

RESPONSIVENESS - INTEGRITY - TEAMWORK

June 12, 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

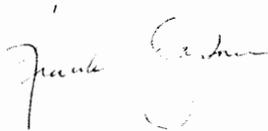
Subject: Response to Notice of Deficiency: Voluntary Corrective Measures Work Plan,
SWMU 8 Soil Remediation, December 2005, Holloman Air Force Base, EPA ID#
NM6572124422, HWB-HAFB-06-002

Dear Mr. Kieling,

Enclosed please find tabulated responses to the subject Notice of Deficiency (HWB-HAFB-06-002). 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.



Frank Gardner, PG
Program Manager

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



Voluntary Corrective Measures Work Plan
SWMU 08 Soil Remediation, December 2005
Holloman AFB

Comment No.	Section	Page	Comment	Response
Author	David Strasser		Date of Comments: April 14, 2006, Notice of Deficiency	Date of Response: June 12, 2006
1	General		<p>Based upon review of the subject Work Plan, which included review of applicable portions of the previous Phase I and Phase II remediation reports, the extent of soil and groundwater contamination at this site has not been adequately characterized. Therefore, the Permittee is required to conduct additional site characterization activities prior to Phase III soil excavation as follows:</p> <p>a) Figure 5 of the Work Plan shows the proposed boundary of the Phase III excavation. However, there is no indication as to how the southwest limit of the excavation was determined, as no soil sampling was conducted in this area. Therefore, the Permittee is required to submit a soil sampling plan as part of the revised Work Plan that will be required as a result of this Notice. This plan should include a sufficient number of samples to adequately characterize the remaining soil contamination at this site that is not underneath adjacent structures. NMED understands that soil and groundwater conditions under the adjacent structures will be evaluated under a separate Work Plan addendum after the Phase III excavation and sampling is conducted. Soils should be analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons, (TPH), polychlorinated biphenyls (PCBSs), and target analyte list (TAL) metals (see Comment No. 6)</p> <p>b) The Work Plan indicates that groundwater at SWMU 8 is found at approximately 10 feet below ground surface. The Work Plan indicates that contaminated soils will be removed to approximately on (1) foot below the encountered ground water table. Contaminated soil is therefore in contact with ground water. The two previous remediation activities did not include ground water sampling and the proposed VCM does</p>	<p>Agreed. Delineation of soil and groundwater contamination at SWMU 08 was carried out in May 22, 2006, using guidance provided in the May 2, 2006, Memorandum Work Plan. The latter was provided and approved by NMED prior to the performance of the characterization. In summary, three groundwater monitoring wells were installed to delineate soil and groundwater conditions within:</p> <ol style="list-style-type: none"> 1. the formerly excavated area, 2. the area proposed for excavation in the SWMU 08 Soil Remediation Work Plan and, 3. the immediate downgradient area south of Building 232. <p>Although analytical results for soil and groundwater samples collected are not available at this time, they will be used to guide the soil excavation proposed in this work plan. The analyses requested in the NOD were performed on the samples collected on May 22, 2006. Well locations are provided in Figure 1, Attachment 1.</p>

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			not include ground water sampling. Therefore, the Permittee is required to submit a ground water sampling plan as part of the revised Work Plan that will be required as a result of this Notice. This shall be done prior to performing Phase III excavation. The plan must include, at a minimum, installation of two monitoring wells at the site, which can be temporary wells. One well should be installed within the boundary of the Phase II excavation and the other within the boundary of the proposed Phase III excavation. Ground water should be analyzed for VOCs, SVOCs, TPH, PCBs, TAL Metals and total dissolved solids (TDS).	
2	General		The Permittee is required to submit documentation regarding the Method Detection Limits of all soil and ground water analytes.	Agreed. Table 4-3 has been changed to represent a summary of laboratory quality control criteria to include the method detection limits.
3	Section 3, 1 st Para, 2 nd sentence	3-1	This sentence states that soils contaminated by hydrocarbons at levels exceeding 880 mg/kg TPH will be removed. Based upon the description of the material released from the oil and water separator provided in Section 1.1.2, which included "oils, detergents and fuels" from an auto hobby shop, these materials are classified as "unknown oil". In accordance with NMED TPH Screening Guidelines (November 2005), the residential TPH screening guideline for unknown oil is 800 mg/kg. Therefore, the Permittee is required to utilize the 800 mg/kg screening level. All sections of the Work Plan specifying TPH screening levels must be revised to reflect this change.	Agreed. The 800 mg/kg TPH standard will be used as the screening level and all relevant sections of the Work Plan will be modified to reflect this change.
4	Section 3.3.3.1, 1 st Para, 5 th sentence	3-4	This sentence states that soils demonstrating a concentration below 880 (to be 800) mg/kg TPH will be stockpiled for backfill. This sentence must be revised to also state that soil used for backfill shall not have TPH hazardous constituent (e.g. VOCs, SVOC) concentrations in excess of NMED residential 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.

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5	Sections 3.3.3.3 & 4.2 & Table 3-1	3-5 & 4-2	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 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 (3-5, 4-2 and Table 3-1) 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.
6	Section 4.1.3, 1 st sentence	4-2	This sentence indicates that a minimum of one sample per site will be subject to laboratory validation. The Permittee shall be required to collect a minimum of two samples from suspect soil for laboratory validation. In addition, the November 2005 NMED TPH Screening Guidelines require that for sites with unknown soil sources, soil analysis must include VOCs, SVOCs, metals (TAL), and PCBs as well as TPH. Therefore, the Permittee must revise the soil sampling plan to include laboratory analysis of soils for these parameters.	Section 4 of the work plan has been streamlined to resonate with the excavation process outlined in Section 3. 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. Table 3-1 has been changed accordingly.
7	Table 3-1		Table 3-1 includes a column showing the "Frequency" of sample collection. NMED requires that the following changes be made regarding frequency to Table 3-1 and related sections: <ul style="list-style-type: none"> a) During "Field Screening" of suspect soils for field confirmatory purposes, sample every 50 cubic yards (cy), not 100, and for laboratory validation purposes sample every 100 cy, not 300. b) Sample the "Stock Pile" for backfill characterization every 200 cy, not 500. 	The requested changes have been made to Table 3-1 with the exception of comment 7a as all suspect soil will be handled as though contaminated and transported to the FT-31 Land farm for treatment. Table 3-1 has been changed to remove all references to suspect soils.
8	Figures 3, 4, and 5		NMED requires that all site figures include a coordinate system (e.g., UTM, latitude/longitude) and the boundaries of the site must be shown on the figures. Coordinates of site boundaries must also be shown. High accuracy (+/- 3 ft) GPS coordinates are acceptable. The	Agreed. Site coordinate information will be added to the indicated figures.

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			Permittee is required to resubmit the subject figures satisfying these requirements.	
			Response to NOD due by June 15, 2006.	