

RESPONSIVENESS - INTEGRITY - TEAMWORK

June 8, 2006

New Mexico Environment Department  
Hazardous Waste Bureau  
Permits Management Program  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303



Attention: Mr. John E. Kieling  
Program Manager

Subject: Response to Notice of Deficiency: Voluntary Corrective Measures Work Plan,  
Disposal Pit 63 (DP-63), February 2006, Holloman Air Force Base, EPA ID#  
NM6572124422, HWB-HAFB-06-001.

Dear Mr. Kieling,

Enclosed please find tabulated responses to the subject Notice of Deficiency (HWB-HAFB-06-001). Upon verbal or written concurrence from NMED, Bhate will submit the changed pages to NMED.

If you have any questions, please feel free to call me at 303-815-1762.

Sincerely,  
Bhate Environmental Associates, Inc.

A handwritten signature in cursive script that reads "Frank Gardner".

Frank Gardner, PG  
Program Manager

cc w/ encl: C. Amindyas, NMED HWB  
D. Strasser, NMED HWB  
D. Griffin, HAFB



Voluntary Corrective Measures Work Plan  
Disposal Pit 63 (DP-63), February 2006  
Holloman AFB

Comment No.	Section	Page	Comment	Response
Author	David Strasser		Date of Comments: April 14, 2006, Notice of Deficiency HWB-HAFB-06-001	Date of Response: June 2, 2006
1	2.1.1, 3 <sup>rd</sup> Sentence	2-1	This sentence states that among other constituents detected in subsurface soils during the 2000 Preliminary Assessment/Site Inspection (PA/SI), PCBs, pesticides and explosives were detected. However, according to the analytical results tables for this PA/SI presented in Appendix A of the subject Work Plan, PCBs and pesticides were not detected and soil samples were not detected and soil samples were not analyzed for explosives. The Permittee must clarify this apparent discrepancy.	The sentence has been revised as follows:  Analytical results for the subsurface soil samples collected at DP-63 showed detections of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), cyanide, <del>polychlorinated biphenyls (PCBs), pesticides, explosives,</del> and Target Analyte List (TAL) metals (totals).
2	2.1.1.5, 1 <sup>st</sup> paragraph	2-4	This paragraph states that manganese was detected in soil sample DP-02 at 46' – 47' below ground surface at a concentration of 4,930 mg/kg. This concentration is in excess of the NMED residential soil screening level (SSL) 1,550 mg/kg. This paragraph does not acknowledge this exceedance. The Permitted is required to acknowledge that the manganese concentrations exceed the SSL, provide an explanation for the possible source of this contamination, and a discussion on the proposed remedy. The Permittee is reminded that manganese has been detected in groundwater at concentrations significantly above the New Mexico Water Quality Control Commission standards in all the monitoring wells at this site.	The paragraph has been revised as follows:  At location DP02, the sample from 46 to 47 feet bgs contained a manganese concentration of 4,930 mg/kg. This value exceeds the background of 165 mg/kg but is less than the NMED residential soil screening level (SSL) of 10,200 mg/kg. It should be noted that this sample was collected below the water table and may be representative of saturated conditions. In the sample from 20 to 21 feet bgs at location DP04, manganese was reported at a concentration of 308 mg/kg.  <b>Note: The residential SSL for manganese in the August 2005 NMED Soil Screening Levels, Revision 3 is 10,200 mg/kg. An explanation of the nature and extent of manganese in soil and groundwater provided in Section 2.2.1.</b>
3	2.2.1.1, 2 <sup>nd</sup> paragraph	2-5	This paragraph states that surface soil samples were not collected at boring locations SS09 and DP11. This appears to be a miss-statement as there is no boring SS09 at this site and Remedial Investigation Tables show that a surface soil sample was collected from boring DP11. The Permittee is required to clarify this paragraph.	The paragraph has been deleted.
4	2.4	2-8	This section indicates that subsurface anomalies that were or will be detected during the geophysical investigation will be removed. However, the section does not indicate that any soil samples will be collected for analysis from	The following paragraph will be added to Section 2.4.3:  The pits did require backfilling before completion of the geophysical survey. However, before the disposal pits were backfilled, the sidewalls

