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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 24, 2010

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Michael Graham
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Los Alamos National Security, L.L.C.
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**RE: RISK REDUCTION PROPOSAL
LOS ALAMOS NATIONAL LABORATORY, EPA ID# NM0890010515**

Dear Messrs. Smith and Graham:

The New Mexico Environment Department (Department) has received the revised "Risk Reduction Proposal" (Proposal) provided via e-mail on November 11, 2010 from the Department of Energy/National Nuclear Security Administration (DOE). The Proposal follows discussions the Department held with DOE and Los Alamos National Security LLC (LANS) (collectively, the Respondents) on November 3, 2010 regarding cleanup of Los Alamos National Laboratory (LANL).

The Department cannot accept your Proposal for the reasons outlined in this letter. Most importantly, the Proposal would discard much of the schedule and many of the substantive provisions of the March 1, 2005 Compliance Order on Consent (Consent Order), which the Department spent nearly three years negotiating with DOE and its contractor. To allow the Respondents the opportunity to revise and expand the Proposal, the Department provides the following comments. These comments elaborate on this overarching concern, and the Proposal's lack of detail that precludes a thorough and meaningful evaluation. The comments separately address the proposed revisions to the Consent Order, and the proposed approach for removal of transuranic (TRU) waste from Area G at TA-54.

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I. CONSENT ORDER

Modification of Consent Order (Page 1 second paragraph)

The upshot of the Proposal would be a wholesale modification of the compliance dates in Part XII of the Consent Order. Yet the proposal makes no mention of such modification, or of the procedures that must be followed to modify the Consent Order. Section III.J.1 of the Order provides that a modification “must be in writing and signed by all Parties.” Moreover, the modification is subject to the procedural requirements described in Section III.W.5 of the Order, providing for public participation including public notice and comment, and the opportunity for an administrative hearing and judicial appeals.

If one of the Proposal’s goals is to extend deadlines in the Consent Order, Section III.J.2 of the Order outlines the appropriate mechanism and requirements to do so. It provides that “[t]he Respondents may seek an extension of time in which to perform a requirement of this Consent Order, for good cause, by sending a written request for extension of time and proposed schedule to the Department.” Thus, the Respondents must show good cause for deadline extensions on a case-by-case basis. However, the Respondents make little attempt in the Proposal to show good cause for postponing many Consent Order deadlines for years.

The Department has granted the majority of extension requests submitted by the Respondents since the Order was issued in 2005. Denials, while infrequent, were issued when good cause was not demonstrated. The Proposal does not provide any specific cause for the extension of any submittal deadlines – only nonspecific references such as limited public access to areas of the Laboratory and data that do not exceed regulatory screening levels at unspecified sites.

Annual Meetings (Page 2, first full paragraph)

The Proposal suggests that the parties will meet annually to discuss a schedule for work to be completed in federal fiscal year 2013 (FY13) and beyond. The Department strongly disagrees with this approach.

By signing the Consent Order, the Respondents made a commitment to complete corrective action at LANL according to a schedule set forth in some detail in Section XII of the Order. That corrective action must be completed by 2015. The Consent Order does not include a provision to renegotiate the schedule for completion of corrective action annually, or at any time between the date of issuance and the date for submittal of the last site-specific remedy completion report, except as expressly provided in Section III.J.2. And under that section, any extension must be for a definite period of time.

Risk-Based Approach (Page 2 second full paragraph)

The Proposal also states that it offers a “risk-based approach” to completion of the corrective action. But the Respondents do not demonstrate how the Proposal would reduce risk or more

effectively protect the public and the environment. To the contrary, the Department believes that by delaying the completion of corrective actions for several years, the Proposal, as compared to the schedule set forth in the Consent Order, would inevitably increase risk to health and the environment.

NPDES Permit (Page 3, Item 1, third bullet)

The Proposal references the NPDES Individual Permit for LANL, issued by the Environmental Protection Agency. The Respondents state that implementation of the permit will ensure that appropriate actions are taken to mitigate migration of hazardous constituents from solid waste management units. The Department does not agree with this statement.

