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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

January 10, 2007

Keith Landreth
Attn: ATZC-DOE (Landreth)
Bldg. 624
1733 Pleasanton Rd.
Fort Bliss, New Mexico 79916-6812

**RE: REVIEW OF RESPONSES TO NOTICE OF DEFICIENCY (NOD)
FOR THE SUPPLEMENTAL RCRA FACILITY
INVESTIGATION (RFI) REPORT FOR
SWMU-19 McGREGOR RANGE CAMP OXIDATION POND
FORT BLISS, NEW MEXICO, EPA ID# NM4213720101-01**

Dear Mr. Landreth:

The New Mexico Environment Department (NMED) has received the Department of the Army's (Permittee) *McGregor Range Oxidation Pond Supplemental RFI Report Response to NOD Comments*, dated January 23, 2006. NMED has reviewed the responses and has concluded that the technical evaluation cannot be completed at this time, pending the submittal of a fully revised RFI Report. The Permittee must submit a revised RFI Report within sixty (60) days of receipt of this letter, including a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. The Permittee must revise the work plan as outlined in the comments below. The numbered comments of this letter correspond to the table included in the Permittees' January 23, 2006 letter.

GENERAL COMMENTS

Comment 1

The Permittee must supply hydrogeologic cross-sections of Solid Waste Management Unit (SWMU) 19 in the revised report. Since the pond is currently in operation and the integrity of the liner has been compromised in several places resulting in the potential for a release, the Permittee must propose if and when the liner will be replaced. The Permittee must also supply data to

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confirm that the vertical extent of contamination has been adequately delineated and that contaminants are not migrating to groundwater.

Comment 2

The Permittee's response is adequate.

Comment 3

The Permittee's response indicates that the human health risk assessment is provided for informational purposes only and to establish the need for land use controls. Please note that because the risk assessment was considered inadequate, no final risk-based decisions can be made using this assessment.

Comment 4

The Permittee's response is adequate.

Comment 5

The Permittee's response indicates that a risk analysis to lower trophic levels was not the intent of the risk assessment, and thus was not included in the report. However, without the inclusion of such an analysis (i.e., comparison to no adverse effect levels (NOELs) and low adverse effect levels (LOELs)) the risk assessment is incomplete. The plant, invertebrate, and amphibian (i.e., salamander) communities are a critical link to upper trophic species that may inhabit or use the pond as a food source and therefore represent an important resource to be protected. Thus, the assessment endpoint that should be identified with respect to the lower trophic level organisms is the maintenance of productive plant, invertebrate, and amphibian communities in the pond. Aquatic invertebrates also perform an important function in the degradation of organic matter in sediment through their bioturbative activities. If the health of the lower trophic levels are deemed at risk from exposure to contaminants in surface water and sediment, then contaminants at the site have impacted the ecosystem because a primary food source to upper trophic levels is impaired. The risk assessment must be revised to address the risks to lower trophic receptors unless this analysis was performed as part of the VEGA study, which indicated the presence of elevated hazard quotients.

Comment 6

The Permittee's response to the comment is inadequate because the exposure of upper trophic organisms to surface water is not addressed. In order to support corrective action decisions at this SWMU, all relevant exposure media must be addressed. There is no basis for eliminating surface water as an exposure medium as birds may use the pond as a drinking water source as well as ingest surface water incidentally during foraging activities in the pond. To support corrective active decisions for this unit, the Permittee must revise the report by evaluating all relevant exposure medium including surface water, sediment, and food chain exposures.

Comment 7

The Permittee's response to the comment is inadequate. Lower trophic levels need to be evaluated in the ecological risk assessment to support corrective action decisions. Refer to

response to General Comment No 5.

Comment 8

The Permittees' response to the comment is inadequate. Lower trophic levels need to be evaluated in the ecological risk assessment to support corrective action decisions. Refer to response to General Comment No 5.

Comment 9

The response indicates that the risk assessment differed from the VEGA study in that more refined and site-specific data were applied. It is not uncommon for a screening assessment, like the VEGA study, to show elevated risk, while more refined and site-specific assessment results in lower risk. The Permittees' response to this comment is adequate as presented.

Comment 10

The Permittee's response to this comment may be adequate, although final revisions were not provided. A complete evaluation could, therefore not be made. The Permittee must revise the Report by providing an explanation for each contaminant of concern (COC) that was not retained for additional analyses.

Comment 11

The Permittee's response indicates that there is no available background information for the McGregor Pond, therefore only screening benchmarks were applied. The document should address this uncertainty in the uncertainty section and describe how the absence of background data may impact the risk conclusions. In addition, the Permittee must evaluate if the background soil investigation to be conducted at McGregor Range and Doña Ana Range SWMUs is appropriate for this site.

Comment 12

The intent of the response to this comment may be adequate; however, it is not clear whether including pH data will demonstrate that the soil pH is within the range where aluminum can be considered bioavailable or if the inclusion of pH is to demonstrate the conservativeness of the risk assessment. The Permittee must revise the Report by adding pH data. Final evaluation of this response is pending the revised Report.

Comment 13

The Permittee's response is contradictory. The Permittee states that the shallow water-bearing unit is reflective of the pond above, while stating that the shallow water-bearing unit was not located in borings advanced in the vicinity of the pond. It appears that the shallow water-bearing unit has not been fully defined in the area of SWMU 19. If the shallow water bearing unit is reflective of the pond above it, then the Permittee cannot conclude, using data collected and completed for a nearby landfill on the McGregor Range, that there is no connection between the shallow perched water and the regional aquifer. The Permittee must address this issue in the revised Report.

