

**FILED**

**FEB 27 2003**

HEARING BOARD  
BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT

BEFORE THE HEARING BOARD  
OF THE  
BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
STATE OF CALIFORNIA

**MARY ROMAIDIS**  
CLERK  
HEARING BOARD  
BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT

In the Matter of the Application of	)	
	)	
SFPP, L.P.	)	No. 3415
	)	<u>ORDER GRANTING VARIANCE</u>
For a Variance from Regulation 2, Rule 1,	)	
Section 307 (Condition No. 17984, Item No. 15)	)	
And Regulation 8, Rule 33, Section 302	)	
_____	)	

This Order ("Order") grants an Application for a Short Term Variance ("Application") from the provisions of Bay Area Air Quality Management District ("District") Regulation 2, Rule 1, Section 307 (Condition No. 17984, Item No. 15) and Regulation 8, Rule 33, Section 302 for the Plant No. 4020 located at 2150 Kruse Drive, San Jose, California 95131, owned and operated by SFPP, L.P. an operating partnership of Kinder Morgan Energy Partners, L.P. ("Applicant") The application was filed on December 27, 2002. The term of the Variance is from December 31, 2002 to January 17, 2003.

Nancy E. Van Burgel, Assistant General Counsel for Kinder Morgan, Inc. appeared for Applicant.

Toby Sherwood, Assistant District Counsel, appeared for the Air Pollution Control Officer ("APCO").

The Clerk of the Hearing Board provided notice of the hearing on the Application in accordance with the requirements of the Health and Safety Code. The Hearing Board heard the request for variance on January 30, 2003.

The Hearing Board provided the public an opportunity to testify at the hearing as required by the Health and Safety Code. No members of the public testified. The

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Hearing Board heard Applicant's testimony and evidence. The APCO did not oppose the granting of the variance. At the hearing, Applicant amended the application to change the time period of the variance to include December 31, 2002, through January 17, 2003. Applicant also amended the Application to request a variance from Regulation 8, Rule 33, Section 302.

The Hearing Board declared the evidentiary portion of the hearing closed after receiving testimony and after deliberation and upon motion decided the matter.

### **BACKGROUND**

Applicant owns and operates a petroleum terminal facility located at 2150 Kruse Drive in San Jose, California ("San Jose Terminal"). The facility stores and transports gasoline and other liquid petroleum products for and belonging to its customers. The facility is a "for hire" terminal that acts as a "common carrier" of products. As such, the Applicant must make these products available on demand to the entities to whom these products belong.

The San Jose Terminal is one of the end points of the pipeline system that accepts product from Applicant's Concord Station, which, in turn, receives product from area refineries. The San Jose Terminal delivers its customers' product by loading the product into tanker trucks via its truck loading racks. At these truck loading racks, vapors are collected in a vapor holding tank (accumulator) and then burned in a thermal oxidizer unit. The Applicant has a Permit to Operate the San Jose Terminal combustor with the accumulator and in direct mode (without accumulator). However, throughput at the facility is constrained when operating in direct mode by conditions of the California Air Resources Board (CARB) pertaining to the combustor unit.

The equipment in question is a portable combustor unit owned by John Zink Company that was brought to the San Jose Terminal following equipment failure in the

vapor accumulator. The portable unit is not CARB certified to operate in direct mode. The variance requested by this Application is limited to the operation of the portable combustor unit. Specifically, a variance is sought from Regulation 2, Rule 1, Section 307 which forbids the operation of equipment that would be in violation of any permit condition. The permit condition at issue is condition No. 17984, Item 15. This condition states that the portable combustor may only operate with a vapor accumulator and not in direct mode. A variance also is sought from Regulation 8, Rule 33, Section 302, which requires that only a CARB certified vapor recovery system may be used at a facility.

On December 17, 2002, Applicant started experiencing unexpected vapor tank problems at the San Jose Terminal. Applicant first notified the District on December 17, 2002 that there was a suspected device failure at the San Jose Terminal. The first attempts to repair the vapor accumulator unit involved emptying the tank and preparing the tank for confined space entry. The San Jose Terminal vapor burner was placed in direct mode during these activities. Following numerous attempts to repair the vapor tank gauge system and to repair the bladder in the vapor accumulator, Applicant determined that the vapor accumulator had to be taken out of service in order to replace the bladder in the unit. Again, the District was notified numerous times as to the status of the repair activities. On December 24, 2002 and again on December 27, 2002, the Applicant had discussions with the District regarding possible use of a portable burner unit in direct mode.