The NPDES Permit does not require monitoring for all hazardous constituents that remain at many sites the Respondents have cleaned up under the Consent Order and that could migrate from those sites. The narrow analytical suite required under the NPDES Permit may not be adequate as a control measure to support a Corrective Action Complete with Controls determination. It may not even provide enough data to adequately demonstrate that the status of such a site qualifies for Corrective Action Complete without Controls. The Department intends to require more extensive monitoring of surface water chemistry at such sites.

“Higher Risk” (Page 3, Item 1, fourth through sixth bullets)

The Proposal lists three corrective action projects – Sandia Canyon chromium investigation, corrective action on property not owned by DOE, and TA-21 waste line and tank remediation – as “higher risk projects.” The Respondents suggest that these projects will be completed according to schedule under the Consent Order.

The Respondents do not provide justification for listing these three projects while ignoring other high-risk projects that would be postponed under the Proposal. A few examples include the explosive compounds groundwater contamination beneath Cañon de Valle (260 Outfall) and other portions of TA-16; the migration of contaminants in canyon sediments and surface water toward the Rio Grande; the potential for a separate chromium plume in Mortandad Canyon; and the potential releases of volatile organic compounds to groundwater from TA-18, suggested by the presence of trichloroethylene and toluene in regional well R-20.

“Protective” of Health and the Environment (Page 3, Item 1, seventh and eighth bullets)

The Proposal also lists two components of corrective action at LANL – the canyon investigations, and the “intensive” site-wide groundwater and surface water monitoring – that would be “protective” of health and the environment. The Respondents suggest that these elements would proceed as required under the Consent Order while other corrective action tasks are postponed, thus ensuring that health and the environment would be protected during the delay. Notwithstanding these ongoing investigations and monitoring, the Department believes

that delaying the investigation of aggregate areas would reduce protection of health and the environment.

Aggregate Area Investigations (Page 4, Item 2.a & Table on pages 5-6)

The Proposal would postpone the investigation of the aggregate areas to FY13 to FY15. Such postponement would leave little or no time for additional phases of investigation, cleanup actions, or contingencies if the investigations are to be completed by FY15. Investigations at LANL have typically required more than one phase of work to adequately characterize sites; remediation almost always requires additional phases of work. The Proposal as written virtually guarantees incomplete data for remediation design, inadequate cleanup, and noncompliance. Further, The Respondents have not provided any justification for postponing the aggregate area investigations in the Proposal.

“Streamlining” Investigations (Page 4, Item 2b)

The Respondents propose to compress the schedule by “streamlining” investigations and making “sound” field decisions. The Respondents must clarify what is meant by streamlining. The Department notes, however, that the October draft of the Proposal indicates that this would mean eliminating the work plan and report review and approval process until the Respondents decide that nature and extent of contamination has been defined. The Proposal references the use of “sound field decisions” without defining the term.

The Department interprets this component as the performance of work without approval and oversight from the Department. Investigation work would proceed without an approved work plan. The Respondents’ operatives would have wide latitude to make field decisions unilaterally. Such an approach would neutralize a primary goal of the Consent Order. Compared to the years prior to 2005, implementation of the Order since 2005 has greatly streamlined the investigations at LANL. Much has been accomplished since 2005, with the Department’s participation in reviewing, critiquing, and ultimately approving work plans and overseeing field work enhancing and facilitating timely characterization and cleanup.

The Respondents do not have a record of making sound field decisions absent the Department’s review and approval. To the contrary, the Respondents’ unilateral actions have caused delays in completion of site characterization, which have in turn created difficulties and delays in Department decision-making. For example, the MDA L SVE Pilot Test was conducted without a work plan reviewed or approved by the Department. The report summarizing the results of the test (LA-UR-06-7900, November 2006) was seriously deficient and did not provide useable information, precluding its use in the evaluation of any remedy that includes SVE. Such deficient investigation work makes remedy selection much more difficult, and renders the selected remedy less transparent and much more difficult to defend. The approval process under the Consent Order is critical to ensure transparent, defensible decisions related to corrective action.

