

Department of Energy

Office of Civilian Radioactive Waste Management Yucca Mountain Site Characterization Office P.O. Box 98608 Las Vegas, NV 89193-8608

JUN 1 9 1995

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U.S. DEPARTMENT OF ENERGY (DOE) STUDY PLAN DEVELOPMENT AND REVIEW (SCPB: N/A)

During the April 4, 1995, DOE/U.S. Nuclear Regulatory Commission (NRC) Management Meeting, the NRC informed DOE of a change in the staff's position in reviewing DOE's Site Characterization Plan study plans. NRC's statements on April 4, 1995, have led us to believe that the NRC is no longer tracking study plan comments as open items in the NRC's Open Item Tracking System.

This letter is to inform the NRC of DOE's response to this action with respect to submitting study plans and also with respect to responding to comments on study plans made by NRC staff. DOE intends to provide responses to outstanding NRC study plan comments as "information only." DOE will return responses to comments on those study plans listed below.

- 8.3.1.8.5.1 (Characterization of Volcanic Features) (Seven comments and nine questions.)
- 8.3.1.8.1.2 (Physical Process of Magmatism and Effects on the Potential Repository) (Ten comments and two questions.)
- 8.3.1.8.2.1 (Analysis of Waste Package Rupture Due to Tectonic Processes and Events) (Two questions and six comments; DOE responded to these questions and comments; letter from Shelor to Holonich dated April 6, 1994.)
- 8.3.1.15.1.1 (Laboratory Thermal Properties) (Three questions.)

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## Joseph J. Holonich

DOE intends to continue development of the remaining study plans identified at the September 21, 1994, DOE/NRC Management Meeting and provide copies of DOE-approved study plans under existing practices to the usual parties, NRC, State of Nevada, and affected units of government for information purposes only. Study plans of special interest to the NRC can be reviewed and commented on according to your discretion, and DOE will respond. DOE intends to continue to use our study plans as important tools to provide information for resolution of SCA open items. We will be submitting new and revised study plans that bear upon resolution of specific SCA open items to the NRC as the situation arises. We place the same priority in resolving SCA open items as NRC assigned them in the DOE/NRC Management Meeting on December 6, 1994.

There are currently 17 study plans related to SCA open items which are itemized in the enclosure. The indicated study plans are important vehicles by which these open items are to be addressed in whole or in part.

If you have any questions, please contact either Thomas W. Bjerstedt of my staff at (702) 794-7590 or J. Randy Leonard of the Civilian Radioactive Waste Management System Management and Operating Contractor at (702) 794-1954.

Stephan'J. Brocoum Assistant Manager for Suitability and Licensing

AMSL: TWB-3353

Enclosure: Study Plans Related to SCA Open Items Joseph J. Holonich

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cc w/encl: L. H. Barrett, HQ (RW-2) FORS R. A. Milner, HQ (RW-30) FORS A. B. Brownstein, HQ (RW-36) FORS C. E. Einberg, HQ (RW-36) FORS Samuel Rousso, HQ (RW-40) FORS W. D. Barnard, NWTRB, Arlington, VA R. R. Loux, State of Nevada, Carson City, NV T. J. Hickey, State of Nevada, Carson City, NV Cyril Schank, Churchill County, Fallon, NV D. A. Bechtel, Clark County, Las Vegas, NV J. D. Hoffman, Esmeralda County, Goldfield, NV Eureka County Board of Commissioners, Eureka, NV B. R. Mettam, Inyo County, Independence, CA Lander County Board of Commissioners, Battle Mountain, NV Jason Pitts, Lincoln County, Pioche, NV V. E. Poe, Mineral County, Hawthorne, NV L. W. Bradshaw, Nye County, Tonopah, NV Florindo Mariani, White Pine County, Ely, NV P. A. Niedzielski-Eichner, Nye County, Chantilly, VA William Offutt, Nye County, Tonopah, NV P. M. Dunn, M&O, Vienna, VA C. L. Sisco, M&O, Washington, VA R. I. Holden, National Congress of American Indians, Washington, DC Elwood Lowery, Nevada Indian Environmental Coalition, Reno, NV R. E. Ritchey, USGS, Denver, CO S. E. LeRoy, M&O, Las Vegas, NV M. W. Pendleton, M&O, Las Vegas, NV T. M. Williamson, M&O, Las Vegas, NV J. L. Younker, M&O, Las Vegas, NV S. P. Nesbit, M&O, Las Vegas, NV C. T. Statton, M&O, Las Vegas, NV J. R. Leonard, M&O, Las Vegas, NV S. B. Jones, YMSCO, NV D. R. Williams, YMSCO, NV J. C. Nesbit, YMSCO, NV J. M. Banks, YMSCO, NV S. J. Brocoum, YMSCO, NV R. V. Barton, YMSCO, NV A. V. Gil, YMSCO, NV R. G. Hawe, YMSCO, NV C. L. Hanlon, YMSCO, NV

## SCA SUPPLEMENTAL RESPONSES RELATED TO STUDY PLANS

SCA Open liem ID	Description
Comment 8: SP 8.3.1.17.4.2	Alternative Tectonic Models
Comment 15: SP 8.3.1.2.2.3	Activity 8.3.1.2.2.3.3 (Solitario Canyon) inadequate to test hypotheses re hydrologic char. of faults
Comment 24: SP 8.3.1.3.3.2	Plan additional activities to determine the thermodynamic properties of zeolites
Comment 31: SP 8.3.1.3.6.1	No determination of speciation, kinetics, and matrix diffusion under fracture flow conditions
Comment 33: SP 8.3.1.4.2.3	Engineering rk parameters not adequately integrated into plan to develop 3-D rk characteristics model
Comment 34: SP 8.3.1.9.2.1	Integrated drilling program: use of data in studies; uncertainty in core retrieval
Comment 55: SP 8.3.1.15.1.3 SP 8.3.1.15.1.5	Adequacy of statistical approach for thermal/mechanical properties
Comment 56: 8.3.1.15.1.7 8.3.1.15.1.8	Model validation for thermal/mechanical properties testing
Comment 59: SP 8.3.1.17.4.7	Clarify studies and sequencing of geophysics/geologic activities
Comment 61: SP 8.3.1.17.2.1	Assumption future faulting will follow old patterns
Comment 62: SP 8.3.1.17.2.1	Use of standoff distances from faults for surface facilities
Comment 68: SP 8.3.1.17.4.12	Adequacy of treatment of detachment faults
Comment 69: 8.3.1.17.4.12	Where is data on NW trending faults synthesized
Comment 96: SP 8.3.1.3.4.1/3 SP 8.3.1.3.5.1	Adequacy of KD equations for modeling heterogeneous medium
Question 8: SP 8.3.1.4.3.1 SP 8.3.1.4.3.2	Uncertainty in 3-D rk characteristics model of the site

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SCA Open item ID	Description
Question 9: SP 8.3.1.4.3.1	Determine multiple properties from same samples
Question 59: SP 8.3.1.15.1.6	Provide basis for relatively short duration of thermal tests