



**Department of Energy**

Washington, DC 20585

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Repository Licensing & Quality Assurance  
Project Directorate  
Division of High-Level Waste Management  
Office of Nuclear Material Safety  
and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Holonich:

The Office of Geologic Disposal/Yucca Mountain Site Characterization Project Office (YMPO) issued Revision 9 of the Site Characterization Program Baseline (SCPB) on October 2, 1992. As you know, the SCPB represents the YMPO's baselined technical program for characterization of the Yucca Mountain site. A previous letter of explanation sent to the U.S. Nuclear Regulatory Commission (NRC) (Shelor to Linehan, dated 7/15/91) upon issue of Revision 1 discussed the purpose and scope of the SCPB. Prior revisions of the SCPB essentially included all of Chapter 8 of the Site Characterization Plan (SCP), excluding Section 8.5 (Schedules and Milestones), Section 8.6 (Quality Assurance), and other information on schedules, technical procedures, and application of results from various sections of the SCP. This letter explains modifications to the SCPB introduced in Revision 9 with respect to the text and items controlled in it, and how the U.S. Department of Energy (DOE) intends to control the site characterization program.

In fiscal year 1992, YMPO reviewed the extent of the material that had been baselined in prior SCPB revisions which, in effect, consisted of "full text" baselining of SCP Chapter 8. YMPO assessed: (1) how the process for changing the SCPB had worked since issue of Revision 0 in February 1990; (2) whether or not "full text" baselining was an appropriate level of control for the YMPO Change Control Board (CCB); (3) whether duplication of controlled items was occurring between the SCPB and other project documents. With respect to item 3, for example, descriptions of SCP studies and activities were controlled and baselined by the YMPO CCB in the SCPB and were also contained in SCP study plans, which themselves are controlled documents. This overlap in controlled content between the SCPB and study plans has already lead to significant delays in the approval of some study plans while minor changes were being made to the SCPB to maintain consistency with the study plan text. Similar overlap was found between the SCPB and the Exploratory Shaft Facility (ESF) Design Requirements Document in sections summarizing test controls and

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ESF design concepts.

As a result of this management evaluation, the purpose and scope of the SCPB has changed in the following ways:

1. Rather than controlling study and activity descriptions in two documents, YMPO will control the testing objectives in the SCPB and the actual study and activity descriptions for the planned testing in study plans. Each draft study plan or proposed revision(s) is reviewed against the testing objectives in the SCPB for consistency. When a change to an objective(s) of a study is proposed, the change must first be approved by the YMPO CCB and implemented in the SCPB. Revisions to the SCPB and to study plans are reported in Site Characterization Progress Reports.
2. Revision 9 of the SCPB has also limited the CCB controlled text for sections of the document covering design and performance assessment and linkages to performance allocation tables. Performance allocation tables manifest a strategy for the site that is satisfied by the scope and direction of site characterization studies.
3. The site characterization parameter tables were removed from the SCPB and placed in a separate controlled document, the Site Characterization Parameter Tables (YMP/92-24), that supports the SCPB. When the YMPO CCB approves changes to a performance allocation table in the SCPB, an affected document notice will be issued to make a corresponding change to the Site Characterization Parameter Tables document, if the change affects a site characterization parameter(s).
4. The hypothesis testing tables from the SCP have been removed from Revision 9 of the SCPB. The hypothesis testing tables in the SCP were developed to document the conceptual understanding of processes and conditions at the site and, as such, were necessarily preliminary. Inherent in these preliminary hypotheses are not only uncertainties known to be important, but also uncertainties that are probably inconsequential. The hypothesis testing tables from the SCP contain "working hypotheses" for use in supporting the issue resolution process. The alternative conceptual models will evolve conceptually throughout site characterization as new data are collected and interpreted.

The hypothesis testing tables were created in response to NRC's Point Paper Objection 1 on the SCP/Consultation Draft to demonstrate that DOE had considered and is considering alternative conceptual models in planning and executing the site characterization program. The hypothesis testing tables are documented in the SCP, and would be considered in the scoping for issue resolution documentation. The DOE considers it inappropriate to control them in the baseline

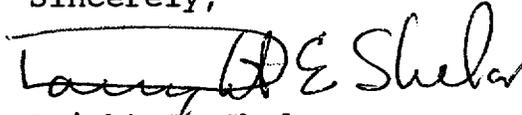
as if they were configured items in the site characterization program, and thereby subject to control by the YMPO CCB.

These modifications provide a baselined and traceable record of changes to site characterization study program objectives and performance allocation tables in a manner that is much more amenable to managing a complex geotechnical program.

In Enclosures 1 and 2 of this letter, we are transmitting uncontrolled copies of Revision 9 of the SCPB (enclosure 1) and Revision 0 of the Site Characterization Parameter Tables document (enclosure 2).

If you have any questions, please contact Chris Einberg of my office at 202-586-8869.

Sincerely,



Dwight E. Shelor  
Associate Director for  
Systems and Compliance  
Office of Civilian Radioactive  
Waste Management

Enclosure:

*on the shelf in binder*

1. Revision 9 of the Site Characterization Program  
Baseline, YMP/CM-0011
2. Revision 0 of the Site Characterization Parameter  
Tables Document, YMP/92-24

cc: w\enclosures

C. Gertz, YMPO (w\o enclosures)

T. J. Hickey, Nevada Legislative Committee

R. Loux, State of Nevada

C. Abrams, NRC

D. Bechtel, Las Vegas, NV

Eureka County, NV

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