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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 1, 2010

William J. O'Donnell, II
Chief, Operational Army and Medical Branch
Department of the Army
600 Army Pentagon
Washington, DC 20310-0600

**RE: CLARIFICATION ON SAMPLING PROTOCOLS FOR IGLOO INTERIORS
FORT WINGATE DEPOT ACTIVITY, NEW MEXICO
EPA ID# NM6213820974
FWDA-08-001**

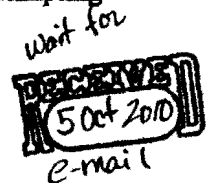
Dear Mr. O'Donnell:

The New Mexico Environment Department (NMED) received the Department of the Army's (the Permittee) letter concerning sampling protocols for igloo interiors at Fort Wingate Depot Activity (FWDA), dated June 11, 2010. In the letter the Permittee requested a description of swipe sampling protocol and the regulatory criteria to be used when comparing the igloo sampling results. NMED provides the following guidance for swipe sampling:

Swipe sampling guidance documents:

1. USACHPPM Technical Guide 312 June 2009
2. NIOSH Method 7702 (XRF analysis for lead only)
3. NIOSH 9100 (Swipe sampling for lead only)
4. Brookhaven National Laboratory SOP IH.75190 Swipe Sampling Procedures

The Permittee should include the following sampling approach in their proposed sampling and analysis plans:



1. Sample collection unit area – 100 cm²
2. Each individual swipe sample must be obtained from an undisturbed surface (i.e., from a surface not previously sampled or cleaned)
3. Different analyses require different solvents [e.g., laboratory deionized (DI) water (metals, perchlorate), hexane (semivolatile organic compounds [SVOCs], polychlorinated biphenyls [PCBs]), acetonitrile (explosives)]
4. Concentrations must be reported in µg/100 cm²
5. Laboratory analysis – can analyze for one laboratory method per swipe (e.g., EPA Method 6010 or 6020 for metals, EPA Method 8330 for explosives, EPA Method 8270 for SVOCs).

Field metals analysis is possible using X-ray fluorescence (XRF); however, the following are requirements and limitations associated with the use of XRF:

1. XRF can analyze for no more than four to five metals per swipe
2. calibration standards for lead can be purchased but calibration standards for other metals must be prepared by an analytical laboratory
3. the instrument must be factory calibrated to “thin mode” for thin film (swipe) samples
4. XRF instrument detection limits may be too high for use in comparing to screening or cleanup levels, which would preclude the use of XRF and the swipe samples would have to be sent to a laboratory for metals analysis (approximately \$12-\$15 per analyte for EPA Methods 6010 and 6020, respectively, mercury \$25)

The required sampling is intended to evaluate for the presence of selected indicator compounds and their general concentrations. NMED is calculating industrial cleanup levels as a benchmark; however, cleanup levels must be determined based on anticipated future use which is a tribal decision. BIA will be the future administrator of the property once the land parcels containing igloos is transferred from Army control and prior to transfer of the properties into tribal trust. The Permittee must consult with the BIA to determine their criteria for acceptance of the properties and the Permittee must also consult with the Navajo Nation and Pueblo of Zuni to determine anticipated future use of the igloos.

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If you have any questions regarding this letter, please contact Tammy Diaz at (505) 476-6056.

Sincerely,



John E. Kieling
Program Manager
Permits Management Program
Hazardous Waste Bureau

cc: Dave Cobrain NMED HWB
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