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RON CURRY
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**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

October 4, 2006

David Gregory
Federal Project Director
Los Alamos Site Office
Department of Energy
528 35th Street, Mail Stop A316
Los Alamos, NM 87544

David McInroy
Remediation Services Deputy Project Director
Los Alamos National Laboratory
P.O. Box 1663, Mail Stop M992
Los Alamos, NM 87545

**RE: NOTICE OF DISAPPROVAL
LOS ALAMOS AND PUEBLO CANYONS SUPPLEMENTAL INVESTIGATION
REPORT
LOS ALAMOS NATIONAL LABORATORY, NM0890010515
HWB-LANL-06-014**

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) has received the *Los Alamos and Pueblo Canyons Supplemental Investigation Report* (Report), dated December 2005 and referenced by LA-UR-05-9230/ER2005-0893. NMED hereby issues this notice of disapproval for the Report. The Department of Energy and the Los Alamos National Security, LLC (collectively, the Permittees) must respond to the comments as outlined in this letter within 30 days of receipt of this letter. All submittals must be in the form of two paper copies and one electronic copy in accordance with Section XI.A of the Order on Consent.

Comments:

1. Appendix E notes that, “[a]nalytes thought to be naturally occurring (e.g., aluminum) were not plotted.” The Report does not provide the basis used to establish the criterion, “thought



to be naturally occurring,” nor does the Report list those chemicals found to exceed screening criteria but excluded from the report based on that criterion, other than aluminum. Including such information is useful when considering potential cumulative chemical risks. This would, for example, allow the assessment of baseline risks provided by “naturally” occurring chemical conditions in the watershed, and allow an assessment of total chemical-based risks in the watershed. The Permittees must justify provide a basis for the criterion and justify why these constituents were not included in the risk assessment.

2. In Appendix E is stated that, “[i]n Los Alamos and DP Canyons, the highest values are generally associated with gage stations E030, E040, and E042. In Acid and Pueblo Canyons, the highest concentrations are generally found at gage stations E060, and the concentrations of those same contaminants are also low at E110.” The report continues with, “These spatial trends indicate that much of the suspended sediment is dropping out of floodwaters before reaching the Rio Grande and/or that analyte concentrations are being diluted from mixing during downstream transport.” This conclusion is not the only possible explanation. An alternative hypothesis for this relationship, not considered or assessed in the report, is that flow volumes and frequencies at this most downstream site, which funnels flows together from the many smaller tributaries, effectively has more frequent and greater scour energies through the reach containing this site, effectively flushing sediments further downstream. The Permittees must more fully assess alternative hypotheses, including the one discussed above.
3. The last sentence of Section 2.7 in the Report, Results of the Ecological Risk Screening for Dioxins and Furans, states the following: “Because adverse ecological effects to mammals were not identified in the original ecological assessment, the assessment implicitly demonstrated that there are no adverse ecological effects from dioxins and furans.” From the Permittees’ response to general comment # 3 in the April 29, 2005 *Response to the Notice of Disapproval*, dioxins and furans were not included in the risk assessment. Therefore, this conclusion is unsubstantiated. The Permittees appear to be concluding that risks are not present because analyses were not completed nor were effects observed. Ecological risks, even significant risks, can be present without effects being observed. This statement in the Report requires revision or clarification with a more complete presentation of the supporting analysis. Alternately, the Permittees may delete the statement.
4. The note at the bottom of Table 2.6-2 refers to “Section 7.” This appears to be a typographical error. The Permittees must clarify the note by referencing the correct section or state which document the Permittees are referencing.

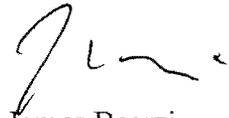
Messrs. Gregory and McInroy

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Should you have any questions, please feel free to contact Darlene Goering of my staff at (505) 428-2542.

Sincerely,



James Bearzi

Chief

Hazardous Waste Bureau

JPB:dxg

cc: D. Goering, NMED HWB
S. Yanicak, NMED DOE OB, MS J993
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