



## Department of Energy

Washington, DC 20585

QA: N/A

DOCKET NUMBER: 63-001

January 7, 2010

**ATTN: Document Control Desk**

John H. (Jack Sulima), Project Manager  
Project Management Branch B  
Division of High-Level Waste Repository Safety  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
EBB-2B2  
11545 Rockville Pike  
Rockville, MD 20852-2738

**YUCCA MOUNTAIN - REQUEST FOR ADDITIONAL INFORMATION - SAFETY EVALUATION REPORT, VOLUME 3 - POSTCLOSURE CHAPTER 2.2.1.3.2, MECHANICAL DISRUPTION OF ENGINEERED BARRIERS, 3RD SET - (DEPARTMENT OF ENERGY'S SAFETY ANALYSIS REPORT SECTION 2.3.4)**

Reference: Ltr, Sulima to Williams, dtd 12/14/2009, "Yucca Mountain – Request for Additional Information – Safety Evaluation Report, Volume 3 – Postclosure Chapter 2.2.1.3.2, Mechanical Disruption of Engineered Barriers, 3rd Set – (Department of Energy's Safety Analysis Report Section 2.3.4)"

The purpose of this letter is to transmit the U.S. Department of Energy's (DOE) responses to four (4) of the nine (9) Requests for Additional Information (RAIs) identified in the above-referenced letter. The responses to RAI Numbers 5, 6, 8, and 9 are provided as enclosures to this letter. DOE expects to submit the remaining RAI responses on or before January 27, 2010.

Most of the DOE references cited in the RAI responses have previously been provided with the License Application (LA), the LA update, or as part of previous RAI responses. The reference provided with a previous RAI response is identified within the enclosed response reference section. The DOE reference cited in the RAI responses, which has not been previously provided to the Nuclear Regulatory Commission, is included with this submittal.

There are no commitments in the enclosed RAI responses. If you have any questions regarding this letter, please contact me at (202) 586-9620, or by email to [jeff.williams@rw.doe.gov](mailto:jeff.williams@rw.doe.gov).

Jeffrey R. Williams, Supervisor  
Licensing Interactions Branch  
Regulatory Affairs Division  
Office of Technical Management

OTM: CJM-0209



Enclosures (5):

1. Response to RAI Volume 3, Chapter 2.2.1.3.2, Set 3, Number 5
2. Response to RAI Volume 3, Chapter 2.2.1.3.2, Set 3, Number 6
3. Response to RAI Volume 3, Chapter 2.2.1.3.2, Set 3, Number 8
4. Response to RAI Volume 3, Chapter 2.2.1.3.2, Set 3, Number 9
5. SNL (Sandia National Laboratories) 2007. *Mechanical Assessment of Degraded Waste Packages and Drip Shields Subject to Vibratory Ground Motion*. MDL-WIS-AC-000001 REV 00 ERD 03. Las Vegas, Nevada: Sandia National Laboratories.  
ACC: DOC.20090917.0002.

cc w/encls:

J. C. Chen, NRC, Rockville, MD  
J. R. Cuadrado, NRC, Rockville, MD  
J. R. Davis, NRC, Rockville, MD  
R. K. Johnson, NRC, Rockville, MD  
A. S. Mohseni, NRC, Rockville, MD  
N. K. Stablein, NRC, Rockville, MD  
D. B. Spitzberg, NRC, Arlington, TX  
J. D. Parrott, NRC, Las Vegas, NV  
L. M. Willoughby, NRC, Las Vegas, NV  
Jack Sulima, NRC, Rockville, MD  
Christian Jacobs, NRC, Rockville, MD  
Lola Gomez, NRC, Rockville, MD  
W. C. Patrick, CNWRA, San Antonio, TX  
Budhi Sagar, CNWRA, San Antonio, TX  
Bob Brient, CNWRA, San Antonio, TX  
Rod McCullum, NEI, Washington, DC  
B. J. Garrick, NWTRB, Arlington, VA  
Bruce Breslow, State of Nevada, Carson City, NV  
Alan Kalt, Churchill County, Fallon, NV  
Irene Navis, Clark County, Las Vegas, NV  
Ed Mueller, Esmeralda County, Goldfield, NV  
Ron Damele, Eureka County, Eureka, NV  
Alisa Lembke, Inyo County, Independence, CA  
Chuck Chapin, Lander County, Battle Mountain, NV  
Connie Simkins, Lincoln County, Pioche, NV  
Linda Mathias, Mineral County, Hawthorne, NV  
Darrell Lacy, Nye County, Pahrump, NV  
Jeff VanNeil, Nye County, Pahrump, NV  
Joe Kennedy, Timbisha Shoshone Tribe, Death Valley, CA  
Mike Simon, White Pine County, Ely, NV  
K. W. Bell, California Energy Commission, Sacramento, CA  
Barbara Byron, California Energy Commission, Sacramento, CA  
Susan Durbin, California Attorney General's Office, Sacramento, CA  
Charles Fitzpatrick, Egan, Fitzpatrick, Malsch, PLLC

EIE Document Components:

|   |          |
|---|----------|
| 001_Trans_Ltr_3.2.2.1.3.2_Set_3_RAI_5_6_8_9.pdf   |          |
| 002_Encl_3.2.2.1.3.2_Set_3_RAI_5_6_8_9.pdf        | 7,047 KB |
| 003_DOC.20090917.0002_MDL-WIS-AC-000001_R0_E3.pdf | 785 KB   |