



April 20, 1996

Route 3, Box 7
Gallup, New Mexico
87301

Mr. Bob Sweeney
RCRA Technical Compliance
Hazardous and Radioactive Materials Bureau
2044 Galisteo
P.O. Box 26110
Santa Fe, New Mexico 87502



Dear Mr. Sweeney:

SUBJECT: RESPONSE TO THE 1995 COMPREHENSIVE GROUNDWATER MONITORING EVALUATION (CME), GIANT REFINING COMPANY, CINIZA REFINERY.

Giant Refining Company is in receipt of your letter dated December 6, 1996, concerning the October 26, 1995, Comprehensive Groundwater Monitoring Evaluation (CME) performed by the New Mexico Environment Department (NMED), Hazardous and Radioactive Materials Bureau (HRMB). As stated in your letter the purpose for the Entry Conferences was to present HRMB's credentials, cite the statutory authority to enter the site, specify the reason for the evaluation, conduct an inspection of the groundwater monitoring system, obtain groundwater samples, and to discuss the objectives of and procedures for the CME.

At this time I am going to address the five (5) objective identified in the December 6, 1996, letter.

NMED/HRMB's Objective: "1) Ciniza Sand (geological information) - The question of which water-bearing zone (the deeper Sonsela Sand or the shallower Ciniza Sand) is to be determined as the upper most aquifer beneath the LTA has been a concern to both HRMB and GRC. Subsurface data show there are several sand layers, some dry and others water-bearing, in the Ciniza Sand interval. Understanding the continuity and extent of the sand beds is critical in determining which water-bearing zone (i.e. the Sonsela or the Ciniza) is the uppermost aquifer. During the Entry conference the complexity of the various sand beds in the Ciniza Sand interval, not only beneath the LTA but also in other parts of the refinery property, was discussed briefly. To answer questions about the areal extent of the Ciniza Sand(s), cross-sections or fence diagrams employing detailed stratigraphic information from the SMX, OW, MW, and SMW series boreholes/wells should be constructed. Please contact Mr. Bob Sweeney, the HRMB Facility Manager, to coordinate the specifics of this request."

Giant's Response: Mr. Bill Kingsley, Precision Engineering, has just completed three soil boring (See Attachment "A" for approximate locations) and the bi-monthly soil sampling event at the Land Treatment Area (LTA). The soil boring were place at

location and depths so as to verify or deny the lithology of existing wells. Upon receipt of the finished logs, Giant will transmit copies to NMED/HRMB for filing.

NMED/HRMB's Objective: "2) Monitor Well - 5 (MW-5) - Certain information on MW-5 is missing from the HRMB files. Please send a lithology log and an "AS built" construction diagram."

Giant's Response: Attachment "B" is a copy of the lithology and the "as built" construction diagram for MW-5.

NMED/HRMB's Objective "3) Replacement monitoring well for SMW-6 - HRMB understands that no water was found in the Ciniza Sand during three attempts to replace SMW-6. On a fourth attempt, SMW-6 was over-drilled, old stainless steel casing removed, new PVC casing installed, and very little water was observed in the newly completed well. HRMB requests GRC to continue monitoring this well to determine if the lack of water is seasonal or if the groundwater found in SMW-6 in the past was the result of infiltration of surface and near surface water down the annulus of the well bore. If Ciniza Sand groundwater enters the well in the future, semi-annual sampling and analyses should be continued."

Giant's Response: Giant is still defining the formation locally known as the "Ciniza Sand" and the effects it has on environmental issues. In the event, however, if SMW-6 is found to contain water of adequate quantity and low turbidity, samples will be taken and analyzed in accordance with Giant's Permit.

NMED/HRMB's Objective: "4) GRC's method of purging groundwater - GRC's practice of purging one or more monitoring wells prior to measuring the elevation of groundwater in all wells, and how the water levels might be changed in one well due to purging in another, was discussed. Please note that this was also commented on following the March 1991 CME. It is a requirement that GRC measure the groundwater elevation in all monitoring wells prior to purging any of them."

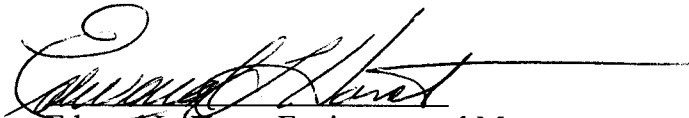
Giant's Response: Measuring and purging procedures have been changed to reflect this requirement. Samples taken in October, 1996, will reflect that change.

NMED/HRMB's: "5) Method of displaying groundwater monitoring data - The possibility of portraying the semi-annual groundwater monitoring data in map form in addition to the tabular form now used was also discussed. The maps would show which contaminants have been detected in the monitoring wells and how the levels of contamination have changed over time. HRMB is still interested in this method of tracking contaminant plumes and would appreciate this additional information included in GRC's next semi-annual groundwater monitoring report."

Giant' Response: At present Giant is reviewing software that would perform this task. Attempts will be made to provide NMED/HRMB the requested information.

If there are any questions or concerns on this matter, please contact me at (505) 722-0227.

Sincerely,

A handwritten signature in cursive script, appearing to read "Edward L. Horst", is written over a horizontal line.

Edward L. Horst, Environmental Manager
Giant Refining Company
Ciniza Refinery

cc: David Pavlich, HSE Manager
Steve Morris, Envir. Specialist

ATTACHMENT "A"

● APPROXIMATE '96 (APRIL) SOIL BORING LOCATIONS

