



**DEPARTMENT OF THE ARMY**  
FORT WINGATE DEPOT ACTIVITY  
P.O. BOX 268  
FORT WINGATE, NM 87316

August 26, 2013

Mr. John Kieling  
Chief, Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303

Dear Mr. Kieling:

The purpose of this letter is to address comments presented to the Army in the New Mexico Environment Department (NMED) Approval letter dated July 23, 2013 for the *Phase 2 Soil Background Report*, dated February 5, 2013 and prepared for FWDA as required under RCRA Permit EPA ID No. NM6213820974.

The following are Army responses to NMED comments.

Comment 1:

The Permittee's Phase II 2012 samples were collected from 6-12 inches below ground surface (bgs) as approved by NMED. Typically, deeper background samples are warranted since hypothetical residential receptors are expected to be exposed to soil down to 10 feet bgs. Clarify whether the 2012 background comparison values based on surface soil will be compared with site data greater than 12 inches bgs or whether the subsurface data from the 2010 background study based on the ecological zones will be used. If the 2012 data are to be applied to subsurface soil, discuss whether the surface soil background concentrations are representative of soil greater than 12 inches bgs.

Response 1:

The 2012 data will be compared with surface and subsurface site data based on the explanation established in section 6.2.1 of the *Soil Background Study and Data Evaluation Report, Version 2, Final, October 2010* which was approved by NMED on November 23, 2010. Statistics determined there were no significant differences between the distributions of elements at three different depth intervals. Therefore, the surface soil background concentrations are representative of subsurface soil.

Comment 2:

The Permittee provides general recommendations in Sections 6.1 and 6.2 as to which background comparison values should be considered for site-to-background comparisons at various sites and parcels throughout FWDA. During individual site-to-background comparisons, the National Resource Conservation Service (NRCS) soil type at each site should be verified and discussed, and appropriate background values applied at that time. Justification of the

selection of background comparison values must be included in future reports submitted to NMED for approval.

Response 2:

For individual site-to-background comparisons, the NRCS soil type at each site will be verified and discussed in detail based on the recommendations provided in Sections 6.1 and 6.2 of the *Phase 2 Soil Background Report, Final, February 2013*, and the appropriate background value applied for arsenic. The Army will ensure that the justification of the selection of background comparison values is included in future reports submitted to NMED for approval.

Comment 3:

The Permittee needs to clarify Table 4-1 with respect to 2009 background soil data. While 2009 and 2012 data were combined to calculate facility-wide background comparison values, the recommended arsenic background comparison for the individual soil units were calculated based on the 2012 data only. Provide additional information about 2009 data based on ecological zone, and clarify if the 2012 data based on soil type is to replace data based on ecological zones or if the two sets of data will be included in the new background comparison values for individual soil units. Provide clarification as to how the additional arsenic background comparison values for the individual soil units will be used in conjunction with the 2009 analytical results.

Response 3:

The 2012 data based on soil type will replace the 2009 data based on ecological zone as the background comparison value for individual soil units for arsenic only. The 2012 background study confirmed that naturally occurring arsenic concentrations vary significantly from soil unit to soil unit. The 2009 data based on ecological zone as discussed in the *Soil Background Study and Data Evaluation Report, Version 2, Final, October 2010*, will be used as the background comparison value for the elements listed in that report with the exception of arsenic.

If you have questions or require further information, please call me at (330) 358-7312.

Sincerely,



Mark Patterson  
BRAC Environmental Coordinator

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