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FB 04



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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

November 24, 2004

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

SUBJECT: NOTICE OF DEFICIENCY
FINAL VOLUNTARY CORRECTIVE ACTION REPORT – INACTIVE
MCGREGOR RANGE OPEN DETONATION PIT AREAS – SOLID
WASTE MANAGEMENT UNIT 20 (FTBL-015) – FORT BLISS,
NEW MEXICO
FORT BLISS
EPA ID NO. NM4213720101-01
HWB-FB 03-001

Dear Mr. Landreth:

The New Mexico Environment Department (NMED) has reviewed Fort Bliss' Final Voluntary Corrective Action Report – Inactive McGregor Range Open Detonation Pit Areas – Solid Waste Management Unit 20 (FTBL-015) – Fort Bliss, New Mexico submitted on February 10, 2003. Fort Bliss submitted this site investigation report as a Voluntary Corrective Action Report (VCA Report).

NMED has determined that the subject report is not adequate and that changes are necessary before it can be approved. Therefore, NMED is issuing Fort Bliss with this Notice of Deficiency (NOD). Fort Bliss must resolve these comment before NMED can consider approving the report.

General Comments

1. Fort Bliss' RCRA Facility Investigation (RFI) of SWMU 20 was conducted in 3 phases. The Phase 1 RFI was a general characterization of 9 SWMUs, including SWMU 20. Fort Bliss collected and analyzed a small number of surface soil and an even smaller number of subsurface soil samples during its Phase 1 RFI. Because of very limited site historical information, Fort Bliss did not completely characterize the activities performed at SWMU 20. The Phase 2 RFI was even more limited in scope and was confined to six "confirmatory" samples taken in close proximity to soil samples that tested positive for polychlorinated biphenyls (PCBs) and explosives. The Phase 3 RFI attempted to characterize areas of SWMU 20 that had not previously been addressed and to delineate the extent of the PCB contamination.

SWMU 20 includes the entire Open Detonation area and is not limited to the relatively small detonation pits upon which Fort Bliss focused. Given that SMWU 20 is approximately 10 acres in size and includes at least 2 detonation pits, numerous "mounds", a trench, a large amount of fiberglass and metal debris, and the surrounding kickout area, Fort Bliss' investigation to date did not include a sufficient number of soil samples. Fort Bliss cannot demonstrate that no release has occurred at SWMU 20 because it failed to take a sufficient number of samples to adequately characterize SWMU 20. As Fort Bliss noted in Section 5 of its 1998 Phase 2 RFI Report, "[I]t is also reasonable to suggest that there may be other localized pockets of PCB contaminated surface soils in this area that were not detected during the Phase 1 investigation." NMED agrees with this statement, although the presence of other constituents other than just PCB is also likely.

2. Fort Bliss' depictions of SWMU 20 must be revised (see Figures 1-1 through 2.4). The 1997 Phase 1 RFI Report depicts numerous mounds and geophysical anomalies. However, in later figures, the geophysical anomalies appear to have been depicted as mounds (see Figure 2-1, 2003 VCA Report). Fort Bliss must specify whether the mounds depicted on the various site maps are naturally occurring "mesquite-coppice dunes" or are the result of open detonation operations.
3. Fort Bliss did not investigate the trench using geophysics in the Phase 1 RFI, although the site characterization discussion indicated that the trench may have been used for open burning (See Section 1.2 of Appendix A). Fort Bliss later determined that it was appropriate to collect 2 soil samples from the trench in the Supplemental RFI. Fort Bliss must conduct a geophysical investigation of the trench to determine whether any disposal occurred at this site.

