



BILL RICHARDSON
GOVERNOR

GRCB-04 

State of New Mexico
ENVIRONMENT DEPARTMENT

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ENTERED



RON CURRY
SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

December 21, 2004

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

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

SUBJECT: APPROVAL WITH CONDITIONS
VOLUNTARY CORRECTIVE MEASURES PLAN
BLOOMFIELD REFINING COMPANY
RCRA PERMIT NO. NMD 089416416
HWB-GRCB-04-005

Dear Mr. Schmaltz and Mr. Riege:

The New Mexico Environment Department (NMED) has completed its review of the Voluntary Corrective Measures Plan titled *Corrective Action Plan* (CAP) dated November 17, 2004, submitted on behalf of Giant Refining Company Bloomfield (GRCB). NMED hereby approves the CAP with the conditions listed below:

1. In addition to NMED, all requested information shall be submitted to the Oil Conservation Division Santa Fe office and the OCD District office.
2. The barrier wall shall be imbedded a minimum of 5 feet into the Nacimiento Formation. A barrier wall conceptual "flow net study" shall be conducted to ensure the wall is buried deep enough to stop significant seepage from going under the wall. Please provide the results of the study for NMED approval before actual installation of the wall.

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3. The final barrier wall type shall be submitted to NMED for approval before installation. GRCB shall demonstrate to NMED that the barrier wall type and design will meet any structural requirement and hydraulic conductivity (k) of 1×10^{-7} cm/sec.
4. Detailed "as built drawings" and photo documentation shall be supplied at the completion of construction. At least one of the drawings shall show a cross section along the entire wall.
5. Daily logs shall be kept during the construction phase. All pertinent information shall be logged such as contamination observed, soil characteristics, water levels, depth to Nacimiento Formation, progress made each day, dewatering or contaminant removal activities, general weather, and all other pertinent information that should be logged that may cause a deviation of the approved design and/or any anomalies found in the trench which may cause GRCB to deviate from the plan or be of a concern. GRCB shall notify NMED of any deviations from the plan within one business day of making the change.
6. GRCB shall submit a weekly progress report and photos via E-mail on Monday morning.
7. GRCB shall submit the fluid collection system design for approval before actual installation. This should include a map identifying the locations of recovery wells or trenches and all other pertinent information. The Permittee may remove fluids during the course of the project for logistic and safety reasons. All fluids and waste removed shall be disposed or recycled in an approved manner.
8. GRCB shall maintain a qualified technical person on site during the construction phase to ensure quality assurance and control of the project. This person shall be experienced in identifying the Nacimiento Formation. Ample confirmation bottom hole soil samples shall be collected in areas where the proposed collection systems may be placed. Samples shall be collected and preserved to properly identify/classify the soils.
9. GRCB will notify the NMED at least 72 hours in advance of the start of construction and all scheduled sampling activities throughout the construction process such that the NMED has the opportunity to witness the events and/or collect split samples during NMED's normal business hours.
10. GRCB shall submit a plan for NMED approval to evaluate the effectiveness of the barrier wall. This plan should include monitoring points on both sides of the barrier wall.

11. GRCB must submit construction diagrams for the peizometers along the north property boundary installed during the November 2003, July 2004, and October 2004 drilling programs. This information must include the slot-size and slot intervals of the PVC hand-slotted screens, length of screen, depth at which the screens were set, and depth of water bearing zones. The "Log of Test Borings" (boring logs) found in the CAP do not include all of this information.
12. Boring log SB1-0704 states "[b]lack with hydrocarbon odor;" the term black is also used in other boring logs SB2-0704, SB3-0704, SB6-0704, and SB7-0704. GRCB must clarify the use of the term "black" in the boring logs. (e.g. is black referring to hydrocarbon staining or is black the actual mineral color in the sand).
13. The CAP, Sections 4.2 contains a table presenting the hydraulic properties from a slug test. GRCB must provide the results of the slug test and the associated calculations. Include graphs as necessary.
14. The CAP, Section 4.3 states "[e]ach boring installed during the October 2004 drilling campaign was drilled 3 to 5 feet into the Nacimiento Formation. Soil samples were collected every 2.5 ft and submitted to a geotechnical laboratory for grain size analysis to estimate the properties important for the design of the barrier and collection system. Samples collected of the Nacimiento Formation were also submitted to the lab for hydraulic conductivity testing."

GRCB must submit the results of the grain size analyses and hydraulic conductivity testing for all borings.

15. CAP, page 2 of Section 6.1 Barrier Concept, states "Appropriate construction quality control measures will be applied during barrier construction to verify that the performance requirements will be achieved."

GRCB must identify the quality control measures that will be used and the performance requirements that will be achieved.

16. The CAP, Section 6.2 Fluids Collection Concept, states "[f]luids will be removed from the collection points using a vacuum truck when necessary based on fluids level monitoring results. Collection fluids will be delivered to the existing French Drain collection tank near SB2-0704."

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GRCB must clarify if a vacuum truck is the only method of fluid collection removal to be employed upon completion of the barrier wall and fluid collection system.

17. Appendix A provides results from a sieve analysis. GRCB must identify what soil samples are associated with "PEI Lab No." 46464, 46465, 46461, 46462, and 46463 because these were not identified in the October boring logs.
18. The barrier wall installation may cause the displacement of hydrocarbons. In the future, NMED may require additional sampling and monitoring from the monitoring wells located in the southern portion of the refinery (e.g. MW-32, 33, 34, 35, 36, 36, and 38) and the three outfall locations.

The Permittees must submit the requested information within 30 days of receipt of this letter or NMED will rescind approval.

If you have any questions regarding this approval please contact me at (505) 428-2545.

Sincerely,



Hope Monzeglio
Project Leader
Hazardous Waste Bureau

HCM:hcm

cc: J. Bearzi, NMED HWB
J. Kieling, NMED HWB
D. Cobrain, NMED HWB
W. Price, OCD
D. Foust, OCD Aztec Office
B. Wilkinson, EPA

Reading File and GRCB 2004 File