Assumptions (Page 8)

In its Proposal, the Respondents list several assumptions which apparently are prerequisites to the Proposal. The Department takes issue with these assumptions.

In assumptions 1 and 2, The Respondents assume that the Department will approve extension requests for completing the corrective action for MDA A and MDA B. However, the Department has received an extension request for MDA B only a few days ago (November 19, 2010) and has not had an opportunity to fully evaluate it. The Department has not received a similar request for MDA A.

In assumption 3, the Respondents assume that the Department will approve a deviation from the work plan for MDA AA. The Department has not yet fully evaluated the Respondents' letter regarding the status of MDA AA, which it received only on November 12, 2010.

In assumption 4, the Respondents presume that the corrective measures evaluation (CME) for MDA L will serve as a "template" for future CME's. The Department disagrees with this assumption. The MDA L CME (Revision 1) is deficient. The Department is preparing a Notice of Disapproval, providing comments and direction to the Respondents that major revisions are necessary. The MDA L CME is therefore not in a condition to be used as a template for the other CMEs in the review process. The Proposal appears to presume that all sites are the same and therefore a template can be developed for use at every site at the Facility where a CME is required. That is not the case.

In assumption 6, the Respondents assume that no penalties will be assessed due to differing labeling requirements for LANL and the Waste Isolation Pilot Plant (WIPP). The Department will not waive its authority to assess fines or penalties, or take enforcement action administratively or in district court, for any violation of labeling requirements under applicable regulations or permits.

In assumption 7, the Respondents assume that the Department will not direct "additional scope" in FY11 or FY12 without "equivalent off-sets." The Department will not limit its authority to require the Respondents to respond to newly discovered environmental conditions at known or newly discovered sites that require immediate action by agreeing to allow the Respondents to further limit or delay the required corrective action or waste removal activities. Such a trade-off would further compromise the Respondents' ability to achieve compliance with the Consent Order schedule.

Finally, in assumption 8, the Respondents assume, somewhat cryptically, that "[n]o emergent scope associated with the Buckman water project is realized." The Buckman groundwater characterization activities are tied to the Respondents' surface water and groundwater monitoring activities cited as being "protective" on page 3 of the Proposal. The Department will not limit its authority to require the Respondents to respond to any conditions resulting from Laboratory activities that require corrective action.

Rationale (Pages 10-12)

The Department does not agree with the purported “rationale” for the Proposal, in which the Respondents seek to explain that postponing the aggregate area investigations will not result in additional risk to health or the environment. The monitoring requirements of the NPDES Individual Permit, to which the Proposal again refers, are not adequate. Although the permit requires storm water monitoring at selected Solid Waste Management Units (SWMUs), it does not require monitoring of all likely hazardous constituents, and it does not require watershed-wide storm water monitoring. The Respondents’ statement that delaying Phase I investigations of aggregate areas would result in little increase in “current risk” – an undefined term – is not supported by any site investigation results, particularly given that facility-wide groundwater investigation is not complete. The Respondents’ statement that characterization of source areas on Laboratory property is limited to exposure of Laboratory employees is, in some cases, inaccurate. It also implies that the Respondents’ employees and contractors are not included or are discounted in some manner in the Respondents’ assessment of threats to human health.

II. TRU WASTE DISPOSTION

Annual Meetings (Page 2, first full paragraph)

Much as explained above with respect to corrective action requirements, the Respondents’ proposal for the Department to meet annually and agree on commitments for shipments to WIPP of legacy TRU waste is not acceptable. As Department representatives have stated numerous times (most recently on November 3, 2010), enforceable milestones must be established through 2015. Although the Department has further comments on the entire approach of the Respondents’ proposed “milestones” for disposition TA-54 legacy TRU waste, these “milestones” are simply the Respondents’ internal pacing mechanism to fully comply with the enforceable deadlines specified in the Consent Order to close Area G. As such, the Department sees no benefit to “agree upon commitments” by the Respondents unless they are also binding and enforceable under the Consent Order.