Specific Comments

4. Section 1.1. Summary. Fort Bliss states that based on comparisons of identified constituent concentration to state or federal soil standards that "...a release has not occurred." NMED rejects this assertion. Because Fort Bliss has documented that constituents have been detected at concentrations that exceed background concentrations, Fort Bliss has determined that a release has occurred. The release may or may not exceed human health and/or ecological risk-based concentrations, but that sort of determination is quite different than a determination that "no release has occurred." Fort Bliss must revise this section, and any other section(s), to reflect this determination.
5. Section 2.4.2. Phase 1 RFI Summary. NMED is concerned with Fort Bliss' use of the term "reporting limits" through this VCA Report. As discussed below, EPA has defined reporting limits as "The lowest concentration or amount of the target analyte required to be reported from a data collection project. Reporting limits are generally greater than detection limits and usually are not associated with a probability level." Laboratories often submit data packages that use terms that are not well defined, such as "reporting limit." NMED requires facilities to submit analytical data that is based on the method detection limits, not laboratory "reporting limits."

Fort Bliss' statement in Section 2.4.2 that "Explosives were analyzed, but none were reported in any of the samples" is an example of why NMED is concerned when data is submitted using "reporting limits." Fort Bliss must revise this report to avoid using the term "reporting limit" and must specify whether a constituent was detected. All detections must be reported, even if the laboratory cannot quantify the concentration at which the constituent has been detected.

6. Section 2.4.2.4. Phase 1 RFI Data Gaps. Fort Bliss acknowledges that the Phase 1 RFI had data gaps, but provided no discussion. Fort Bliss must revise this section to discuss the Phase 1 data gaps and must address the major issues raised by NMED in Comment 1 above.
7. Section 2.4.4.2. Supplemental RFI Sampling Data Collection. Fort Bliss states that 7 soil samples were collected from "outside" of the SWMU 20 area. However, with the exception of SS-G-08, the soil samples were clearly collected inside the boundaries of SWMU 20. As noted above, SWMU 20 is a large area, and is not just restricted to the two detonation pits. However, the seven soil samples do appear to be appropriate kick out samples.

8. Section 3.2.1. Human Health. Fort Bliss has not followed NMED's Soil Screening Level Guidance (NMED 2000, revised 2004). Fort Bliss failed to address additive risk (see Section 2.1.1, NMED 2004). Fort Bliss also uses the term "closure" inappropriately. To date, Fort Bliss has not addressed any cleanup of SWMU 20 and apparently intends to leave all debris in place.
9. Appendix A – Draft Screening Level Ecological Risk Assessment Inactive McGregor Range Open Detonation Pit Areas – Solid Waste Management Unit 20 (FTBL-015) - Fort Bliss, New Mexico. Fort Bliss has submitted a "Draft" Screening Level Ecological Risk Assessment (SLERA) Report; NMED does not review draft documents. However, NMED is providing some general comments for Fort Bliss' consideration when it submits a final SLERA Report.
10. Section 1.1. Introduction. Fort Bliss must attach the two SLERA checklists (Attachments A and B) that it prepared following NMED guidance.
11. Section 2.8. Previous Field Investigations. The SLERA indicates that Fort Bliss conducted a Unexploded Ordnance (UXO) clearance at SWMU 20. Section 2.8 must be revised to indicate that the sampling locations were screened for UXO, but that Fort Bliss has never conducted a complete UXO clearance of SWMU 20, or, if Fort Bliss has conducted a complete UXO clearance, provide supporting documentation for the clearance activities.
12. Figures 2-1 and 2-3 incorrectly depict the location of SWMU 20. Fort Bliss must review and revise all figures in the VCA Report and Appendix A (SLERA) appropriately.
13. Section 4.2. Data Evaluation To Select Contaminants Of Potential Ecological Concern (COPECs). Fort Bliss uses the terms "sample quantitation limits" and "reporting limits" frequently in this report (e.g., untitled table on Page 2-10). The sample quantitation limit is defined as the detection limit that accounts for sample characteristics, sample preparation, and analytical adjustments such as dilution (see SLERA Guidance, NMED 2000). EPA has defined reporting limits as "The lowest concentration or amount of the target analyte required to be reported from a data collection project. Reporting limits are generally greater than detection limits and usually are not associated with a probability level." NMED is concerned that Fort Bliss may be inappropriately omitting data by only reporting data that exceeds a laboratory contract related reporting limit. Fort Bliss must review and revise this report appropriately to ensure that all detects are reported, even those that the laboratory can only report as an estimated concentration, and not just those detects that exceed the laboratory's contractual requirements.

