State of New Mexico ENVIRONMENT DEPARTMENT



GOVERNOR

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CERTIFIED MAIL RETURN RECEIPT REQUESTED

January 31, 2007

David Gregory, Federal Project Director Los Alamos Site Office Department of Energy 528 35th Street, Mail Stop A316 Los Alamos, New Mexico 87544 David McInroy, Deputy Project Director Environmental Services Los Alamos National Laboratory P.O. Box 1663 Mail Stop M992 Los Alamos, New Mexico 87545

RE: APPROVAL WITH MODIFICATIONS FOR THE INVESTIGATION/REMEDIATION WORK PLAN FOR MATERIAL DISPOSAL AREA B, SOLID WASTE MANAGEMENT UNIT 21-015, AT TECHNICAL AREA 21, REVISION 1, LOS ALAMOS NATIONAL LABORATORY (LANL) EPA ID #NM0890010515, HWB-LANL-06-007

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) is in receipt of the Department of Energy and the Los Alamos National Security, LLC's (collectively, the Permittees) Response to the Notice of Disapproval for the Investigation/Remediation Work Plan for Material Disposal Area B, Solid Waste Management Unit 21-015, at Technical Area 21 dated October 2006 and referenced by LA-UR-06-6917/EP2006-0780 and the Investigation/Remediation Work Plan for Material Disposal Area B, Solid Waste Management Unit 21-015, at Technical Area 21, Revision 1, dated October 2006 and referenced by LA-UR-06-6918/EP2006-0783 (collectively referred to as the "IRWP"). NMED has reviewed these documents and hereby issues this Approval with Modifications for the IRWP.

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General Comments

The following comment was submitted by the Pueblo of San Ildefonso: "MDA G is even closer to Pueblo land. Essentially this option removes waste from unlined pits farther away from the Pueblo and places it in unlined pits closer to the Pueblo, and increases the risk to our people and resources."

While NMED acknowledges that certain radioactive wastes are subject to an exemption in the Resource Conservation and Recovery Act (RCRA) and therefore outside NMED's regulatory sphere, NMED urges the Permittees to evaluate the risk of disposal of low level radioactive waste (LLRW) at MDA G compared to the risk of transporting such waste to an off-site disposal facility. This evaluation should be shared with the Pueblo of San Ildefonso, NMED, and all other interested parties, prior to implementation of the approved Work Plan.

Specific Comments

1) Section 2.2.2, Subsurface Tuff, page 3, paragraph 1:

Permittees' Statement: "Three subsurface investigation campaigns were conducted at MDA B. These occurred in 1966 (Kennedy 1966, 00540), 1983 (LANL 1991, 07529), and 1998 (unpublished data, presented in Appendix B of this report, section B-4.3.1)."

NMED Comment: The data from the 1998 investigation were never formally reported to NMED until they were submitted as part of the Historical Investigation Report (HIR) for MDA B. The data were therefore not subject to NMED review and approval. The Permittees must clarify the sources of the data presented in Appendix B, Section B-4.3.1 of the IRWP in the SAP.

2) Section 4.3.2, Environmental Protection Monitoring, page 13:

Permittees' Statement: "Activities within the excavation enclosure will be monitored using real-time continuous air monitoring (CAM) systems or similar devices. The CAMs will survey airborne radioactive particles inside the work zone and outside the enclosure at specific locations around the site."

NMED Comment: The Permittees must monitor specifically for beryllium in addition to airborne radioactive particles and airborne particulates. The frequency and methods for beryllium monitoring must be included in the Permittees' *Documented Safety and Analysis Plan*. The Permittees must provide a copy of this document to NMED at least 30 days prior to the commencement of field work.

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3) Section 4.4, Excavation of Disposal Trench Contents, page 14, paragraph 2:

Permittees' Statement: "If the screening results indicate that the material is not hazardous waste and potentially meets residential cleanup levels, representative samples will be collected and submitted through the Laboratory's Sample Management Office (SMO) for analysis of TAL metals, radionuclides (by gamma spectroscopy), isotopic uranium, isotopic plutonium, tritium, strontium-90, VOCs, SVOCs, dioxins/furans, PCBs, explosive compounds, perchlorate/nitrate, and cyanide."

NMED Comment: In addition to the analyses proposed by the Permittees to verify that lay-back and overburden material is nonhazardous, meets residential cleanup levels, or both, the Permittees must also submit samples for alpha spectroscopy analysis. The Permittees must collect one sample for every 50 cubic yards of lay-back or overburden material intended for use as backfill, in order to confirm that the material is nonhazardous, meets the residential cleanup levels, or both. Any overburden/lay-back materials returned to the excavation as fill must be placed in the deeper portions of the excavation.

4) Section 5.9.1, Drilling Methods, page 24:

Permittees' Statement: "Boreholes will be drilled with a drill rig capable of continuous coring and deep borehole production. All drilling activities will follow appropriate Laboratory guidance documents and protocols to ensure that health and safety issues are reviewed and addressed during field operations. Boreholes will be drilled initially using a hollow-stem auger. In the event that boreholes cannot be completed by this method, air-rotary drilling with a split barrel sampler will be used. This will ensure that the desired depth can be achieved and that continuous core can be collected."

NMED Comment: The Permittees must notify and gain prior approval from NMED if the use of drilling fluids other than air becomes necessary for the advancement of drilling at MDA B.

If the Permittees fail to implement the modifications outlined in this letter, NMED will automatically rescind this approval. NMED reserves the right to modify methods and techniques in the IRWP based on the results and observations made during the first phase of work or based on solutions to specific field problems resolved at other corrective action sites. In accordance with Section XI.A of the March 1, 2005 Order on Consent (Order), all submittals must be in the form of two paper copies and one electronic copy. Attached is NMED's response to public comment for your review.

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Should you have any questions, please contact Kathryn Chamberlain at (505) 476-6046.

Sincerely,

James P. Bearzi

Chief

Hazardous Waste Bureau

JPB:kmc

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