



**DEPARTMENT OF ENERGY**  
National Nuclear Security Administration  
Los Alamos Site Office  
Los Alamos, New Mexico 87544



**JUL 29 2009**

Mr. J.D. Campbell, Chairman  
Northern New Mexico Citizens Advisory Board  
1660 Old Pecos Trail, Suite B  
Santa Fe, New Mexico 87505

Dear Mr. Campbell:

The Department of Energy's Los Alamos Site Office has reviewed the Northern New Mexico Citizens Advisory Board recommendations 2008-07 and 2009-01 - Use of Risk Based End States and Improved Description of Data in the next Environmental Surveillance Report. The Los Alamos Site Office response to each recommendation is provided in the attachment.

If you have any questions or concerns, you may contact David Gregory at (505) 667-5808, or myself at (505) 606-0397.

Sincerely,

George J. Rael  
Assistant Manager  
Environmental Operations

EO-15GR-009

cc:

D. Gregory, EP, LASO  
L. Bishop, EP, LASO  
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M. Graham, LANS  
P. Huber, LANS  
Records Center, LASO  
Official Contract File, LASO

## **ATTACHMENT**

### **Recommendation No. 2008-07 by Waste Management Committee – Implement DOE P 455.1, “Use of Risk-Based End States”<sup>1</sup>**

#### **Recommendation**

The NNM CAB recommends implementation of DOE P 455.1, “Use of Risk-Based End States” as input to the clean-up evaluation and decision process for MDA G and all future waste sites at LANL.

#### **Background**

On November 4, 2003 LANL submitted "Risk Based End States Vision" to DOE HQ and to DOE LASO. Copies were also provided to the CAB and interested members of the public. DOE presented the RBES document to the CAB on November 19, 2003.

The public comment period included a public meeting on January 7, 2004. The general tenor of the public input was concern that the “end state” might promote incomplete cleanup actions. The comment period ended February 27, 2004. The document did not receive a final approval. A document using some of the work from the draft RBES document was released as "Summary of Watersheds Potentially Impacted by the Los Alamos National Laboratory " and provided to the CAB and interested members of the public upon its completion in July, 2006 and again in 2008.

#### **Response**

Environmental remediation activities at LANL are planned and executed in accordance with the Compliance Order on Consent giving the final end state decisions for corrective actions to the New Mexico Environment Department (NMED). NMED approves and finalizes decisions on end state compliance for legacy waste sites. However, it is important to understand that decisions are made only after human health risks and risks to the environment are evaluated. Risk screening and risk assessments are done in keeping with the known or projected land use but in general LANL adopts a more conservative approach in determining risks.

The LANL lifecycle baseline integrates Risk Based End States into the cleanup decision through compliance with the NMED Order on Consent. As an example, the Corrective Measures Evaluation for Material Disposal Area G Report, Section 5.2, titled, “Consent Order Criteria”, provides:

“A range of corrective measures alternatives is screened and evaluated to determine what corrective measure(s) is most appropriate at MDA G to ensure protection of human health and the environment in the future. For this evaluation, the capability to control the release of potentially harmful quantities of

contaminants from the site is assessed in accordance with NMED, EPA, and DOE risk/dose assessment guidance. A range of alternatives, including closure under DOE Order 435.1, source removal, containment, and contaminant removal is assessed. The containment alternatives are evaluated to ensure that contaminant concentrations do not exceed cleanup levels if the material in the subsurface disposal units is left in place. The benefits, costs, and implementation risks of the alternatives are compared with the no further action alternative as a baseline.”

The Los Alamos Site Office (LASO) is committed to ensuring that post cleanup requirements are defined and “built-in” to ensure compliance. At the same time, optimization opportunities are evaluated to ensure the most cost effective approach is considered. The future stewardship requirements should be clearly identified in each remedy while maintaining protection of human health and the environment as the highest priority.

## **ATTACHMENT**

### **Recommendation No. 2009-01 by Environmental Monitoring and Surveillance Committee –**

#### **Recommendation for Improved Description of Data in the Next Environmental Surveillance Report**

##### **Recommendation**

The NNM CAB recommends that DOE and LANL work to improve the uniformity of description in the Environmental Surveillance Report for 2008. Description of data lying above established background, a federal or state standard or an established screening level should occur with the same linguistic precision as data falling below that standard.

##### **Response**

On an annual basis, the Los Alamos National Laboratory (the Laboratory) releases an Environmental Surveillance Report (ESR) required under Department of Energy (DOE) Orders 450.1A and 231.1A Chg 1. The ESR provides information on the Laboratory's environmental monitoring activities including results to ensure they comply with applicable federal, state, and local environmental laws and regulations. The data gathered and reported is part of the Laboratory's efforts to ensure public safety and to monitor environmental quality at and near the Laboratory. The ESRs are available on the LANL homepage at <http://www.lanl.gov/environment/all/esr.shtml>

The LASO and LANS will work to improve reporting data published in the ESR to ensure it is consistent and accurate. However, it was not the intention for the authors of the report to obfuscate higher contamination findings. The wording used in the 2007 Report was intended to clearly state that a regulatory limit was exceeded. LASO and LANS did not interpret this wording as an attempt to underplay concentrations. As the recommendation notes, "The technical data in the full report includes these measurements".