

April 13, 2005

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

SUBJECT: PRE-LICENSING EVALUATION OF KEY TECHNICAL ISSUE AGREEMENTS:  
EVOLUTION OF THE NEAR-FIELD ENVIRONMENT 3.05 AND 4.05;  
RADIONUCLIDE TRANSPORT 1.03 and 3.07; AND GENERAL 1.01,  
COMMENTS 43 AND 46

Dear Mr. Ziegler:

In a letter dated October 3, 2003, the U.S. Department of Energy (DOE) submitted a report titled "Technical Basis Document No. 8: Colloids," which contains DOE's responses to several agreement items reached between DOE and the U.S. Nuclear Regulatory Commission (NRC) and pertaining to the following key technical issues (KTI): Evolution of the Near-Field Environment (ENFE), Radionuclide Transport (RT), and Total System Performance Assessment and Integration. The staff review of DOE's responses to the agreement items is based on information requests by NRC that are documented in the summary highlights of DOE and NRC technical exchange and management meetings. This report provides a summary of NRC staff evaluation of DOE responses to Comments 46 of Agreement General (GEN) 1.01 and the following agreement items: ENFE.3.05 and 4.05, RT.1.03, and 3.07. The NRC Staff did not review Agreement GEN.1.01, Comment 43 since it was to be addressed only if DOE adopted a "low temperature" operating mode, which is not currently planned, and therefore, will not be discussing any further in this letter. The staff evaluation of the remaining DOE responses in "Technical Basis Document No. 8: Colloids" will be provided separately.

The NRC reviewed DOE's KTI agreement responses within the report to determine whether any aspect of the agreements was excluded from the response. No omissions were found. Based on our review of the information provided, NRC staff considers these agreements and comments closed and has no further questions at this time. Results of our review are provided in the enclosure to this letter. Although these agreements are considered closed, please note that NRC will make its final determination on any issues relevant to licensing during review of any potential License Application.

In accordance with 10 CFR 2.390 of the NRC's "Rules of General Applicability," a copy of this letter and its enclosure will be available electronically in the NRC Public Document Room or from the Publicly Available Records component of the NRC's document system (ADAMS). The ADAMS package accession number is ML050470204. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

J. Ziegler

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If you have any questions regarding this matter, please contact Daniel S. Rom, of my staff at (301) 415-6704 or by e-mail at [DSR@nrc.gov](mailto:DSR@nrc.gov).

Sincerely,

/RA/

Lawrence E. Kokajko, Deputy Director  
Division of High-Level Waste Repository Safety  
Office of Nuclear Material Safety  
and Safeguards

Enclosure:

The U.S. NRC NMSS Review of the U.S. DOE's KTI Agreement Responses Related to the Potential Geologic Repository at YM, NV: Colloid-Related Agreements ENFE.3.05 and 4.05, RT.1.03 and 3.07, and GEN.1.01, Comments 43 and 46

cc: See attached list.

Letter to J. Ziegler from L. Kokajko, dated: April 13, 2005

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.
L. Marshall, Eureka County, NV	S. Gomberg, DOE/Washington, D.C.
A. Johnson, Eureka County, NV	W. J. Arthur, III , DOE/ORD
A. Remus, Inyo County, CA	R. Dyer, DOE/ORD
M. Yarbrow, Lander County, NV	J. Ziegler, DOE/ORD
S. Hafen, Lincoln County, NV	A. Gil, DOE/ORD
M. Baughman, Lincoln County, NV	W. Boyle, DOE/ORD
L. Mathias, Mineral County, NV	D. Brown, DOE/OCRWM
D. Swanson, Nye County, NV	S.A. Wade,, DOE/ORD
M. Maher, Nye County, NV	C. Hanlon, DOE/ORD
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J. Ray, NV Congressional Delegation	N. Hunemuller, DOE/ORD
B. J. Vonderheide, NV Congressional Delegation	R. L. Craun, DOE/ORD
T. Story, NV Congressional Delegation	M. Mason, BSC
R. Herbert, NV Congressional Delegation	S. Cereghino, BSC
M. Murphy	N. Williams, BSC
S. Joya, NV Congressional Delegation	E. Mueller, BSC
K. Kirkeby, NV Congressional Delegation	J. Mitchell, BSC
R. Loux, State of NV	D. Beckman, BSC/B&A
S. Frishman, State of NV	M. Voegele, BSC/SAID
S. Lynch, State of NV	B. Helmer, Timbisha Shoshone Tribe
P. Guinan, Legislative Counsel Bureau	R. Boland, Timbisha Shoshone Tribe
R. Clark, EPA	R. Arnold, Pahrump Paiute Tribe
R. Anderson, NEI	J. Birchim, Yomba Shoshone Tribe

cc: (Continued)

R. McCullum, NEI

S. Kraft, NEI

J. Kessler, EPRI

D. Duncan, USGS

R. Craig, USGS

W. Booth, Engineering Svcs, LTD

C. Marden, BNFL Inc.

J. Bacooh, Big Pine Paiute Tribe of the Owens Valley

P. Thompson, Duckwater Shoshone Tribe

T. Kingham, GAO

D. Feehan, GAO

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

L. Lehman, T-REG, Inc.

J. Donnell, DOE/ORD

R. L. Craun, OPM&E

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R. Murray, DOE/ORD

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R. Wilder, Fort Independence Indian Tribe

D. Vega, Bishop Paiute Indian Tribe

J. Egan, Egan, Fitzpatrick, Malsch, PLLC

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

E. Smith, Chemehuevi Indian Tribe

D. Buckner, Ely Shoshone Tribe

V. Guzman, Walker River Paiute

D. Eddy, Jr., Colorado River Indian Tribes

H. Jackson, Public Citizen

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I. Zabarte, Western Shoshone National Council

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L. Alfano, Lincoln County

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

D. Duquette, NWTRB

J. Ziegler

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If you have any questions regarding this matter, please contact Daniel S. Rom, of my staff at (301) 415-6704 or by e-mail at [DSR@nrc.gov](mailto:DSR@nrc.gov).

Sincerely,

/RA/

Lawrence E. Kokajko, Deputy Director  
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Office of Nuclear Material Safety  
and Safeguards

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cc: See attached list.

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