

FEB 16 1989

MEMO TO SILBERBERG.

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MEMORANDUM FOR: Melvin Silberberg, Chief
Waste Management Branch
Division of Engineering, RES

THRU: Ronald L. Ballard, Chief
Geosciences & Systems Performance Branch
Division of High-Level Waste Management, NMSS

FROM: Seth M. Coplan, Section Leader
Systems Performance Section
Geosciences & Systems Performance Branch
Division of High-Level Waste Management, NMSS

SUBJECT: REQUEST FOR REVIEW OF PERFORMANCE ALLOCATION IN THE
YUCCA MOUNTAIN PROJECT SCP

As discussed with you during a meeting on January 17, 1989, we request your staff's participation in the review of the "performance allocation" process as implemented in the Site Characterization Plan (SCP) for the Yucca Mountain Project. This review involves a number of disciplines: hydrology, geochemistry, geophysics, materials engineering, structural engineering and mining engineering and should be conducted at a level of detail consistent with the general level of detail presented in the SCP.

The goals of the review are to confirm whether DOE has indeed:

- (1) integrated the investigations called for by performance allocation in consideration of alternative conceptual models or hypotheses;
- (2) assured that one investigation will neither preclude nor interfere with another by looking at the set of investigations as a whole;
- (3) maintained consistency between the implicit assumptions of the performance allocation tables and the explicit assumptions of the alternative conceptual model or hypotheses for each issue, and
- (4) identified investigations that will distinguish among alternative concepts/hypothesis tables (e.g., studies of activities to reduce uncertainty).

The performance allocation process and its role in guiding the site characterization program is discussed in SCP Section 8.1. An additional overview of the process in light of DOE-NRC meeting agreements is contained in the Section 3.2.2 of the Review Plan for NRC Staff Review of DOE's Site Characterization Plan (Review Plan).

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DOE's proposed, tentative performance allocation is summarized in tables (with some supporting text) in the SCP. A set of alternative conceptual models and hypotheses, which are different from the conceptual model upon which the performance allocation is based, are also summarized in SCP tables. (The site characterization program should provide data to distinguish between alternative conceptual models). The enclosure contains a location aid by subject area for: (1) general information on performance allocation, (2) performance allocation tables, and (3) alternative conceptual model tables.

Review comments should be provided to me by March 9, 1989. They should be in the form of point papers as described in the Review Plan, Section 5.3.2. I would be happy to set up meetings with your reviewers for discussion of the performance allocation process during the week of February 13th and exchange of concerns about how DOE has implemented performance allocation during the week of February 27th.

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Enclosure:
As stated

cc: N. Stablein, HLPD
N. Eisenberg, HLGP

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ALTERNATIVE CONCEPTUAL MODEL (ACM) AND PERFORMANCE ALLOCATION
TABLES BY SUBJECT AREA

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