

GRC 94

State of New Mexico

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**MEMORANDUM**

TO: Tom Tatkin, RCRA Permitting Program

FROM: Ron Kern, RCRA Technical Compliance Program Manager *RK*

DATE: August 2, 1994

SUBJECT: **Land Treatment Unit Characterization Plan, Giant Refining Company - Ciniza, Gallup**

The RCRA Technical Compliance Program was requested by the RCRA Permitting Program to review the June, 1994 document "**Land Treatment Unit Characterization**", prepared by the Ciniza refinery facility of Giant Refining Company (GRC), Gallup, New Mexico. This submittal was prepared to comply with a February, 1994 HRMB requirement for GRC to characterize the treatment zone and below treatment zone for Closure of the Land Treatment Unit (LTU). HRMB technical comments and recommendations are included on the attached pages (Attachment I).

cc: Barbara Hoditschek, RCRA Permitting Program Manager  
File: GRC/Red/94

**ATTACHMENT I**

The following technical comments from the Hazardous and Radioactive Materials Bureau (HRMB), New Mexico Environment Department, relate to the June, 1994 document "**Land Treatment Unit Characterization**". This document was prepared by Giant Refining Company (GRC) to comply with a February, 1994 HRMB requirement for GRC to characterize the concentrations and distributions of hazardous constituents within the treatment zone and below treatment zone of the Land Treatment Unit (LTU) at the Ciniza facility for Closure.

Language in bold print enclosed within parentheses is quoted directly from the text of the June, 1994 LTU characterization report. Following the quotes are comments from the Technical Compliance Program of HRMB.

ITEM

- 1 Page 1, Introduction, Paragraph 2: (**Although characterization of chromium and lead migration has been adequately addressed by previous sampling events, chromium and lead concentrations within the Treatment Zone must be characterized.**). All soil samples within the Treatment Zone and Below Treatment Zone (BTZ) of the LTU must be analyzed for all constituents listed in the Modified Skinner List (Table 3). Please amend this statement accordingly. This would therefore be consistent with the approach proposed by GRC in Table 1.
- 2 Page 1, Coring, Paragraph 1: (**Giant proposes to core twelve additional points...to a total depth of ten feet.**). GRC must ensure that the proposed locations and depths for soil cores are adequate to characterize and delineate the nature and extent of hazardous constituents within the BTZ which have been released from the LTU.
- 3 Page 1, Coring, Paragraph 2: (**Giant shall randomly select four coring points in Cell #1, four points in Cell #2, and four points in Cell #3.**). GRC must provide HRMB with a map of the proposed locations for the coring points. Any coring points within and adjacent to the LTU must be reviewed and approved by HRMB.
- 4 Page 3, General, Paragraph 1: (**Samples taken from the BTZ will be tested using the tolerance interval as used and presented in other sampling events (Report on the Special Sampling Activities at the Land Treatment Unit, November, 1993).**). Although potentially an appropriate alternative, the Tolerance Interval test on samples from the BTZ must be explained more thoroughly than in previous reports. Additionally, whereas

this procedure may be applicable for lead and chromium, all hazardous organic constituents detected within the BTZ will generally be considered as having migrated from the LTU.

- 5 Page 4, Closure, Paragraph 3: (**A small amount of water was recovered on April 31, 1994 and was analyzed for volatile organic compounds. No VOC constituents were detected**). Please clarify the sampling date. Either the VOC data should have been previously transmitted to HRMB, or the data should be referenced in a document, if previously sent to HRMB.
- 6 Page 5, Closure, Paragraph 2: (**ZOI soil samples will be analyzed for Table 1 constituents...**). Table 2 appears to be the proper citation for this statement.
- 7 Page 5, Closure, Last Paragraph: (**Due to low levels of hazardous constituents, Giant proposes no additional remediation beyond enhancement of microbial destruction of hydrocarbon in the ZOI.**). Evaluation of all the results from an adequate characterization of the LTU site is necessary to determine if corrective measures are required.
- 8 Page 6, Risk Assessment, Last Paragraph: (**Due to the conditions presented above and the fact that there is no need for remediation, the risks associated with closure of the Land Treatment Unit are minimal and require no special considerations.**). A baseline risk assessment, according to U.S. EPA's current Risk Assessment Guidance for Superfund, may be necessary to adequately determine any threat to human health and/or the environment associated with both carcinogenic and non-carcinogenic constituents at the LTU. This risk assessment would consider both current and future land uses, as well as the possible pathways and media of exposure.
- 9 Page 9, Table 2: Please define Event 1 and Event 1 + 60 Days. These terms should also be clearly defined in the text.
- 10 Pages 10-12, Table 3, Modified Skinner List: Table 3 must also include the following hazardous constituents, which have been detected at the LTU during previous GRC sampling events:  
  
Benzyl alcohol  
1,1,1-Trichloroethane  
  
Please correct the spelling of Bis(2-Ethylhexyl)phthalate in Table 3.
- 11 Appendix 1, Title Page: Sampling Plan should be designated as Sampling and Analysis Plan.

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- 12 Appendix 1, Table 2: See item 9 above.
- 13 Appendix 1, Table 3: See item 10 above.
- 14 There are two (2) appendices designated as Appendix 1. Please clarify.