

January 25, 2006

Mr. Donald R. Metzler
Moab Federal Project Director
U.S. Department of Energy
2597 B Road
Grand Junction, CO 81503

SUBJECT: REVIEW OF RADIOLOGICAL INCLUSION/EXCLUSION PROCEDURES FOR
VICINITY PROPERTIES, MOAB, UTAH PROJECT

Dear Mr. Metzler:

By letter dated November 15, 2005, you requested the U.S. Nuclear Regulatory Commission (NRC) to review and concur in an enclosed revised document "Moab Inclusion/Exclusion Surveys," that the U.S. Department of Energy is proposing to use during remedial action at the Moab Project site. The procedures are to be used to determine if radiological contamination found at a vicinity property is the result of tailings derived from the former Atlas Corporation mill site. The NRC staff has reviewed the document and finds that it needs additional information in order to complete its review. The information needed is identified in the enclosure. If you have any questions concerning this letter please contact me at (301) 415-6629 or by e-mail at mhf1@nrc.gov.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

D. Metzler

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If you have any questions concerning this letter please contact me at (301) 415-6629 or by e-mail at mhf1@nrc.gov.

Sincerely,

/RA/

Myron H. Fliegel, Project Manager
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Docket No.: WM-110

Enclosure: Request for Additional
Information

cc: W. Sinclair, Utah DEQ

D. Metzler

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REQUEST FOR ADDITIONAL INFORMATION
MOAB PROJECT
MOAB INCLUSION/EXCLUSION SURVEYS

The revised decision tree and the text indicate that properties in Moab will not be considered for inclusion as a vicinity property unless there is evidence that tailings were brought to the property. Page 3 states, "In conclusion, for properties in the city, unless there was factual evidence that tailings left the Moab site and were used on a property, they will not be considered further for inclusion into the remedial action program." The first decision box in the decision tree diagram (page 6) states, "Does strong evidence suggest that Atlas tailings were taken from the site to the property?" If the answer is negative, the property would be excluded.

- 1) The U.S. Department of Energy (DOE) proposes (page 3) to perform gamma surveys only on properties for which there is factual evidence that tailings were received from the mill. The justification for not performing gamma surveys on all the properties on the EPA list is weak. There are 130 properties that EPA determined in 1971 had gamma anomalies. In 2005, DOE performed gamma-screening surveys on 17 of those properties. DOE states that while most either did not have elevated gamma readings or had visible ore (presumably the source of the elevated readings), some properties had elevated gamma readings that could not be explained. DOE states that for those properties, there was no visual evidence or history that tailings had been brought to the property. DOE uses this as the basis not to survey the remaining 113 properties.
 - a) DOE either needs to provide a firmer basis to forego gamma surveys on all the properties on the EPA list or commit to perform those surveys.
 - b) DOE needs to provide a better rationale for excluding a property with elevated gamma readings and no visible tailings. The negative finding proposed (i.e., no visual evidence or known instance of tailings being brought to the site) is not sufficient. One can easily contemplate scenarios that would pass DOE's negative finding but still have tailings on the property.
- 2) The decision tree (page 6) appears to be inconsistent with DOE's proposed methodology. It contains a box with an arrow to the first decision box (identified above) with the statement, "For properties on EPA list; perform gamma scan." However, it appears from the first decision tree box that the results of the gamma scan are not used at that point in determining whether to consider the property for remediation as a vicinity property.
 - a) What is the purpose of the gamma scan at that point, if its results are not used in the inclusion/exclusion decision at the first decision box?
 - b) The second decision box requires results of a gamma survey.
 - i) Would it be more appropriate under DOE's proposed methodology for the gamma survey box to be after the first decision box?
 - ii) Why would the survey be limited to properties on the EPA list, rather than any property that passed the first decision box?

Enclosure