



**Department of Energy**

Washington, DC 20585

**AUG 11 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 8.3.1.3.6.2, Revision 0, "Diffusion," at enclosure 1, 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). A list of technical procedures to be used in conjunction with this study plan is at 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.

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PDR WASTE  
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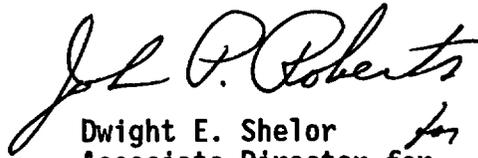


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The Document Transmittal/Acknowledgement Record for your controlled copy of the study plan should be signed and dated and returned to the Document Control Center in Las Vegas, Nevada.

If you have any questions, please contact Ms. Sheila Long at 202-586-1447.

Sincerely,



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

2 Enclosures

1. Study Plan 8.3.1.3.6.2,  
Revision 0
2. List of Technical Procedures

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

cc: w/enclosure 2  
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  
L. Bradshaw, 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

Detailed Technical Procedures to be Utilized in  
the Diffusion Study 8.3.1.3.6.2

<u>PROCEDURE #</u>	<u>TITLE</u>
TWS-INC-DP-66	Saturated Diffusion Cell Experiment
TWS-INC-DP-62	Bulk NTS Well Water Samples
TWS-INC-DP-35	pH Measurement
TWS-INC-DP-83	Storage and Handling of Solid Samples
TWS-INC-DP-60	Preparation of NTS Samples for LANL YMP Solid Core Experiments
TWS-INC-DP-79	Liquid Scintillation Counting of Samples
TWS-INC-DP-45	Analysis of Anions by Ion Chromatography
TWS-INC-DP-98	Tuff Water Experiment
TWS-INC-DP-67	Rock Beaker Experiment
TWS-INC-DP-81	Tuff Block Diffusion Experiment
TWS-INC-DP-64	Gamma Ray Spectrometry Analysis

YMP-116-R1  
7/14/93

**YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT  
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WASHINGTON, DC 20585

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