Applicant testified that it had received numerous complaints at the San Jose Terminal from its customers during the time that only the San Jose Terminal vapor combustor was in operation and throughput limits were imposed. Accordingly, in order to continue operating safely, without producing excess air emissions, and without causing significant delays and product shortages for its customers, Applicant needed to

operate a portable combustor unit in direct mode without CARB certification. Thereby, Application submitted its Application to the District.

On December 30, 2002, the John Zink portable burner unit arrived at the San Jose Terminal. On December 31, 2002, the portable unit was set up and a source test was conducted with the portable unit operating in direct mode. Source test results were immediately available on December 31, 2002. The results of the source testing indicated that there would be no excess emissions from the portable unit during direct mode operation. Additionally, Applicant contacted CARB to conduct a direct mode certification test on the portable unit. The CARB certification testing was conducted on January 14, 2003 and the results of both the CARB test and the third party performance test were submitted to the District. The bladder was repaired and the vapor accumulator unit was placed back in service on January 17, 2003. At that time, the Applicant discontinued operation of the portable combustor.

### **DISCUSSION**

The failure of the bladder in the vapor accumulator tank was beyond the reasonable control of the Applicant. The failure was due to a malfunction of the vapor tank gauge system that caused the inflatable bladder to rub against brackets inside the holding tank and thereby puncture the bladder. The configuration of the vapor accumulator is such that it is impossible to inspect the inside of the bladder, which is where the actual gauge malfunction occurred, without taking the vapor accumulator out of service. Applicant performed a daily check on the gauge exterior to the tank. Applicant diligently proceeded to replace the bladder unit as soon as the problem was discovered and diagnosed.

Upon failure of the vapor accumulator, Applicant ran its main vapor burner in direct mode as permitted. However, the throughput limits and operational constraints

caused Applicant to consider placing an additional vapor burner unit on the site. In running the one vapor burner, Applicant was forced to shut down approximately one-half of its truck loading facilities. This resulted in a major disruption of service to its customers, some of which have no choice but to fuel their trucks at this facility. Applicant is under contractual requirements to deliver product on demand to its respective customers. Applicant made the prudent decision to place an additional portable vapor burner at the site in order meet regional demands and to operate the facility in a safe and efficient manner.

The hardship caused by being forced to operate at approximately 50% would not have resulted in a corresponding benefit to air quality. As confirmed by the third party source testing and later CARB testing, there were no excess emissions during the period of the requested variance. Although the CARB testing was completed, the portable unit did not receive final certification based on a requirement that a switch capable of shutting down the loading operation in the event of a combustor failure be installed on the unit. Applicant does not own the John Zink portable unit and as such, cannot require this device to be added to the portable unit. CARB certification for this unit is pending the installation and testing of the shutdown switch device.

Applicant operated both units within its prescribed emission limits for the San Jose Terminal facility.

### **SPECIFIC FINDINGS**

The Hearing Board finds pursuant to Health and Safety Code Section 42352 that:

1. During the time period of December 31, 2002 through January 17, 2003, Applicant was in violation of Regulation 2, Rule 1, Section 307 (Permit Condition No. 17984, Item No. 15) and Regulation 8, Rule 33, Section 302.

2. Applicant could not have reasonably known or anticipated that the vapor tank gauge system malfunction would have led to a puncture in the bladder which then caused the vapor tank accumulator to fail because:

(i) the vapor tank gauge is located inside the vapor tank and it is impossible to notice the point of the failure without taking the bladder tank out of service;

(ii) the only way to identify bladder failure is by taking vapor readings in the accumulator tank above the bladder; and

(iii) the equipment was inspected on a regular basis.

Due to conditions beyond the reasonable control of Applicant, requiring compliance with the aforesaid District Regulations and permit conditions would require Applicant to run its facility at about 50% of normal operation. This would possibly create product shortages and delivery disruption that in effect would amount to a practical closing of Applicant's lawful business. Applicant took reasonable actions to replace the vapor accumulator and to ensure that there would be no excess emissions;

3. The hardships that would be created if Applicant were required to comply with the aforesaid District Regulations and permit condition would be without a corresponding benefit in reducing air contaminations because there were no excess emissions and, therefore, no emissions violations during the time period of the variance.

4. Applicant curtailed its operations during part of the variance period in question, which resulted in product delivery disruptions, customer complaints and operational inefficiency.

