

JUL 13 1993

NOTE FOR: Joseph J. Holonich, Director  
Repository Licensing and Quality Assurance Project  
Directorate  
Division of High-Level Waste Management, NMSS

FROM: Ronald L. Ballard, Chief  
Geology and Engineering Branch  
Division of High-Level Waste Management, NMSS

SUBJECT: REVIEW OF DOE STUDY PLAN 8.3.1.4.3.1, "SYSTEMATIC  
ACQUISITION OF SITE-SPECIFIC SUBSURFACE INFORMATION,  
REVISION 1, JUNE 14, 1993"

Attached to this memorandum are the results of the expedited review of the subject Study Plan. This review was conducted in accordance with the guidance provided in the Review Plan for NRC Staff Review of Study Plans, Revision 2, dated February 1, 1993. The technical portion of this review was conducted by William H. Ford, Norman A. Eisenberg, and John W. Bradbury of HLHP, William J. Boyle and John S. Trapp of HLGE, while the Quality Assurance aspects of this plan were reviewed by Kenneth R. Hooks of HLPD. As a result of this review it was determined that:

1. This study plan is substantially in agreement with the revised Level of Detail Agreement for Study Plans and there are no open items related to the Quality Assurance Program that could call into question the quality of this study plan.
2. No objections to the activities described were identified. Because of the nature of the planned program there could be: (1) potential adverse effects on repository performance; (2) potential significant and irreversible/unmitigatable effects on characterization that could physically preclude obtaining information necessary for licensing; and (3) potential disruption to the characterization schedules and sequencing of studies that could substantially reduce the ability of DOE to obtain information necessary for licensing. Because the staff sees no other practicable method which DOE could use to obtain the necessary information which this program is designed to obtain and because the revised plan recognizes the need for integration throughout the program to mitigate possible effects to the extent practical, we have no objections to the work proceeding. From a practical standpoint, it is necessary to weigh the necessity of gathering the basic information with the recognized concerns listed above.
3. There are no open items which this study plan is to resolve.

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4. We have tentatively identified areas of concern with the ability of DOE to gather the necessary information for which this plan is intended. These concerns deal primarily with the statistical basis of the study plan, the criteria for evaluating the sufficiency of the data collected, the linkage of this study to an overall program of performance assessment, and the potential additional disruptive site work which may be necessary to accomplish the stated goals of this plan. Evaluation of these concerns will require a detailed review which may result in the development of comments on this study plan.

In summation, we consider that while there are no objections to the initiation of the work described within this study plan, technical concerns have been identified which may result in the development of comments during the detailed review. The samples collected from this program provide data to be used throughout the project, and represent what appears to be a necessary part of the overall site characterization effort. The program outlined within this study plan could, however, be more extensive than the 12 original borings described. In view of the potential for these activities to impact on waste isolation, we consider that any additional work, beyond the original 12 borings, should not proceed prior to review and evaluation of the proposed changes by NRC staff. Additionally, if the DOE is planning to relocate and reschedule the borings described in this study plan, to accomodate pending ESF design changes, it would be advantageous to have this revised information prior to conducting the detailed review.

If there are any questions, please contact John Trapp at 504-2509.

Ronald L. Ballard, Chief  
Geology and Engineering Branch  
Division of High-Level Waste Management, NMSS

cc: C. Abrams

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\* See previous concurrence:

OFC	HLPD	C	HLGE	E	HLGE*		HLHP		HLGE*		HLGE	C	HLGE
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4. We have tentatively identified areas of concern with the ability of DOE to gather the necessary information for which this plan is intended. These concerns deal primarily with the statistical basis of the study plan, the criteria for evaluating the sufficiency of the data collected, and the potential additional disruptive site work which may be necessary to accomplish the stated goals of this plan. Evaluation of these concerns will require a detailed review which may result in the development of comments on this study plan.

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