

October 14, 2004

Mr. Joseph Ziegler, Director
Office of License Application and Strategy
U.S. Department of Energy
Office of Repository Development
1551 Hillshire Drive
North Las Vegas, NV 89134-6321

SUBJECT: U.S. DEPARTMENT OF ENERGY'S DESCRIPTION OF PLANS FOR
RETRIEVAL OF RADIOACTIVE WASTE AT A GEOLOGICAL REPOSITORY
AT YUCCA MOUNTAIN, NEVADA

Dear Mr. Ziegler:

This letter is in response to the U.S. Department of Energy's (DOE's) letter of August 17, 2004, informing the U.S. Nuclear Regulatory Commission (NRC) of DOE's approach to address retrieval in a potential license application (LA) for a nuclear waste repository at the Yucca Mountain site. As you noted in your letter, a description of plans for retrieval and alternate storage must be included in the LA as required by 10 CFR 63.21(c)(7). Your letter also clearly acknowledges the need for the repository design to preserve the option of waste retrieval as required by 10 CFR 63.111(e). DOE should provide sufficient details related to retrieval in the LA in order for NRC staff to be able to determine whether the proposed repository design in a potential LA will preserve the option of retrieval of any or all the emplaced waste, as stated in the preclosure performance objective (10 CFR 63.111(e)).

Guidance concerning the review methods and acceptance criteria that may be employed by the reviewers of a potential DOE LA is detailed in the Yucca Mountain Review Plan (Section 2.1.2). Essentially, DOE needs to design (and build) the proposed repository in such a way that the retrieval option is not rendered impractical or impossible. In order to achieve this, DOE needs to consider the potential to retrieve any or all of the waste and factor such a possibility into the design of the repository. For example, removing the backfill from an emplacement tunnel may be much more involved and complicated than backfilling the tunnel, and may not simply be a 'reversal' of the backfilling operation. The DOE Safety Analysis Report should also include a sufficiently detailed description of its plans for the alternate storage of the radioactive waste including, availability of space and a concept of operations for potential surface storage following retrieval.

J. Ziegler

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The NRC staff agrees with DOE that much more detailed and specific plans will be needed before an actual retrieval operation, if and when it becomes necessary, as stated in your letter. If you have any questions on this matter, please contact Dr. Mysore Nataraja of my staff, at (301) 415-6695 or via e-mail at msn1@nrc.gov.

Sincerely,

/RA/

C. William Reamer, Director
Division of High-Level Waste Repository Safety
Office of Nuclear Material Safety
and Safeguards

cc: See attached list

Letter to J. Ziegler from C.W. Reamer, dated: _____
cc:

A. Kalt, Churchill County, NV	A. Elzeftawy, Las Vegas Paiute Tribe
R. Massey, Churchill/Lander County, NV	J. Treichel, Nuclear Waste Task Force
I. Navis, Clark County, NV	W. Briggs, Ross, Dixon & Bell
E. von Tiesenhausen, Clark County, NV	M. Chu, DOE/Washington, D.C.
G. McCorkell, Esmeralda County, NV	G. Runkle, DOE/Washington, D.C.
R. Damele, Eureka County, NV	C. Einberg, DOE/Washington, D.C.
A. Johnson, Eureka County, NV	S. Gomberg, DOE/Washington, D.C.
A. Remus, Inyo County, CA	W. J. Arthur, III , DOE/ORD
M. Yarbro, Lander County, NV	R. Dyer, DOE/ORD
S. Hafen, Lincoln County, NV	J. Ziegler, DOE/ORD
M. Baughman, Lincoln County, NV	A. Gil, DOE/ORD
L. Mathias, Mineral County, NV	W. Boyle, DOE/ORD
L. Bradshaw, Nye County, NV	D. Brown, DOE/OCRWM
M. Maher, Nye County, NV	S. Mellington, DOE/ORD
D. Hammermeister, Nye County, NV	C. Hanlon, DOE/ORD
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T. Story, NV Congressional Delegation	S. Cereghino, BSC
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S. Joya, NV Congressional Delegation	J. Mitchell, BSC
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R. Loux, State of NV	M. Voegele, BSC/SAID
S. Frishman, State of NV	B. Helmer, Timbisha Shoshone Tribe
S. Lynch, State of NV	R. Boland, Timbisha Shoshone Tribe
P. Guinan, Legislative Counsel Bureau	R. Arnold, Pahrump Paiute Tribe
J. Pegues, City of Las Vegas, NV	J. Birchim, Yomba Shoshone Tribe
M. Murphy, Nye County, NV	R. Holden, NCAE

cc: (Continued)

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R. McCullum, NEI

S. Kraft, NEI

J. Kessler, EPRI

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R. Craig, USGS

W. Booth, Engineering Svcs, LTD

L. Lehman, T-Reg, Inc.

S. Echols, Esq

C. Marden, BNFL, Inc.

J. Bacoach, Big Pine Paiute Tribe of the
*Owens Valley

P. Thompson, Duckwater Shoshone Tribe

T. Kingham, GAO

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E. Hiruo, Platts Nuclear Publications

G. Hernandez, Las Vegas Paiute Tribe

K. Finrock, NV Congressional Delegation

P. Johnson, Citizen Alert

A. Capoferri, DOE/ Washington, DC

J. Williams, DOE/Washington, DC

A. Robinson, Robinson-Seidler

M. Dayton, City of Las Vegas

D. Wilson, Sen. Reid's Office

C. Meyers, Moapa Paiute Indian Tribe

R. Wilder, Fort Independence Indian Tribe

D. Vega, Bishop Paiute Indian Tribe

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J. Leeds, Las Vegas Indian Center

J. C. Saulque, Benton Paiute Indian Tribe

C. Bradley, Kaibab Band of Southern Paiutes

R. Joseph, Lone Pine Paiute-Shoshone Tribe

L. Tom, Paiute Indian Tribes of Utah

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D. Buckner, Ely Shoshone Tribe

V. Guzman, Walker River Paiute

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D. Crawford, Inter-Tribal Council of NV

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M. Henderson, Cong. J. Gibbon's Office

B. Vonderheide, Cong. J. Gibbon's Office

D. Duquette, NWTRB

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Sincerely,

/RA/

C. William Reamer, Director
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Office of Nuclear Material Safety
and Safeguards

cc: See attached list

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*See previous concurrence

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