5. During the period the variance was in effect, Applicant's operations at the San Jose Terminal did not cause any excess emissions.

6. The District did not request that Applicant monitor or otherwise quantify emission levels during the variance period.

**THEREFORE, THE HEARING BOARD ORDERS:**

A variance is granted from District Regulation 2, Rule 1, Section 307 (Permit Condition No. 17984, Item No. 15) and Regulation 8, Rule 33, Section 302, for the period December 31, 2002, through January 17, 2003.

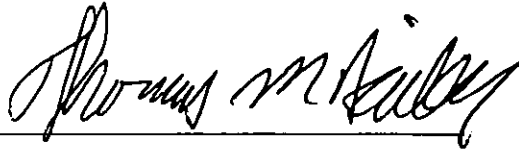
Moved by: Julio A. Magalhães, Ph.D.

Seconded by: Christian Colline, P.E.

AYES: Christian Colline, P.E., Julio A. Magalhães, Ph.D., Allan R. Saxe, Esq., Terry A. Trumbull, Esq., and Thomas M. Dailey, M.D.

NOES: None

NON-PARTICIPATING: None

A handwritten signature in black ink, appearing to read "Thomas M. Dailey", is written over a horizontal line.

Thomas M. Dailey, M.D., Chair

February 27, 2003

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**MARY ROMAIDIS**  
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BEFORE THE HEARING BOARD  
OF THE  
BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
STATE OF CALIFORNIA

In the Matter of the Application of	)	
	)	
Los Medanos Energy Center, LLC	)	No. 3420
	)	
For a Variance from Regulation 2,	)	<u>ORDER GRANTING VARIANCE</u>
Rule 1, Section 307	)	
_____	)	

The above-entitled matter is an Application for Variance from the provisions of Regulation 2, Rule 1, Section 307 filed on January 31, 2003.

Jeffrey Adkins and Gary Rubenstein of Sierra Research appeared on behalf of Los Medanos Energy Center ("Applicant").

Toby Sherwood, Counsel, appeared for the Air Pollution Control Officer ("APCO").

The Clerk of the Hearing Board provided notice of this hearing on the Application for Variance in accordance with the requirements of the California Health and Safety Code. The Hearing Board heard the request for Variance on February 20, 2003. At the hearing, the variance application was amended to request a variance for the period February 20, 2003, through May 20, 2003.

The Hearing Board provided the public opportunity to testify at the hearing as required by the California Health and Safety Code, but no one did so. The Hearing Board heard the Applicant's and APCO's evidence and argument. The APCO did not oppose the granting of this Variance.

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1 The Hearing Board received evidence and argument, and took the matter under submission  
2 for decision. After consideration of the evidence, the Hearing Board voted to grant the request for  
3 Variance, as set forth in more detail below:

4 BACKGROUND

5 Applicant operates a gas turbine power plant located at 750 East Third Street,  
6 Pittsburg, California 94565. Applicant's representatives testified at the hearing that the company  
7 operates two GE Frame 7FA gas turbines with dry low-NOx combustors to produce electricity for  
8 sale to the electrical grid. These combustors include certain components that must be replaced on a  
9 routine basis once they have reached the end of their operational life. Once new combustor  
10 components have been installed, the turbines must be tuned at low operating loads to meet  
11 manufacturer's specifications for emissions and combustion dynamics. The Applicant first  
12 replaced its combustor components in August of 2002. The Applicant discovered during this  
13 tuning procedure that it could not operate within the constraints of its current permit limits, and it  
14 was subsequently issued a Notice of Violation by the District. The Applicant is now required to  
15 perform a second combustor component replacement and tuning procedure, and it sought short-  
16 term Variance relief for this procedure, pending approval of more permanent changes to the  
17 facility's permit to allow for these activities in the future.

18  
19 DISCUSSION

20 Current permit conditions limit the Applicant to 180 minutes of operation in excess of its  
21 NOx emission concentration limits during turbine startup events and to a maximum of 240 pounds  
22 NOx emissions per turbine startup event. The Applicant attempted to conduct its combustor tuning  
23 activities within these permit constraints during a tuning event in August of 2002. However, the  
24 Applicant was not able to complete the tuning procedure within these limits.

