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MAY 10 2007

HEARING BOARD
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

MARY ROMAIDIS
CLERK
HEARING BOARD
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

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

In the Matter of the Application of)
)
CHEVRON PRODUCTS COMPANY)
)
For a Variance from Regulation 2-1-307 and)
Regulation 2-6-307, insofar as they require)
compliance with Condition #469, Section)
6.B. of the Facility's Major Facility Review)
Permit; Standard Condition 1.B.2. of the)
Facility's Major Facility Review Permit,)
insofar as it requires compliance with)
Condition #469, Section 6.B. of the)
Facility's Major Facility Review Permit)
_____)

No. 3534

ORDER GRANTING
EMERGENCY VARIANCE

The above entitled matter, being an Application for Variance from the provisions of Regulation 2-1-307 and Regulation 2-6-307, insofar as they require compliance with Condition #469, Section 6.B. of the Facility's Major Facility Review Permit; and Standard Condition 1.B.2. of the Facility's Major Facility Review Permit, insofar as it requires compliance with Condition #469, Section 6.B. of the Facility's Major Facility Review Permit, having been filed on May 2, 2007, at 4:00 p.m., and having been considered by the Hearing Board:

THE HEARING BOARD STATES as the reasons for its decision and FINDS as to those matters in which findings are required:

ARB

1 1. Applicant filed this Application for Variance under the Emergency Variance
2 procedures, Hearing Board Rules, Section 2.5. Pursuant to Health and Safety Code Sections
3 42359 and 42359.5, the Hearing Board determined that this Application properly could be ruled
4 upon without notice and hearing. Prior to making this determination, and in accordance with
5 Hearing Board Rules Section 2.5.d.2, the Hearing Board requested and received a response to this
6 Application from the Air Pollution Control Officer. That response recommended that the
7 Emergency Variance be granted. The Air Pollution Control Officer's recommendation is based on
8 the District staff's observations and interviews with the Applicant and the Rockwell Automation
9 staff, confirming that there was an electrical short in the control board of the variable frequency
10 drive (VFD) unit associated with the A0067 Selective Catalytic Reduction (SCR) unit causing an
11 unforeseeable failure of the VFD that was beyond the reasonable control of the Applicant.

12 2. Applicant operates a petroleum refinery located at 841 Chevron Way,
13 Richmond, California 94802.

14 3. The equipment for which a Variance is being sought is a Selective Catalytic
15 Reduction (SCR) unit that abates oxides of nitrogen (NOx) from four furnaces in the Richmond
16 Lube Oil Project (RLOP) processing area. On May 1, 2007, the variable frequency drive (VFD)
17 unit to the induced draft fan associated with the SCR unit failed, disabling the fan. The VFD unit
18 controls the rotational speed of the fan motor by controlling the frequency of the electrical power
19 supplied to the fan motor. On May 1, 2007 the Applicant summoned a technician from Rockwell
20 Automation, parent company of Allen Bradley, the manufacturer of the VFD unit, on an
21 emergency basis to evaluate the situation. The technician, Kurt Gross, Senior Field Support
22 Engineer with Rockwell Automation, determined that the VFD unit had failed and was beyond
23 repair, and immediately ordered a replacement VFD unit for overnight delivery. The VFD unit
24 was delivered on May 2, 2007, and Applicant made all possible efforts to install and operate the
25 new VFD unit by the end of May 2, 2007. The Applicant took immediate steps by submitting an
26 Application for Emergency Variance.

1 The induced draft fan and related VFD unit were originally installed on March 24,
2 2007, and had been operating for approximately a month before the VFD unit failed. It is thus
3 clear that the VFD unit, as manufactured, was defective. The start-up procedures were conducted
4 in accordance with the manufacturer's recommendations. A representative from Rockwell
5 Automation also participated in, and certified the installation and start-up procedures for the fan
6 and related VFD unit. The VFD unit failed without warning and such failure was unforeseeable
7 and beyond the Applicant's reasonable control. The breakdown of the VFD unit was not the result
8 of intent, neglect or disregard of any air pollution control law, rule or regulation, or any improper
9 maintenance by the Applicant. Rather, the breakdown was the result of the manufacturer's
10 negligence in providing a defective part to the Applicant.

