

A0297

PDR-1
LPDR- WM-10 (2)
WM-11 (2)
WM-16 (2)

11/18/87

LETTER/87/11/10

- 1 -

Dr. Dae Chung
Staff Scientist
Lawrence Livermore National Laboratory
University of California
Livermore, CA 94550

WM-RES
WM Record File
A0297
LLW

WM Project 10, 11, 16
Docket No. _____
PDR ✓
LPDR ✓ (B, N, S)

Dear Dr. Chung:

Distribution:

(Return to WM, 623-SS)

On November 3, 1987, Ted Johnson and Rus Purcell discussed two recent draft field investigation reports which were prepared by Mr. Purcell and submitted to partially fulfill the requirements of a work assignment which was given to him on May 28, 1987. Based on these discussions, I now feel that the original scope of work for that assignment was overly ambitious and that it is unlikely Mr. Purcell, through no fault of his own, will be able to complete the tasks, as assigned.

Mr. Purcell indicated to Mr. Johnson that an extensive amount of data and analyses will be needed to complete the original task that very little of this data is currently available. Mr. Purcell stated that he could identify the data needed in a relatively short period of time.

I now conclude that the original assignment and scope of work should be changed. Therefore, in accordance with Task 2 of Contract A-0297, I request that Mr. Purcell complete the following task: Conduct a geomorphic examination of the Yucca Mountain HLW site at and near the locations of the proposed shaft and ramp openings. Shaft and ramp locations should be examined for the potential for erosion, debris dam formation, and/or other geomorphic changes and the possible resultant entrance of surface waters. The completed report should (1) address the potential effect of 10,000 years of geomorphic change on drainage configurations at the Yucca Mountain site, specifically in the area of the proposed shafts and drifts and in Drill Hole Wash, (2) quantitatively assess the geomorphic changes that could occur with respect to stream and flood plain erosion in those areas, (3) define the potential lateral, vertical (downcutting), and/or upstream movement and erosion of streams and gullies in those areas and (4), assess the possibilities of locating more suitable shaft and ramp locations in those areas.

If there is insufficient information available to address the subject areas above, the study should focus on the data, information, and analyses which will be needed to reach definitive conclusions in those subject areas. As a minimum, the study should be sufficiently complete to provide answers to the following questions:

- (1) Is there a potential problem related to flooding and/or erosion at the various shaft and ramp locations?
- (2) Why is there a potential problem at those locations?
- (3) What information, data, and analyses need to be provided by DOE to adequately characterize the problem?

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WM Projects: WM-10, 11, 16
PDR yes
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WM Record Files: A-0297
LPDR yes

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(4) What can DOE do to solve the problem?

The results of this study should be transmitted to the NRC in a topical letter report. A draft of the topical letter report should be submitted by the geomorphologist directly to the NRC staff no later than December 15, 1987 for their review and comment.

The action taken by this letter is considered to be within the scope of the current contract (A-0297). No changes to cost or delivery of contracted services and products are authorized. Please notify me immediately if you believe that this letter would result in changes to cost or delivery of contracted products.

Sincerely,

ORIGINAL SIGNED BY

Michael E. Blackford, Project Manager
Geology/Geophysics Section
Technical Review Branch
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

NOV 18 1987

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LETTER TO: Dr. Dae Chung
Staff Scientist
Lawrence Livermore National Laboratory
University of California
Livermore, CA 94550

FROM: Michael E. Blackford, Project Manager
Geology/Geophysics Section
Technical Review Branch
Division of High-Level Waste Management
Office of Nuclear Materials Safety and Safeguards

SUBJECT: FIELD INVESTIGATION REPORT

DATE:

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ORGANIZATION/CONCUREE	INITIALS	DATE CONCURRED
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