



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
2044 Galisteo
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-1557
Fax (505) 827-1544



MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 26, 1997

Ms. Dorinda Mancini
Environmental Manager
Giant Refining - Ciniza
Route 3, Box 7
Gallup, NM 87301

Dear Ms. Mancini:

RE: LTU Clean Closure Performance Standards

The New Mexico Environment Department (NMED) writes this letter to inform Giant Refining Company - Ciniza (Giant) of NMED's recent activities regarding Giant's RCRA Operating Permit (OP) for the Land Treatment Area (LTA). Giant's July 1996 amended Closure Plan (CP) has been the primary focus of NMED's efforts.

The NMED/Hazardous and Radioactive Materials Bureau (HRMB)/RCRA Permits Management Program (RPMP) has re-evaluated and deemed inappropriate the clean closure contaminant level criteria provided to Giant by the HRMB in a letter to Mr. Edward Horst, dated July 19, 1996 (attached). Giant's CP incorporated the suggested clean closure criteria into the closure performance standards (Section 3.1) while also citing the appropriate regulations. The use of the improper closure criteria causes the CP to be contradictory and ultimately makes closure certification impossible. Documents associated with the CP, such as the Characterization Plan and the Sampling and Analysis Plan, are also based on the inappropriate closure criteria and are thus also contradictory.

HRMB's July 1996 letter mistakenly states that clean closure would be considered attained when waste concentrations degrade to either New Mexico Water Quality Standards, the National Drinking Water Maximum Contaminant Levels, or the most conservative EPA guidance criteria. The two above referenced water standards are improper for clean closure criteria for two reasons. First, because the standards pertain only to waters and do not address soil contaminant levels found at the LTA, and second and more important, because they conflict with the regulations. Conservative EPA guidance criteria is inappropriate as a closure performance standard because it is simply too ambiguous.

Dorinda Mancini
Page 2

The RPMP does believe that the timeline requirements detailed in the second paragraph of the 1996 letter would appropriately apply to the LTA clean closure determination.

The hazardous waste regulations (264.280(d)) regarding closure for land treatment units (LTUs) state that "... the operator is not subject to ... (post-closure care) ... if the ... levels of hazardous constituents in the treatment zone do not exceed the background value" Therefore, the clean closure performance standard must be those constituent concentrations not affected by either facility or waste treatment unit operations. The LTU closure requirement of attaining background concentrations are unique among RCRA operable units because LTUs are the only units discussed in the regulations at which hazardous wastes are intentionally placed on the land for treatment.

The clean closure performance standard of attaining background concentrations will apply to the inorganic hazardous constituents contained within the wastes that are also listed in 40 CFR Part 261, Appendix VIII. This will apply to all waste metals and not just chromium or lead. The RPMP considers the constituents within the Modified Skinner List provided in Giant's amended Closure Plan (Tables 4C and 4D) appropriate.

By extension, the clean closure performance standards for organic hazardous constituents are the minimum quantification levels (MQL) as specified in the attached EPA "Region 6 Development of Minimum Quantification Levels." If Giant attains background or MQLs on all hazardous constituents while petroleum hydrocarbon concentrations that are not hazardous constituents continue to exist, the RPMP will consider its regulatory authority exhausted at this unit and will request that the Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department (EMNRD) work with Giant to finalize the abatement.

Finally, the above clean closure performance standards apply to all soils and groundwater within and below the LTA unless it can be shown to be from another source.

Giant's currently approved Closure Plan, Section 3.3.1, requires that "... in situ treatment continue until any residual hazardous waste has degraded below NMED-approved health based concentration limits." The RPMP wishes to establish for the first time these limits in this letter.

The RPMP proposes that the appropriate risk-based concentrations be the most currently available Human Health, Media-Specific Screening Levels provided by the Environmental Protection Agency, Region 6 (attached). The RPMP would insist that Giant use the more conservative of either the soil screening level for transfers from soils to groundwater or the risk-based screening level for soils

Dorinda Mancini
Page 3

based on an residential future land-use exposure scenario. If Giant believes that the EPA algorithm used to calculate the screening levels are inappropriate for the facility, Giant may petition for an alternative. Additionally, if a standard does not exist for a particular constituent, the RPMP would insist that Giant use MQLs.

Please keep in mind that treating hazardous wastes to risk based concentrations would be considered a "closure with waste in-place" and not clean closure. In this situation Giant would still be required to provide post-closure care through a separate post-closure care permit. The RPMP reminds Giant that it always has the option to "remove" all contaminated material to the above mentioned standards in order to stop treatment or attain clean closure.

Furthermore, because treatment must continue until acceptable risk levels have been attained, the RPMP believes that a vegetative cover would preclude the treatment process and be contrary to the closure process.

The RPMP requires that Giant revise the "LTA Closure Plan/Characterization Plan" and any associated documents by taking into account the regulatory requirements and the concerns identified in this letter. These revised documents must be provided to the RPMP within 180 days of receipt of this letter. In the interim Giant must continue all operations necessary to maximize degradation and continue to abide by its sampling and reporting requirements.

The RPMP defer determination as to whether there has been a substantial release for the LTA until the results of the Characterization plan have been submitted. Please contact Mr. Steve Pullen or myself at (505) 827-1558 if you have any questions regarding this letter.

Sincerely,



Robert (Stu) Dinwiddie, Ph.D., Manager
RPMP, HRMB

copy:

Roger Anderson, OCD, w/attach.
David Neleigh, EPA, w/o attach.

Attachments:

NMED July 1996 letter
MQLs
EPA Screening Levels