11 4. The induced draft fan and related VFD unit had been newly installed on
12 March 24, 2007, and as such, there was no regular maintenance and/or inspection schedule for this
13 equipment. The VFD unit failed without warning and as such, the failure was unforeseeable and
14 beyond the Applicant's reasonable control.

15 5. During the period between 7:00 a.m., May 1, 2007 to 7:00 a.m., May 2, 2007,
16 the net emissions were 1.8 pounds of NOx which was covered by the Applicant's breakdown
17 application submitted to the District. There have been no excess emissions since 1:00 p.m., on
18 May 1, 2007. In an effort to mitigate excess emissions, the Applicant reduced the gas feed and
19 furnace flow rates and made several other technical adjustments to the four furnaces. Since
20 1:00 p.m., on May 1, 2007 the Applicant has been in compliance with the 40 ppm NOx limit
21 established by Condition #469, Section 6.B. of the Major Facility Review Permit. Nevertheless,
22 the Applicant applied for an emergency variance relief because of its uncertainty as to whether it
23 can remain in compliance until the replacement VFD unit is installed and demonstrates to be
24 operating properly. During the period of the variance relief, the Applicant will continue to ensure
25 that any NOx emissions will be reduced to the maximum extent feasible.

26 6. As of the time of filing the Application for an Emergency Variance, the

1 Applicant is in compliance with the 40 ppm NOx limit established by Condition #469, Section
2 6.B. of the Major Facility Review Permit. In addition, the Applicant has made all possible efforts
3 to install and operate the new VFD unit by the end of May 2, 2007. Therefore, there was no need
4 to curtail, terminate or modify the operations in lieu of obtaining a variance.

5 7. This Variance will not cause injury, detriment, nuisance, or annoyance to any
6 considerable number of persons or to the public, or endanger the comfort, repose, health or safety
7 of any such persons or the public, or cause or have a natural tendency to cause injury or damage to
8 business or property. The District confirmed that no complaints had been received.

9 8. During the period the variance is in effect the District has requested Applicant to
10 monitor or quantify actual emissions. The Applicant shall document the total excess of NOx
11 emissions within 10 days of the end of the variance period (by June 11, 2007) and shall submit the
12 report, in writing, along with the appropriate excess emission fee to the Hearing Board.

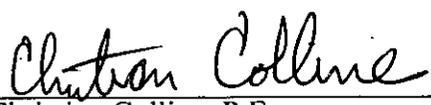
13 9. The Hearing Board determined that the Applicant has demonstrated Good Cause
14 for the following reasons: (A) that based on the District staff's observations and interviews with
15 the Applicant and the Rockwell staff, there was an electrical short in the control board of the VFD
16 unit, causing an unforeseeable failure that was beyond the reasonable control of the Applicant;
17 (B) that the Applicant made all possible efforts to install and operate the new VFD unit by the end
18 of May 2, 2007 and took immediate steps to correct the problem and filed for an Emergency
19 Variance; and (C) that the District staff recommended to the Hearing Board that the Emergency
20 Variance be granted.

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

22 A Variance from Regulation 2-1-307 and Regulation 2-6-307, insofar as they
23 require compliance with Condition #469, Section 6.B. of the Facility's Major Facility Review
24 Permit; Standard Condition 1.B.2. of the Facility's Major Facility Review Permit, insofar as it
25 requires compliance with Condition #469, Section 6.B. of the Facility's Major Facility Review
26 Permit is hereby granted from May 2, 2007 to and including May31, 2007, subject to the following

1 conditions: (1) the Applicant shall submit a report, in writing, to the Hearing Board, at the end of
2 the variance period, outlining the reasons for the failure of the VFD unit; (2) Applicant shall
3 document the total excess NOx emissions within 10 days of the end of the variance period (by
4 June 11, 2007), and shall submit a report, in writing, of the total excess emissions, to the Hearing
5 Board; and (3) Applicant shall pay the excess emission fees, pursuant to District Regulation 3, to
6 the Hearing Board.

7 DATED: May 7, 2007.

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Christian Colline, P.E.

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