Risk-Based Approach (Page 2, second full paragraph)

The statement, “LANL believes this risk-based approach to completion of the Consent Order will more effectively protect the public and the environment,” is an unsupported assertion. Without stating how much TRU waste is in LANL’s inventory, it is unclear how much risk would be reduced or how effectively the Proposal would protect the public health and the environment.

Disposition of TRU Waste (Page 7, Item 3)

The Department concurs with the Respondents’ proposal to “continue to emphasize the disposition of TA-54 legacy TRU waste at LANL.” Beyond that statement, the Department finds the remainder of this paragraph unacceptable. Again, without stating how much TRU waste is in

LANL's inventory, it is unclear how the proposed milestones achieve the deadline specified in the Consent Order to close Area G.

At the November 3, 2010 meeting, the Department requested that the revised proposal include the estimated inventory of legacy waste at TA-54 in order to understand the impact the proposed milestones would have in reducing the overall risk. As previously stated, the Respondents did not provide an estimated inventory in this revised proposal, information that the Department has repeatedly asked for. This information is crucial to substantiate the Respondents' claims of accelerated risk reduction at TA-54.

The *Annual TRU Waste Inventory Report – 2009* (DOE/TRU-09-3425), states that LANL had approximately 11,400 m³ (~57,000 drum equivalents) of stored and projected TRU waste at the end of FY09. The November 17, 2010 Northern New Mexico Citizens' Advisory Board Waste Management Committee Chair's Report states that there are still 40,000 drum equivalents (~8,000 m³) of TRU waste at LANL, and that DOE Headquarters expects 90 percent of the TRU waste to be removed from TA-54 by 2015.

Assuming that 40,000 drum equivalents, or approximately 8,000 m³, of legacy TRU waste remain at TA-54 at the beginning of FY11, the proposed milestones of 500 m³ dispositioned in FY11 and 600 m³ dispositioned in FY 12 would remove only 14 percent of the waste, leaving 86 percent of the remaining TRU legacy waste inventory to be dispositioned no later than the end of FY14. Even if the Respondent had verified these numbers to the Department, the Respondents' track record does not give the Department confidence that they could accomplish such a feat in any event.

The proposed disposition milestones rates of 500 m³ and 600 m³ in FY11 and FY12, respectively, only serve to maintain the existing inadequate disposition rates of approximately 520 m³ and 440 m³ in FY08 and FY09, respectively. Indeed, the Department views this as a clear step backward from the disposition rate of approximately 730 m³ in FY10. The Department estimates that disposition rates would have to be at least five times greater than those proposed by the Respondents in order to approach a rate that would ensure compliance with the enforceable deadline specified in the Consent Order to close Area G.

The Proposal also fails to address the impact of ongoing TRU waste generation and disposition on the disposition of legacy TRU waste. In other words, it is unclear whether the historical disposition rates for FY08, FY09, and FY10 include both legacy and newly generated TRU. If so, overall disposition rates must be even higher to account for the total volume of waste that needs to be removed from Area G.

Annual Meetings, Reprise (Page 7, Item4)

The Proposal anticipates that the commitment of legacy TRU waste shipments would be an annual recurring process. The Department believes this is clearly setting expectations for failure to ensure closure of Area G by 2015. At a minimum, the plan must specify disposition

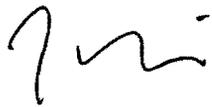
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milestones for legacy TRU waste through at least 2015, and must fully address removal of all waste to accomplish closure of Area G. The Department cannot wait until FY13 to address the potential remaining 86 percent of legacy TRU waste that requires disposition.

Conclusion

While the Department has serious concerns with the Proposal, we urge the Respondents to revise and expand the Proposal to address these comments. If you have any questions on these comments, please contact me directly at (505) 476-6016.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

cc: R. Curry, NMED Cabinet Secretary
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