25 The Applicant is affiliated with Calpine Corporation, and it has conducted a review of other  
26 similar turbines owned by Calpine at the Sutter Energy Center (Yuba City, California) and Delta

1 Energy Center (Pittsburg, California) to determine whether this problem was unique to the  
2 Applicant's facility. After its review of these similar facilities, the Applicant concluded that proper  
3 tuning of its Pittsburg Los Medanos turbines could not be completed under its current permit limits.  
4 The Applicant knew that it could not get permit approval in time for its scheduled combustor tuning  
5 and, as a result, submitted this request for Variance relief. The Applicant submitted a permit  
6 application to the District staff on February 19, 2003, for revision of its permit so that there will be  
7 need for a Variance in the future. The District staff indicated that the requested changes to the perm  
8 are likely to be made.

9 The Applicant has requested a Variance from February 20, 2003, through May 20, 2003, or  
10 until such time when the combustor tuning is complete, whichever occurs first.

11 Applicant is not considered a small business as described by California Health and Safety  
12 Code Section 42352.5(b)(1). Estimated maximum excess emissions during the startup and tuning  
13 events are 365 pounds of NOx. The APCO has not requested Applicant to monitor or quantify actu  
14 emissions beyond the continuous emissions monitoring for NOx already required by the Permit to  
15 Operate for these turbines.

#### 16 17 SPECIFIC FINDINGS

18 The Hearing Board finds pursuant to Health and Safety Code Section 42352 that:

19 1. Applicant will be in violation of Regulation 2, Rule 1, Section 307 during the Variance  
20 period. The regulation requires that the Applicant comply with its Permit Conditions 21(a) and 21(b)  
21 limiting NOx concentrations and emission rates during non-startup operation, and Condition 23  
22 limiting startup events to a maximum of 180 minutes and 240 pounds of NOx emissions.

23 2. Due to conditions beyond the reasonable control of the Applicant, requiring compliance  
24 with District Regulation 2, Rule 1, Section 307, and Conditions 21(a), 21(b), and 23 would result  
25 in an arbitrary and unreasonable taking of property. The problems associated with compliance  
26 during combustor tuning events are unique to dry low-NOx combustors, and it was beyond the

1 reasonable control of the Applicant to comply with these conditions or to have known that the  
2 conditions would be violated during tuning events. Compliance could be achieved only by  
3 shutdown. This would be an unreasonable taking of property.

4 3. The hardship due to requiring immediate compliance with District Regulation 2,  
5 Rule 1, Section 307 would be without a corresponding benefit in reducing air contaminants. The  
6 Applicant estimates that maximum excess emissions will be a total of 365 pounds of NOx from  
7 both turbines combined. Daily and annual emissions will remain within current permit limits.

8 4. Applicant considered curtailing operations in lieu of obtaining a Variance, but  
9 curtailing operation would not result in compliance since tuning must be performed at low turbine  
10 loads. Applicant also considered conducting tuning operations during several consecutive startups,  
11 but determined that this would result in increased NOx emissions as compared with the levels  
12 expected under this variance. In addition, such an approach would result in excessive wear on the  
13 turbines, and might be considered a circumvention of District regulations.

14 5. During the period the Variance is in effect, Applicant will reduce excess emissions  
15 to the maximum extent feasible by meeting its daily and annual emission limits and conducting its  
16 tuning activities as quickly as possible.

17 6. The District staff has not requested Applicant to monitor or otherwise further  
18 quantify any emission levels beyond what is already required by the Permit to Operate for these  
19 turbines.

20  
21 **THEREFORE, THE HEARING BOARD ORDERS:**

22 A Variance from Regulation 2, Rule 1, Section 307 is hereby granted from February 20,  
23 2003, to and including May 20, 2003, or until such time as combustor tuning activities are  
24 completed, whichever is sooner, subject to the following conditions:

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26 1) The Applicant must notify the District staff at least 48 hours before the time the

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newly refurbished gas turbines will be tuned.

- 2) The Applicant cannot emit more than 480 pounds of NOx per startup, for each turbine.
- 3) The Applicant cannot have more than six hours of low load operation, for each turbine, during startup after fuel flow is initiated.
- 4) Applicant shall pay the excess emission fees.

Moved by: Terry A. Trumbull, Esq.

Seconded by: Julio Magalhães, Ph.D.

AYES: Allan R. Saxe, Esq., Julio Magalhães, Ph.D., Terry A. Trumbull, Esq.,  
Michael E. Greenberg, M.D., Christian Colline, P.E.,

NOES: None.

Christian Colline  
Christian Colline, P.E., Acting Chair

2/27/03  
Date