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**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

November 24, 1997

Mr. Theodore Taylor, Project Manager
Los Alamos Area Office
Department of Energy
528 35th Street
Los Alamos, New Mexico 87544

Dr. Sigfried Hecker, Director
Los Alamos National Laboratory
P. O. Box 1663, MS A100
Los Alamos, New Mexico 87545

**RE: Conditional Approval upon Modification
Canyons Investigation Core Work Plan and
Response to Request for Supplemental Information
Los Alamos National Laboratory
NM0890010515**

Dear Mr. Taylor and Dr. Hecker:

The RCRA Permits Management Program (RPMP) of the New Mexico Environment Department conditionally approves the Canyons Investigation Core Work Plan (LA-UR-96-2083) and the Response to the Request for Supplemental Information for the Canyons Investigation Core Work Plan (the "Response") upon modification as detailed in the attachment.

The Department of Energy/Los Alamos National Laboratory (DOE/LANL) must submit to RPMP clean insertable replacement pages incorporating the modifications detailed in the attachment within thirty (30) calendar days of the receipt of this letter. Upon receipt, RPMP will review the replacement pages with the intent to finalize the document's approval and shall provide DOE/LANL with this approval documentation. However, should DOE/LANL fail to provide the replacement pages within the required time limit, RPMP will deny the aforementioned document.



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Should you have any questions regarding this letter, please contact me or Mr. John Kieling, RPMP's LANL Facility Manager, at (505) 827-1558.

Sincerely,



Robert S. ("Stu") Dinwiddie, Ph.D., Manager
RCRA Permits Management Program
Hazardous and Radioactive Materials Bureau

RSD:kth

cc: J. Canepa, LANL EM/ER, MS M992
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File: HSWA LANL 4/1049/0
Track: LANL, Doc date, NA, DOE/LANL, HRMB/Dinwiddie, RE, File

ATTACHMENT
Approval with Modifications
Canyons Investigation Core Work Plan
LA-UR-96-2083

The following modifications directly correspond to both the Request for Supplemental Information and DOE/LANL's responses:

14. **LANL's Response:** *The referenced sentence in the first paragraph on page 4-2 has been revised to read, "But because surface water is rarely ingested, such water is likely to contribute in only a minor way to the overall exposure of humans to contaminants." [top paragraph, page 4-2]*

RPMP Modification: DOE/LANL shall completely strike the referenced and revised sentence in the top paragraph of page 4-2 from the Canyons Investigation Core Work Plan (the "Work Plan").

- 23(a). **LANL's Response:** *...rather than single child and adult American Indian exposure scenarios, a variety of potential exposure conditions...may be evaluated.*

RPMP Modification: To clarify, DOE/LANL shall, at a minimum, evaluate both children and adult exposure scenarios.

- 23(b). **LANL's Response:** *...Although reasonable maximum exposure (RME) estimates may be readily calculated...*

RPMP Modification: DOE/LANL shall calculate the reasonable maximum exposure.

29. **LANL's Response:** *...The DOE retains administrative authority for approving the methodology for radiological assessments...*

RPMP Modification: If mixed waste (i.e., hazardous and radioactive constituents) is present, the Administrative Authority (AA) for the RCRA Hazardous and Solid Waste Amendments, New Mexico Environment Department, retains authority for approval of the radiological assessment methodology.

34. **LANL's Response:** *LANL has developed an ecological risk assessment methodology...*

RPMP Modification: Although DOE/LANL has developed an ecological risk assessment methodology, it has not been approved by the AA. DOE/LANL must obtain approval prior to its implementation (such as biotic sampling).

35. **LANL's Response:** *(a) The need for site-specific biotic sampling to evaluate human health exposures will result from sensitivity analyses performed on the preliminary data from reach sampling...*

*(b)...As discussed with the AA...this preliminary exposure assessment and identification of **significant contaminants** [emphasis added] and pathways through sensitivity analyses in effect a screening step that will direct further evaluation...*

RPMP Modifications: (a) Sensitivity analyses identify exposure factors which may need further evaluation or the collection of more data. These analyses are valid only if the preliminary data are representative of site conditions. Therefore, it is important that DOE/LANL obtain AA approval for site-specific biotic sampling activities.

(b) DOE/LANL shall determine chemicals of potential concern, pathways, and species contributing to those pathways prior to site-specific sampling.

37. **LANL's Response:** *These procedures are presently being developed and are addressed by the LANL-wide approach to ecological studies.*

RPMP Modification: DOE/LANL must obtain AA approval prior to the implementation of the referenced procedures.