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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 1, 2011

Joni Arends, Executive Director
Concerned Citizens for Nuclear Safety
107 Cienega Street
Santa Fe, NM 87501

**RE: PRELIMINARY COMMENTS
CME REPORT, REVISION 2
MATERIAL DISPOSAL AREA G
LOS ALAMOS NATIONAL LABORATORY**

Dear Ms. Arends:

The New Mexico Environment Department (NMED) has received the *Preliminary Public Comments about Corrective Measures Evaluation Report for Material Disposal Area G, Consolidated Unit 54-13(b)-99, at Technical Area 54, Revision 2, at Los Alamos National Laboratory, LA-UR-10-7868, November 2010, EP 2010-0507* (Preliminary Comments) submitted by Concerned Citizens for Nuclear Safety (CCNS) and others on March 15, 2011 via e-mail. The NMED has reviewed and considered the Preliminary Comments in conducting its review of the Material Disposal Area (MDA) G Corrective Measures Evaluation (CME) Report (Report). Because NMED has not approved the Report, a formal public comment period has not yet been initiated. Although NMED is not required to respond to informal comment received outside of public comment periods, we nevertheless do so herein to some of the more overarching issues you raise. Because CCNS and the Los Alamos National Laboratory (LANL) permittees have appealed the Hazardous Waste Facility Permit (Permit) for Los Alamos National Laboratory (LANL), NMED will not be addressing the issues under appeal in this letter

Regarding the October 2008 Performance Assessment and Composite Analysis (PACA) for MDA G, NMED understands that you have not had an opportunity to review the document, and may not even have had access to it. NMED has therefore posted it on our website at: <http://www.nmenv.state.nm.us/hwb/lanlperm.html> under MDA G. We look forward to comments on the PACA in any formal comments you may submit once a CME Report for MDA

G is approved and public noticed.

Remedy selection for MDAs G, H, and L will follow the process outlined in the March 1, 2005 Order on Consent (Order) Section VII.D, *Corrective Measures Evaluation*. As you know, the Department of Energy and Los Alamos National Security (collectively, the LANL Permittees) submitted the most recent version of the CME Report for MDA G to NMED on November 30, 2010. NMED has evaluated the CME Report and has issued a notice of deficiency (NOD) today. The NOD is available for review on the NMED website at:

<http://www.nmenv.state.nm.us/hwb/lanlperm.html> under MDA G. The NOD requires the Permittees to submit a response to the NOD no later than August 26, 2011. NMED will review the response to the NOD and consider items not sufficiently addressed during the proposed remedy selection process.

Once NMED has enough information to support and select a remedy, NMED will approve the Report. Note that NMED may choose to propose a different remedy from that recommended by the Permittees. Regardless, at that time NMED will issue a public notice and a Fact Sheet stating NMED's basis for proposing selection of the remedy, and receive public comment on the remedy for at least 60 days. The public will also have an opportunity to request a public hearing on the proposed remedy, where all interested persons will be given a chance to submit data, views, or argument orally or in writing and to examine witnesses testifying at the hearing. The public hearing will follow the hearing requirements under section 20.4.1.901.F NMAC. In selecting a remedy, the NMED will follow the public participation requirements applicable to remedy selection under sections 20.4.1.900 NMAC incorporating 40 C.F.R. § 270.41 and 20.4.1.901 NMAC.

At the time NMED issues public notice for the proposed remedy, it will also make the administrative record for the proposed remedy available to the public for review at the NMED Hazardous Waste Bureau offices in the Santa Fe, New Mexico. All written and signed comments, including emailed comments, will be considered by NMED prior to approving a final remedy or remedies. Your Preliminary Comments have been added to the LANL administrative record.

As you point out in your letter, a Community Relations Plan is required under Section VII.E.4 of the Order. NMED's records show that the LANL permittees submitted such a Plan on May 27, 2005 (LA-UR-05-3951). In accordance with the Public Involvement Plan, on February 28, 2007 the LANL permittees held a public meeting at Fuller Lodge in Los Alamos on the CME process for MDA G. The LANL permittees also submitted a Public Involvement Plan specific to MDA G as Appendix B of the 2007 MDA G CME Report.

You also point out that a Community Relations Plan is required by the LANL Hazardous Waste Facility Permit (Permit) at Section 1.12. The LANL permittees are to communicate and solicit comments from the public in the development of the Plan, which must be implemented and

posted on their website within 180 days of the effective date of the Permit. We will assess compliance with this requirement after the 180 day deadline, which falls in late June 2011.

NMED has also considered your comments on some of the more technical aspects of the Report, particularly with respect to groundwater issues. While NMED agrees that the current monitoring network near the northeastern portion of MDA G might be inadequate for long term groundwater monitoring, such a deficiency does not prevent remedy selection. NMED is nevertheless requiring the LANL permittees to install additional monitoring well(s) there. NMED also agrees that the LANL permittees should utilize local groundwater background data instead of Laboratory-wide average background concentrations. However, numerous additional groundwater monitoring wells are not needed at MDA G. There is no need to install wells every 50 feet in order to provide an adequate groundwater monitoring, especially when the water table is approximately 900 feet below ground surface. Each monitoring network serve to effectively account for the geologic and hydrologic conditions found at the site.

NMED does not agree that well R-41 is defective and that water level measurements from it are unreliable. Well R-41 is properly constructed, but appears to be located in a local geohydrologic setting that sets it apart from nearby wells. However, even though well R-41 produces reliable water level and water chemistry data, the usefulness of that well for monitoring of potential contaminant migration from MDA G still needs to be assessed. NMED does not agree that well R-56 will not provide representative background data. Such a conclusion is premature since well R-56 had just been completed and more water quality data from it is needed in order to evaluate it for representativeness.

NMED disagrees that the current knowledge of geology beneath MDA G is inadequate for making a decision on corrective measures. Remedy selection does not require a detailed knowledge of every aspect of geology beneath MDA G. NMED acknowledges the potential presence of volcanic vents beneath MDA G, and testified to that effect during the public hearing on the LANL Hazardous Waste Facility Permit. However, a detailed study regarding the presence and distribution of these vents is not feasible since they are impossible to target with a borehole. The role of volcanic vents as potential conduits for contaminant transport into deeper portions of the regional aquifer is exceedingly complex because their permeability depends on the type of material they are filled with, the level of fracturing present, the secondary mineralization present, and the scale and orientation of feeder dikes and sills. In fact, some volcanic vents can be impervious to groundwater flow.

Similarly, NMED also disagrees that the LANL permittees should be required to perform further extensive studies of the deep portion of the regional aquifer beyond a monitoring network. Such an exhaustive study of every portion of the regional aquifer is not necessary, so long as the monitoring network is able to detect potential contaminants from MDA G. However, as discussed above, the LANL permittees need to further investigate geology and hydraulic

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conditions near the northeastern corner of MDA G in order to assure an adequate long-time groundwater monitoring.

Again, thank you for your thoughtful comments on the MDA G Corrective Measures Report. We look forward to your continued involvement in remedy selection at LANL.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

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File: LANL 2011 and Reading