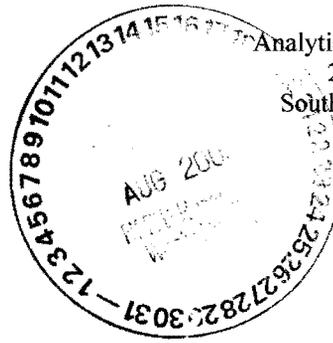




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August 11, 2008

DCN: NMED-2008-10

Mr. David Cobrain
Hazardous Waste Bureau
2905 Rodeo Park Dr. E/Bldg 1
Santa Fe, NM 87505

RE: Los Alamos National Laboratory, Evaluation of the Response to the Notice of Disapproval of the *Investigation Report for Pueblo Canyon Aggregate Area*, dated June 27, 2008.

Dear Mr. Cobrain:

As requested in an email dated July 30, 2008 from Dan Comeau, an evaluation of the responses to risk-assessment comments related to the above-referenced document was conducted. In addition, revised sections of the *Pueblo Canyon Aggregate Area Investigation Report* were reviewed to ensure adequate incorporation of responses. The attached contains the draft evaluations of the responses.

If you have any questions, please call me at (801) 451-2864 or contact me via email at paigewalton@msn.com.

Sincerely,

Paige Walton
Senior Scientist, AQS

Enclosure

cc: Joel Workman, AQS (electronic)
DanComeau, NMED (electronic)

*The contents of this deliverable are confidential and for internal use only.
Comments should not be evaluated as a final work product*

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DRAFT
Evaluation of the Responses to Notice of Disapproval,
Investigation Report for Pueblo Canyon Aggregate Area, Los Alamos National Laboratory
Dated June 27, 2008

Only responses to comments related to the risk assessment were evaluated.

General Comment

1. The response to this comment is adequate. The primary concern had been that only a non-intrusive worker had been evaluated and that the risk assessment did not account for re-development in some of these areas. Los Alamos National Laboratory (LANL) revised the report to include a construction worker scenario at Area of Concern (AOC) 00-018(b). While LANL did not include the construction worker scenario at Solid Waste Management Unit (SWMU) 00-039 as requested in the original comment, the additional lines of evidence for exclusion of this scenario at the SWMU were adequate. In addition, both sites meet the residential risk limits. No additional comments were noted.

Specific Comments

11. The response to this comment is adequate. The area of concern is in a highly developed area and it is not unreasonable to use this as justification for exclusion of ecological risk. The primary concern was that the text needed to provide a more detailed discussion of the current development and zoning for the areas. The text has been revised to include additional language on zoning. No additional comments were noted.
12. The response to this comment is adequate and the text has been modified accordingly.
13. The response to this comment is adequate and the text has been modified accordingly. In addition, the text was modified to reflect information addressing General Comment No.1.
14. The response to this comment is adequate. Sufficient justification (which was included in the revised report) was provided discussing the uncertainty associated with the exposure point concentrations and the overestimation of risk. In addition, the report now contains a range of risk based on various estimates of concentration and exposure point concentrations by ProUCL. It is agreed based upon the additional information that the use of the maximum concentrations is overly conservative and is more representative of maximum exposure and not reasonable maximum exposure. No additional comments were noted.
15. The response to this comment is adequate. LANL proposes to conduct a limited removal action targeting the areas with elevated levels of polycyclic aromatic hydrocarbons (PAHs). The work plan for this removal action should also contain confirmation samples for updating the risk assessment and verification of remediation.
16. The response to this comment is partially adequate. The first part of the response provided justification for comparison of site concentrations to both soil and tuff background levels.

The response alludes that the lower of the background concentrations was applied in determination of whether a contaminant was elevated. Since specific background concentrations are available for different media, these media-specific background should be applied accordingly. For this investigation the conclusions of constituents of potential concern would most likely not change if data were strictly compared to background of like media, and therefore, no additional modification to the text will be required. However, for all future investigations/assessments, site data must be compared to background of the same medium.

The second part of the response addressed barium. It is unclear what “general guideline” the response is referring to when addressing ranges of background. If the site data are above the background reference value, a site attribution analysis comparing the site population to the background population should be conducted. It is possible for site data to be highly skewed toward the upper end of the range of background concentrations, indicating a low level release. Please provide some additional lines of evidence for exclusion of barium at SWMU 00-018(a).

17. The response to this comment is not adequate. The limiting of the evaluation of ecological risk to only those constituents that are included in the ECORISK database is not acceptable. It is noted that the response indicates that ECORISK is being evaluated and updated to include additional constituents that are of concern at sites within LANL. However, the lack of a constituent in this database is not sufficient justification to exclude a constituent. The ecological risk assessment must be revised to include risks associated with these constituents. In addition, elimination of a constituent based on frequency of detection may not be appropriate. If there is site history indicating that a constituent was used/present at a site, then frequency of detection may not be used to eliminate the constituent from analysis of risk. For each constituent that is eliminated based on frequency of detection, sufficient justification must be provided that it is unreasonable to assume the constituent could be present due to operations at the site/site history.
18. The response to this comment is partially adequate. The comment concerning the comparison of upper tolerance limit (UTLs) to upper confidence limits (UCLs) was adequately addressed. However, the comparison of site concentrations to the background range is not appropriate without additional lines of evaluation to include evaluation of the distributions of the two datasets (see Specific Comment No. 16). Please provide additional lines of evidence to justify site concentrations, while within a range for background, do not signify low level releases.