



**Department of Energy**

Washington, DC 20585

**MAY 18 1993**

Mr. Joseph J. Holonich, Director  
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:

Enclosed with this letter is a controlled copy of Study Plan 8.3.1.17.4.4, Revision 0, "Quaternary Strike-Slip Faulting Proximal to the Site Within Northeast-Trending Zones," prepared by the U.S. Department of Energy (DOE) for the Yucca Mountain site. The study plan numbers correspond to the same numbers used in the Site Characterization Plan (SCP) for the Yucca Mountain site.

Study plans are prepared, reviewed, and approved under Yucca Mountain Site Characterization Project Office (YMPO) quality assurance procedures.

This study plan was submitted to YMPO for review before the 1993 DOE/U.S. Nuclear Regulatory Commission (NRC) study plan agreement became effective. Therefore, DOE has reviewed the study plan for consistency with the content requirements for study plans, as given in Attachment B to the Summary of the DOE/NRC meeting on the Level-of-Detail for the SCP (May 7-8, 1986). However, in accordance with the 1993 DOE/NRC agreement, a current list of approved technical procedures for this study plan is provided as Enclosure 2.

It should be noted that there may be some inconsistencies in the milestone report titles and schedules given in this study plan and those in the SCP. Study plans, in general, represent a further evolution of the study in the areas related to schedules and milestones relative to the SCP, and as such, represent DOE's current plans.

DOE did not identify any Site Characterization Analysis open items related to this study plan.

The Document Transmittal/Acknowledgement Record for your controlled copy of the study plan should be signed and dated and returned to the Document Control Center in Las Vegas, Nevada.

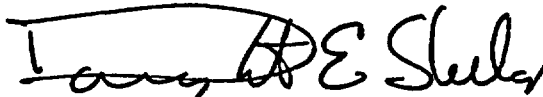
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If you have any questions, please contact Ms. Sheila Long at 202-586-1447 or Mr. Chris Einberg of my office at 202-586-8869.

Sincerely,

A handwritten signature in black ink, appearing to read "Dwight E. Shelor". The signature is written in a cursive style with a large, stylized "D" and "S".

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

Enclosures:

1. Study Plan 8.3.1.17.4.4,  
Revision 0
2. Technical Procedures for  
Study 8.3.1.17.4.4

cc w\enclosure  
Alice Cortinas, CNWRA, San Antonio, TX

cc w/o enclosure  
C. Gertz, YMPO  
T. J. Hickey, Nevada Legislative Committee  
R. Loux, State of Nevada  
D. Bechtel, Las Vegas, NV  
Eureka County, NV  
Lander County, Battle Mountain, NV  
P. Niedzielski-Eichner, Nye County, NV  
W. Offutt, Nye County, NV  
C. Schank, Churchill County, NV  
F. Mariani, White Pine County, NV  
V. Poe, Mineral County, NV  
J. Pitts, Lincoln County, NV  
J. Hayes, Esmeralda County, NV  
B. Mettam, Inyo County, CA  
C. Abrams, NRC

# Technical Procedures for Study 8.3.1.17.4.4

<u>No.</u>	<u>Title</u>	<u>Rev. No.</u>	<u>Date</u>
GCP-01	Radiometric-age data bank	in revision	
GCP-02	Labeling, identification, and control of samples for geochemistry and isotope geology	2	10/22/90
GCP-03	Uranium-series dating	2	6/21/90
GCP-04	Uranium-trend dating	2	6/21/90
GP-01	Geologic mapping	2	7/29/91
GP-03	Stratigraphic studies	in revision	
GP-07	Geologic trenching studies	1	11/6/90
GP-17	Describing and sampling soils in the field	1	11/6/90
TBD	Cation ratio (desert varnish) dating		
TBD	Dating by soil development analysis		
TBD	Radiocarbon dating, conventional and tandem accelerator methods		
TBD	Shallow seismic reflection and refraction surveys		

TBD - Preparation schedule not yet determined