



BILL RICHARDSON  
GOVERNOR

GRCB 07  
State of New Mexico  
**ENVIRONMENT DEPARTMENT**

Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6302  
Telephone (505) 476-6000  
Fax (505) 476-6030  
www.nmenv.state.nm.us



**ENTERED**

RON CURRY  
SECRETARY  
  
CINDY PADILLA  
DEPUTY SECRETARY

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

February 1, 2007

Randy Schmaltz  
Environmental Supervisor  
Giant Refining Company  
P.O. Box 159  
Bloomfield, New Mexico 87413

Ed Riege  
Environmental Superintendent  
Giant Refining Company  
Route 3, Box 7  
Gallup, New Mexico 87301

**RE: COMMENTS ON GIANTS RESPONSE TO THE APPROVAL WITH MODIFICATIONS RIVER TERRACE VOLUNTARY CORRECTIVE MEASURES BIOVENTING SYSTEM SIX-MONTH START-UP REPORT JANUARY 2006 THROUGH JUNE 2006; HWB-GRCB-06-006 EPA ID # NMD089416416**

Dear Messrs Schmaltz and Riege,

The New Mexico Environment Department (NMED) has received Giant Refining Company's, Bloomfield Refinery (GRCB) response letter titled *Approval with Modifications River Terrace Voluntary Corrective Measures Bioventing System Six Month Start-Up Report January 2006 through June 2006*, (Report) dated December 19, 2006. NMED has the following comments.

**Comment 6**

At the end of Comment 6, GRCB states that bioventing wellhead pressure data are not needed in monitoring the performance of the system since there are air velocity indicators at each well head. Measuring the injection pressures along with air velocities at the bioventing wells is necessary to monitor the effectiveness of the bioventing system because combined injection pressure and velocity measurements can indicate the distribution of air entering into the subsurface along with vadose zone (soil) permeability. The collection of injection pressures along with injection velocity measurements at all bioventing wells is a requirement, beginning with the 2007 periodic monitoring.

Messrs Schmaltz and Riege  
February 1, 2006  
Page 2 of 2

**Comment 7**

The column titled “[photo ionization detector] PID (PPM)” in the tables *Soil Gas Monitoring 2005/2006* modified by GRCB denotes the number 1534 repeatedly in temporary wells TP-#1, TP-#4, TP-#5, TP-#6, and TP-#8. NMED questions this data because it is unlikely the exact same PID value would be recorded at various locations and during different events. In future reports, GRCB must provide explanations for seemingly anomalous or unusual results.

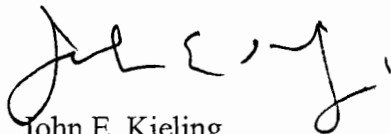
**Comment 9(b)**

The response to Comment 9(b) provides the reason why bioventing wells BV-1 and BV-3 are likely outside the bioventing system area of influence and states that the results of the “in-situ respiration test for samples collected at bioventing wells BV-1 and BV-3 exhibited significantly lower oxygen utilization rates than what was calculated from samples collected at the other BV wells.” NMED was unable to evaluate this conclusion because the data was identified as “[not applicable] N/A” in Table 2 of Section 6.0 of the Report. The area of influence is further defined, with new information, that the “existing slurry wall turns and extends southward from the most northern end of the above-grade sheet-pile.” NMED is unable to confirm the location of the slurry wall extension because there is no documentation that the slurry wall extension was installed and if it was installed, the depth interval and length are unknown. GRCB must provide NMED with the oxygen utilization rates for BV-1, BV-3, and TP-9.

Upon review of the Annual Report for the River Terrace Bioventing System, NMED will address future monitoring and the area of influence as it may affect sampling in our response letter. The oxygen utilization rates must be submitted to NMED on or before March 1, 2007.

Please contact Hope Monzeglio of my staff at 505-476-6045 if you have questions regarding this letter.

Sincerely,



John E. Kieling  
Program Manager  
Permits Management Program  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
H. Monzeglio, NMED HWB  
W. Price, OCD  
B. Powell, NMOCD Aztec District Office  
B. Wilkinson, USEPA Region 6  
File: Reading File and GRCB 2007 File  
HWB-GRCB-06-006