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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

March 13, 2006

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

SUBJECT: APPROVAL WITH MODIFICATIONS
2004 ANNUAL GROUNDWATER REPORT
GIANT REFINING COMPANY, CINIZA REFINERY
EPA ID NO. NMD000333211
HWB-GRCC-05-001

Dear Mr. Riege:

The New Mexico Environment Department (NMED) has completed its review of the *Oil Conservation Division 2004 Annual Groundwater Report* (Report), dated August 2005, submitted on behalf of Giant Refining Company, Ciniza Refinery (the Permittee). NMED only reviewed the information presented in Sections 6.0-13.0, 21.A, 21.E, 21.F, Appendix A, and Appendix B pertaining to groundwater monitoring. NMED hereby approves the Report with modifications as listed in this letter. NMED has determined this Report contains some technical deficiencies that must be corrected in all future groundwater monitoring reports. The Permittee must adhere to all requirements established in this letter in addition to the requirements established in the *Approval with Modifications Giant Ciniza Refinery 2003 OCD Annual Reports GW-32* (Approval Letter), issued by NMED to the Permittee, dated June 1, 2005.

The following are the deficiencies identified in the Report:

1. June 1, 2005 Approval Letter, Item No. 18, Discharge Permit Condition 16.A.iii, states “[a]n annual water table potentiometric elevation map using the water table elevation of the ground water in all refinery monitor wells. A corrected water table elevation shall be determined for all wells containing phase-separated hydrocarbons. The map shall show well locations, pertinent site features, and the direction and magnitude of the hydraulic gradient.”

The *Alluvium/Chinle Group Interface Water Levels* map provided in Section 10 of the Report does not provide contours for groundwater flow directions. In addition, groundwater elevations measured in monitoring wells located in the northwest corner (BW-1B, BW-2B, BW-2b, SMW-4....) were not used to generate potentiometric surface contours. The Permittee must include these features on water table potentiometric surface elevation maps provided in future groundwater reports or provide an explanation for omitting the contours on the map.

2. June 1, 2005 Approval Letter, Item No.10, Discharge Permit Condition 16.A.i required a description of the sample collection procedures and field methods. The methods and procedures are not discussed in the Report. Future groundwater monitoring reports must provide a section that describes the sample collection procedures and other field methods used during that sampling event.
3. The Permittee must refer to the June 1, 2005 Approval Letter, Items No. 14 c, d, and e summarized below:
 - a. Include a section describing field sample collection and handling procedures, equipment calibrations, decontamination procedures, and collection and management of investigation derived wastes.
 - b. Provide a table summarizing well data derived from well depth to water/product measurements from the well casing rims. The water/product levels must be measured to an accuracy of 0.01 foot. The Permittee shall calculate water table elevations by subtracting the depth to water from the surveyed well casing rim elevations. The table shall provide water elevation data for each well. The column headings shall include: measurement date, well identification, well casing elevation, total well depth, depth to SPH, SPH thickness, depth to water, groundwater elevation, and corrected water table elevation (if SPH are present). The data presented in the table can then be applied to the annual water table

potentiometric elevation and product thickness maps for each ground water monitoring event.

4. Section 6.0 of the Report contains the Groundwater Monitoring Plan; item No. 6, which states "Waste water from Pilot Travel Center and Truck Stop Facility...." The Permittee must revise the wording to ensure the reader views the Truck Stop Facility as part of the Pilot Travel Center and that one sample is collected from this area. As it currently reads, it could be interpreted that a sample is collected from the Travel Pilot Center and another sample is collected from the Truck Stop Facility.
5. The Table of Contents of the Report, Section 16.0 is missing Permit Condition 21 F. *Summary of Discovery of New Groundwater Contamination*, which is combined with Permit Condition 21E. Permit Condition 21.F identifies contamination present in BW-3C as probably due to drilling, sampling, or lab contamination. In future reports, such statements must be justified by describing why drilling, sampling or lab contamination is thought to be the source of contamination and not a result of a release.
6. Section 9.0 of the Report provides analytical results for Well # 4, designated as *Well #4 SDWA/Iyanbito*. The collection of this sample was not connected with the groundwater sampling event. In future groundwater monitoring reports, the Permittee must highlight laboratory data not collected during the groundwater monitoring event and provide an explanation why the sample(s) was not collected during the scheduled monitoring.
7. Section 13 of the Report provides the data for hydrocarbon thickness and volume of product recovered. The presentation of the data is unclear because the data is recorded in feet and inches while the titles of the columns specify only feet or inches and not both. Future groundwater monitoring reports must provide the SPH thickness measurements in feet to an accuracy of 0.01 foot and provide accurate titles.
8. Well identification must be consistent throughout the report on analytical reports, reporting tables, and on maps. For example, wells labeled PW-2 and PW-4 on the maps are labeled well #2 and well #4 in the analytical reports and reporting tables. This must be corrected in future groundwater reports.
9. The Permittee shall discuss in future groundwater monitoring reports any deviations to approved sampling activities or provide an explanation why sampling was not conducted. Some analytical data appears to be missing from this Report. The following is a list of the discrepancies related to monitoring of the wells in the Report:

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- a. Section 8 states GWM-1 was analyzed for general chemistry, VOC, SVOC, BTEX, MTBE, and RCRA metals. However, only BTEX and MTBE data were provided in Section 9, containing the tables and analytical reports.
- b. Section 8.0 states that PW-2 was analyzed for cyanide. The analytical results for cyanide were not provided in Section 9.

All future groundwater monitoring reports must follow all requirements included in this letter and also the requirements listed in the original Approval Letter. In September 2005, after the Report was submitted, the Permittee submitted a *Response Letter, HWB-GRCC-04-001* dated September 26, 2005 that included revisions to the *OCD Discharge Renewal Application*. The Permittee must also adhere to all revisions submitted in that *Response Letter* in future groundwater monitoring reports.

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

Sincerely,



Hope Monzeglio
Project Leader
Permits Management Program

HM/sv

cc: J. Kieling, NMED HWB
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file: Reading File and GRCC 2006 File