

JAN 18 1991

Mr. Dwight D. Shelor, Acting Associate Director
for Systems and Compliance
Office of Civilian Radioactive Waste Management
U.S. Department of Energy, RW 30
Washington, D.C. 20585

Dear Mr. Shelor:

**SUBJECT: ACCEPTANCE OF OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT (OCRWM)
QUALITY ASSURANCE (QA) PROGRAM**

This letter responds to your December 11, 1990, letter to Robert Browning requesting that the Nuclear Regulatory Commission (NRC) accept the Department of Energy (DOE) OCRWM (Headquarters and the Yucca Mountain Project Office) QA program for new site characterization activities associated with Midway Valley Trenching and Calcite-Silica Activities. Your letter states that DOE has determined that the OCRWM QA program is acceptable for these limited activities; it is the NRC staff's understanding that DOE has taken no position concerning the overall acceptability of the OCRWM QA program. The NRC will not make a determination of the overall acceptability of the OCRWM program until DOE has accepted the program and requested NRC agreement.

Objection 2 in the NRC staff's Site Characterization Analysis (SCA) recommended that DOE have an acceptable QA program in place prior to the start of new site characterization activities. It also noted that the Objection could be lifted incrementally for QA programs or program areas (see enclosed "Background"). The request in your December 11, 1990 letter is consistent with this concept of segmented relief from Objection 2.

Based on the NRC staff observation of recent audits and surveillances of OCRWM, and the information provided in your December 11, 1990, letter, the NRC staff generally agrees with your evaluation regarding the OCRWM QA program as it relates to the start of new site characterization activities for Midway Valley Trenching and Calcite-Silica Activities. However, the NRC staff notes that QA program deficiencies or weaknesses were identified by DOE during Audit 90-I-01 of OCRWM. Therefore, the NRC staff believes that the OCRWM QA program is acceptable, for new site characterization activities limited to those associated with the Midway Valley Trenching and Calcite-Silica Activities, provided that

9101280195 910118
PDR WASTE
WM-1

PDR

280054

405
WM-1
NH16

the OCRWM Audit 90-I-01 Recommended Actions noted in DOE's December 11, 1990 letter are completed and verified. DOE should notify the NRC in writing when and how these items have been completed and verified as being satisfactorily resolved.

In addition, the NRC staff provided comments to OCRWM on Study Plan 8.3.1.17.4.2 "Evaluating the Location and Recency of Faulting Near Prospective Surface Facilities" which is related to Midway Valley Trenching in my letter to Ralph Stein dated March 16, 1990; comments on Study Plan 8.3.1.5.2.1 "Characterization of the Yucca Mountain Quarternary Regional Hydrology" which is related to Calcite-Silica Activities were provided in my letter to Ralph Stein dated June 8, 1990. Our reviews of these Study Plans did not identify any technical concerns which would preclude the start of new site characterization activities under these Study Plans.

Should you have any questions concerning our review, please contact Mr. Kenneth Hooks of my staff at (301)/FTS-492-0447.

Sincerely,

ORIGINAL SIGNED BY

John J. Linehan, Director
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: As stated

- cc: R. Loux, State of Nevada
- C. Gertz, DOE/NV
- S. Bradhurst, Nye County, NV
- M. Baughman, Lincoln County, NV
- D. Bechtel, Clark County, NV
- D. Weigel, GAO
- P. Niedzielski-Echner, Nye County, NV

DISTRIBUTION

CNwRA	NMSS R/F	HLPD R/	LSS LPDR
ACNW	PDR	Central File	
REBrowning, HLWM	BJYoungblood, HLWM	JBunting, HLEN	JLinehan, HLPD
RBallard, HLGP	On-Site Reps	WBelke, HLPD	KHooks, HLPD
JBuckley, HLPD	JConway, HLPD	TVerma, HLPD	

OFC	:HLPD	:HLPD	:	:	:	:	:
NAME	:KHooks	:JLinehan	:	:	:	:	:
DATE	:01/18/91	:01/18/91	:	:	:	:	:

