is within a few hundred feet of the complainant's location.

8. The continued operation is not likely to create an immediate threat or hazard to public health or safety.

CONCLUSIONS AND ORDER

NOW, THEREFORE, THE HEARING BOARD ORDERS that Vintage Production California LLC is granted a Regular Variance from District Rule 29, Conditions on Permits, Section C, Violation of Permit Conditions, Federal Operating Permit No. 00004 - Attachment 71.1N1, Condition 1, and District Rule 71.1, Crude Oil Production and Separation, Section B.1, Requirements – Storage Tanks, and Section C.1, Requirements – Produced Gas, for operation of two unpermitted emergency flares; one at the Ojai Fee Lease and one at the Silverthread Lease. This Regular Variance is valid for Federal Operating Permit No. 00004 - the Ojai Oil Field Leases. This order will remain in effect from November 16, 2009, until March 15, 2010. This variance is subject to the following conditions:

1. All produced or recovered gas from the Ojai Oil Field Leases shall be routed to a properly operated flare. No produced or recovered gas shall be vented or “stacked” to the atmosphere.
2. Vintage shall continue operating the Ojai Oil Field Leases with reduced gas production until the alternate gas line is repaired and put back in service. This action will reduce the volume of gas to be flared.
3. The combined volume of gas flared at the Ojai Fee Lease and the Silverthread Lease shall not exceed 2.0 million cubic feet per day.
4. The Shiells Canyon Gas Plant shall not be put back into operation until flaring in the two unpermitted emergency flares has ceased.

THE PETITIONER SHALL:

INCREMENTS OF PROGRESS

1. Record the daily volume of gas combusted in the flares and submit that data to the District with monthly progress reports.
2. Petitioner shall provide the District with monthly progress reports that include:
 - a) the actions taken to repair the gas line,
 - b) the daily totals of the volume of gas combusted in the flares, and
 - c) a calculation of excess emissions.
3. Petitioner shall submit monthly progress reports to the District, five (5) working days after the first of the month; the first report will be due by December 7, 2009.
4. Petitioner shall notify the District when repairs on the gas line are complete.
5. Petitioner shall demonstrate compliance by March 15, 2010.
6. Submit a final progress report to the District by March 22, 2010.

REPORTING REQUIREMENTS

1. Petitioner shall provide monthly progress reports on the progress of gas line repairs to the District; the first report will be due by December 7, 2009.
2. Petitioner shall record the daily volume of gas combusted in the emergency flares on the Ojai Fee and Silverthread Leases and estimate the excess emissions. Petitioner shall submit this data to the District with the monthly progress reports. Excess emissions fees will be based on the data submitted in this report.
3. Payment for excess emission fees shall be submitted to the Ventura County Air Pollution Control District no later than 60 days after receiving the bill.
4. If delay is anticipated in meeting the final compliance date in this Variance Order, the Petitioner shall notify the District in writing of the anticipated delay and the reasons for such delay. Notification is not to be misconstrued as an extension of this Variance Order.
5. Any modification of the final compliance date of this Variance Order must be brought before the Hearing Board.

- 6. Due date for filing a petition to extend or modify this Order must be received by Ventura County Air Pollution Control District no later than January 6, 2010.
- 7. Petitioner shall notify the District of its compliance or non-compliance with this Variance Order no later than March 22, 2010.
- 8. All submittals and notifications to the District regarding this Variance Order shall be made to Ms. Chris Cote, Ventura County Air Pollution Control District, 669 County Square Drive, Ventura, CA 93003.

GENERAL

- 1. Except as provided in this order, compliance with this Order shall not relieve Petitioner from liability under the District's Rules for any violation, thereof, and shall not preclude the District from pursuing remedies in accordance with the Health and Safety Code in the event of any violation.
- 2. The failure to abide by any condition of this decision and Order shall subject the party receiving the Variance to penalties set forth in Health and Safety Code Section 42402.
- 3. Each day during which a violation occurs is a separate offense.
- 4. Petitioner shall retain the obligation to comply with all other local, state and federal regulations not specifically referenced in this Variance Order.
- 5. Petitioner shall pay the Hearing Board fees specified in District Rule 41.

Gary Gasperino, Chair	<u> Aye </u>
Stephen C. Hurlock, Ph.D.	<u> Nay </u>
Daniel J. Murphy	<u> Aye </u>
Michael Stubblefield	<u> Aye </u>

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
GARY GASPERINO, HEARING BOARD CHAIR

DATE