14. Section 4.2.2. Evaluation of Sample Quantitation Limits (SQLs). In Exhibit 4-1 Fort Bliss indicates that it eliminated mercury and PCB isomers because they were not detected in any sample and are not expected to be present in the medium of concern. NMED agrees that the data do not indicate that mercury is of concern. However, several PCB isomers were detected during the 3 RFIs, and, as Fort Bliss indicated in its Phase 1 RFI Report (Section 4.3.6.3), PCBs are a common contaminant associated with missiles, and therefore, are reasonably expected to have been released at SWMU 20. Fort Bliss conducted its Phase 2 RFI largely because of PCB detects. It is inappropriate to eliminate constituents during the SLERA by claiming that they are was not present at concentrations that exceeded a laboratory “reporting limit.” All PCB isomers must be retained for the SLERA and Fort Bliss must revise its SLERA to include the detected PCB isomers as Contaminants of Potential Ecological Concern (COPECs).
15. Section 4.4.2. Identification of Ecological Receptors. Fort Bliss has limited its SLERA to consider only two trophic levels, although it points out that the ecology of desert grasslands is extremely diverse. At a minimum, Fort Bliss must revise its SLERA to include an appropriate carnivore/predator indicator species.
16. Table 4-2. Parameters for Calculation of Upper 95% Confidence Limit Concentrations. Fort Bliss must revise Table 4-2 to include the calculated Upper 95% Confidence Limit (UCL) concentration.
17. Table 4-9. COPEC Concentration in Invertebrates (C_{inv}) Due to Root Uptake. Fort Bliss must explain what “Root Uptake” means with respect to invertebrates.
18. Section 8. Conclusions and Recommendations. As noted above, Fort Bliss has not adequately characterized SWMU 20. Major data gaps must be addressed. Also, as noted above, Fort Bliss must revise its SLERA to include a carnivore/predator as an indicator species. Also, as noted above, additional investigation is necessary to meet NMED’s requirements for a No Further Action (NFA) determination.
19. Fort Bliss has not adequately characterized SWMU 20. Fort Bliss shall have 90 days to submit a RCRA Facility Investigation Work Plan that will specify how Fort Bliss will complete its characterization of SWMU 20. Fort Bliss’ RFI Work Plan must also include a section(s) on how it proposes to complete a revised SLERA. NMED recommends that Fort Bliss remove the missile debris that covers SWMU 20 as part of good environmental stewardship. Removal of the debris in and around SWMU 20 would certainly help Fort Bliss justify a NFA petition. Removal of the missile debris should be completed prior to the implementation of the additional investigations to ensure that any indirect

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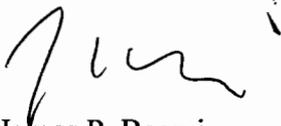
investigation, such as a geophysical investigation, is not negatively impacted by the metal debris.

NMED recommends that Fort Bliss follow the closure procedures for its permitted Open Detonation Unit specified in Attachment F (Closure Plan) to its RCRA Permit. Fort Bliss' closure plan specifies that it will remove of all metal debris, that the kickout area will be swept with metal detecting equipment and cleared, and that the site will be remediated appropriately.

NMED requires Fort Bliss to submit a RCRA Facility Investigation (RFI) Work Plan to address major deficiencies and data gaps in its RFI for SWMU 20. Fort Bliss should submit the required RFI Work Plan for SWMU 20 within 90 days of your receipt of this NOD. NMED is providing Fort Bliss with comments on its the VCA Report and Screening Level Ecological Risk Assessment for future reference.

If you have any questions concerning this letter, please call Glenn von Gonten at 505-428-2551.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

JPB:gvg

Attachment

cc: J. Kieling, NMED HWB
D. Cobrain, NMED HWB
G. von Gonten, NMED HWB
L. King, EPA Region 6 (6PD-N)
David Dodge, Fort Bliss

File: Reading File & FB 2004 File, FB 03-001