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			under these anomalies. The Permittee is required to provide a plan to NMED for analyzing soils under those anomalies that have the potential for impacting soil with hazardous constituents (e.g. containers, ordnance).	and bottom of the pits were sampled for VOCs, SVOCs, TPH, explosives, and metals at the frequency of 1 per 20 lineal feet of sidewall at mid depth.
5	3.3.1	3-3	This section indicates that one soil sample will be collected from monitoring well borings DP63-MW06 and DP63-MW08. The depth of the soil sample collection is not provided. The Permittee is required to provide the depth of sample collection from each boring and the rationale for selecting the depths.	The following sentence has been added to Section 3.3.1 to clarify:  Selection of soil samples for laboratory analysis will be based on field screening results using an OVA. Either the sample interval with the highest OVA reading or the interval immediately above the water table will be submitted for analysis.
6	3.4	3-3	This section indicates that, during sampling activities, soil and ground water samples will not be analyzed for explosives. Given the past activities of munitions disposal at this site, the Permittee is required to analyze all soil and groundwater samples for explosives by EPA method 8330. This is in addition to analyzing other constituents at the disposal site under other methods. These results will determine if future explosives analysis will be required. NMED recognizes that explosives were not detected in ground water during the 2000 PA/SI.	Explosives will be added to the list of analyses in this section and Tables 3-1, 3-2, 4-1, 5-1, and 5-2.
7	4.3.2.1, 1 <sup>st</sup> full paragraph, 5 <sup>th</sup> sentence	4-3	This sentence states that soils demonstrating a TPH concentration below 880 mg/kg will be stockpiled for backfill. This must be revised to also state that soil used for backfill shall not have TPH hazardous constituent (e.g., VOCs, SVOCs) concentrations in excess of NMED residential soil screening levels.	The following sentence has been added to the discussion:  All soil stockpiled for backfill will undergo laboratory analysis to verify no TPH hazardous constituents (e.g., VOCs, SVOCs) in excess of NMED residential SSLs are present.
8	4.3.2.3 & 5.4 & Table 4-1	4-4 & 5-2	The Work Plan must be revised to show that, in addition to collecting confirmation samples at a frequency of one per 20 linear feet per excavation sidewall and one per side sidewall, a minimum of two soil samples shall be collected from any sidewall greater than 18 feet in length. Also, confirmatory sampling shall be biased to areas with the greatest potential for contamination.	The affected pages (4-4 and 5-2) have been modified as follows:  Excavation confirmation samples will be collected at a frequency of 2 per 18 linear feet (1n ft) for each side wall at mid-depth of the contamination zone. At a minimum, 1 sample per side wall will be collected for side walls less than 18 ln ft. Also, confirmatory sampling shall be biased to areas with the greatest potential for contamination.

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9	5.1.1, 2 <sup>nd</sup> Paragraph, 2 <sup>nd</sup> sentence	5-1	This sentence states that initial field screening will be conducted on one sample per 100 cubic yards (cy) of soil removed. The Permittee is required to conduct field screening at an interval of one sample per every 25 cy of soil removed.	The sentence has been revised as follows:  During excavation activities initial field screening via headspace analysis will be performed on every 25 cubic yards of soil removed.
10	5.1.3, 1 <sup>st</sup> sentence	5-1	This sentence indicates that a minimum of one sample per site will be subject to laboratory validation. The Permittee is required to collect a minimum of two samples from suspect soil for laboratory validation.	Section 5 of the work plan has been streamlined to resonate with the excavation process outlined in Section 4. Essentially, all suspect soil will be treated as contaminated soil and taken to the FT-31 Land farm for treatment. Therefore, sampling of suspect soils is no longer applicable.
11	5.4 & 5.4.2, Tables 3-1, 4-1, & 5-2 & Appendix G, Tables 2-2, 3-1 and 3-2	5-2 & 5-3	The Permittee must revise these sections and tables to indicate that all samples will be analyzed for explosives by EPA Method 8330.	The indicated sections and tables have been revised to indicate that all samples will be analyzed for explosives by EPA Method 8330.
12	5.4.1, 1 <sup>st</sup> sentence	5-2	This sentence states that stockpiled overburden soils will be sampled every 500 cy. The Permittee is required to sample stockpiled soil every 200 cy.	Section 5 has been adjusted and stockpile sampling is discussed in Section 5.1.2 where the following language has been added:  For backfill characterization purposes, laboratory validation sampling will be performed at a frequency of one sample for every 200 cubic yards of stockpiled overburden soil. The samples will be analyzed for TPH (GRO, DRO, ORO), VOCs, SVOCs, and explosives. Laboratory analyses will be completed at an expedited turn-around-time of 24 hours.
13	6.3	6-1	This section indicates that metals will only be evaluated against background levels presented in the "Basewide Background Study" (Radian 1993). The Permittee is also required to evaluate metals against the current NMED residential risk-based soil screening levels for conducting human-health screening – level assessment.	The following sentence has been added to clarify:  Metals detected in soil will also be evaluated against the current NMED residential risk-based soil screening levels for conducting a human-health screening – level assessment.
14	Table 4-1		Table 4-1 includes a column showing the "Frequency" of	The requested changes have been made to Table 4-1 with the exception

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			<p>sample collection. NMED requires that the following changes be made regarding frequency:</p> <ul style="list-style-type: none"> <li>a) During "Field Screening" of un-impacted soils, sample every 25 cy (<u>not</u> 50 cy) for initial field screening purposes and every 50 cy (not 100 cy) for field confirmatory purposes.</li> <li>b) During "Field Screening" of suspect soils, sample every 25 cy (not 50 cy) for initial field screening purposes, every 50 cy (not 100 cy) for field confirmatory purposes, and for laboratory validation purposes sample every 100 cy (not 300 cy).</li> <li>c) Sample the "Stock Pile" for backfill characterization every 200 cy (not 500 cy).</li> </ul>	of comment 14b as all suspect soil will be handled as though contaminated and transported to the FT-31 Land farm for treatment. Table 4-1 has been changed to remove all references to suspect soils.
			Response to NOD due by June 16, 2006	