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Comment 14

If the calculated risk to human health is only intended for screening purposes then the risk assessment is considered inadequate and no final risk-based decision can be made using this assessment.

Comment 15

The Permittee must revise the Report by revising the number of surface sediment samples referenced in the Report.

SPECIFIC COMMENTS

Comment 1

The Permittee must revise the Report by revising the volatile organic compounds (VOCs) list referenced in the Report.

Comment 2

The Permittee's response is not adequate. Just because SWMU 19 is a constructed waste water pond located in the desert does not mean that site specific background is not available or cannot be estimated. The Permittee must evaluate if the background soil investigation to be conducted at McGregor Range and Doña Ana Range SWMUs is appropriate for this site.

Comment 3

The Permittee's response to this comment is inadequate. The report utilized a maximum contaminant level (MCL) as a scalar criterion to provide a qualitative evaluation of the relative significance of surface water contamination. However, the Permittee indicated in the comment that a more relevant value is the New Mexico Administrative Code (NMAC) standards. It is agreed that the pond is not an interstate surface water, although the pond is also not a potable drinking water supply. Yet, an MCL had been used as the scalar criteria. To conduct a screening level evaluation of contaminants in surface water, the NMAC standards are relevant and appropriate and should be used as the comparison criteria. The Permittee must revise the Report to include the use of NMAC standards.

Comment 4

The response to this comment concerning ambient levels of lead in groundwater may be adequate. Since final revisions were not provided, a complete evaluation could not be made. The response indicated that information on lead levels could be obtained from the referenced remedial investigation reports. While this may true, the response must provide a summary of the natural levels of lead that have been detected in groundwater associated with the site.

Comment 5

The Permittee's response indicates that the NMED Soil Screening Levels do not contain sediment benchmarks. As such, the use of the EPA Region 6 sediment screening level is appropriate and the Report must be revised to reflect this change.

Comment 6

The Report must be revised to include surface water as an exposure medium in the ecological risk assessment. The Report must also be revised by addressing the uncertainties associated with the fluctuations in concentrations. Refer to General Comment 6.

Comment 7

The Permittee must review the contaminants of potential ecological concern (COPEC) section and Appendix 2 and revise as necessary to be consistent with the Permittee's response to NMED's June 7, 2005 NOD.

Comment 8

The Permittee's response is adequate.

Comment 9

The Permittee must revise the Report by clarifying the purpose of the restrictions described in Section 2.5.2.

Comment 10

The Permittee must determine if, in fact, the water and sediments are confined to the oxidation pond. Again, the Permittee must revise the Report to address if and when the liner will be replaced.

Comment 11

The Permittee's response indicates that future human risk scenarios were not included because the Army intends to maintain the current use of the pond as a waste water pond indefinitely. To ensure protection of human health, the Report must be revised to describe the controls in place to ensure that the current use does not change. In addition, the Permittee must state in the revised Report that if future use is to change, the risk evaluation must be re-visited.

Comment 12

The Permittee must revise the Report by clarifying the language in Section 3.2.2 to be consistent with the Permittee's response.

Comment 13

The Permittee must revise the Report by updating Table 1 in Appendix 1 as described in the Permittees' January 23, 2006 response.

Comment 14

The Permittee's response is adequate.

Comment 15

The Permittee's response indicates that MCLs will be removed from the ecological risk assessment. Yet, it does not indicate what screening levels will be used in place of MCLs. Refer to Specific Comment 3.

Comment 16

The Permittee indicates in the response that an evaluation of LOAEL-based toxicity reference levels (TRVs) for the raccoon will be included. However, the response does not indicate how the first half of the comment will be addressed. To reiterate, the report states that LOAEL-based hazard quotients (HQs) for all chemicals are below one when Table 9-1 of Appendix 2 indicates a number of LOAEL-based HQs greater than one. The report must be revised to address the discrepancies between the text and the tabular results in the Appendices.

Comment 17

NMED's June 7, 2005 NOD requires the Permittee to identify the site where the 20 samples were collected. The Permittee responds that Section 3.3 will be removed from Appendix 2 of the report. The Permittee must justify this action. The Permittee must also discuss in the revised report how geotechnical analyses of soils at another site relates to this project.

Comment 18

The response to the comment indicates that evaluating non-parametric upper confidence level (UCLs) is "not anticipated to alter the resulting risk analysis." This statement is without basis. Currently there are a number of LOAEL-based HQ exceedances, and it may be possible that use of the appropriate UCL could alter these conclusions, possibly reducing the UCL. Without using the appropriate UCL, a conclusion that the results are not anticipated to change is without basis. The Permittee must use ProUCL to demonstrate if nonparametric-based UCLs will alter the conclusions.

Comment 19

The Permittee must review the Agency for Toxic Substances and Disease Registry (ASTDR) data and include the appropriate NOEL for beryllium in the revised report as stated by the Permittee in their response.

Additional Comment

The Permittee states in the Executive Summary of the 2005 Supplemental RFI Report that their goal is to operate the oxidation pond under the New Mexico Solid Waste Management Regulations (20.9.1 NMAC) as a sewage oxidation pond. The pond is a SWMU listed on the Ft. Bliss RCRA Permit and will continue to be subject to the regulations at 20.4.1 NMAC.

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If you have any questions regarding this letter, please contact Cheryl Frischkorn at (505) 476-6058.

Sincerely,



James P. Bearzi
Bureau Chief
Hazardous Waste Bureau

JPB: caf

cc: D. Cobrain, NMED HWB
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File: FB 2007 and Reading File