BACKGROUND

Site Characterization Analysis (SCA) Objection

One of the NRC concerns (Objection 2 in Section 4.0 of the NRC staff's Site Characterization Analysis, NUREG-1347) resulting from the NRC review of DOE's Site Characterization Plan for the Yucca Mountain Project pertained to having a DOE QA program, which meets the NRC requirements of Subpart G of 10 CFR Part 60, in place prior to the start of the new site characterization activities. Consistent with previous NRC/DOE agreements, the NRC staff recommended that DOE complete its development and acceptance of DOE and participant QA programs and then obtain NRC acceptance prior to the start of new site characterization activities. NRC also noted in NUREG-1347 that Objection 2 could be lifted incrementally for individual QA programs and program areas as DOE demonstrated and NRC agreed on their acceptability.

Approval of Written Quality Assurance Program

OCRWM submitted its QA Requirements Document (QARD), Revision 4 and QA Program Description (QAPD), Revision 3 to the NRC in October 1990. OCRWM concluded that the QARD and QAPD were in compliance with the NRC requirements of Subpart G of 10 CFR Part 60 and Appendix B of 10 CFR Part 50. The NRC staff performed its own independent review and concluded, in a letter to DOE dated December 3, 1990, that the QARD, Revision 4 and QAPD, Revision 3 addressed the applicable criteria of Subpart G of 10 CFR Part 60 and Appendix B of 10 CFR Part 50, with the possible exception of the six issues addressed in the December 3, 1990 letter. Your December 11, 1990, letter states that these issues will have no impact on the new site characterization activities associated with Midway Valley Trenching and Calcite-Silica Activities. The NRC staff has separately evaluated the potential effects of these six items, and agrees that there should be no impact on the limited activities associated with Midway Valley Trenching and Calcite-Silica Activities.

Demonstration of Implementation of Quality Assurance Program

Before the OCRWM QA program could be determined to be acceptable for start of new site characterization activities, it was necessary for OCRWM to verify and NRC to agree that the QA program as described in the QARD and QAPD was being effectively implemented. After an initial round of audits of participant QA program implementation, NRC and DOE agreed at the April 27, 1990, QA meeting on the criteria to demonstrate that a QA program was being effectively implemented. The criteria included the following:

- (1) Review and resolve open QA program deficiencies identified by the DOE auditors that could have a quality or technical impact on output products;
- (2) Identify the extent of the program implementation since the last DOE audit, including the areas of activity audited or surveilled and the end products produced;
- (3) Determine whether the QA program can be effectively implemented;

- (4) Identify what areas of the QA program are on hold; and
- (5) State the DOE position on whether the QA program is adequate for further implementation to conduct new site characterization activities.

The NRC staff has reviewed the information in OCRWM's December 11, 1990, letter and finds that OCRWM has provided information to address the five criteria as they pertain to the start of new site characterization activities for Midway Valley Trenching and Calcite-Silica Activities. The enclosures to the letter indicate that OCRWM has reviewed the open QA program deficiencies, and based on follow-up evaluation and/or surveillances, determined that there are no items that could have a technical or quality impact on new site characterization activities associated with Midway Valley Trenching and Calcite-Silica Activities.

Based on the NRC staff observation of OCRWM Audit 90-I-01 and Surveillance YMP-SR-91-06 of the Technical Requirements Document (YMP/CM-007, Rev. 2), and the information provided in DOE's December 11, 1990, letter, the NRC staff generally agrees with DOE's evaluation regarding the OCRWM QA program as it relates to the start of new site characterization activities for Midway Valley Trenching and Calcite-Silica Activities. However, the NRC staff notes that QA program deficiencies or weaknesses were identified by DOE during Audit 90-I-01 of OCRWM which related to inadequacies in training, flow down of requirements, traceability of inputs to documents, the Technical Requirements Document (YMP/CM-007), audits, surveillances and the corrective action system. Therefore, the NRC staff believes that the OCRWM QA program is acceptable, for new site characterization activities limited to those associated with the Midway Valley Trenching and Calcite-Silica Activities, provided that the OCRWM Audit 90-I-01 Recommended Actions noted in DOE's December 11, 1990 letter are completed and verified.