



Department of Energy
Office of Civilian Radioactive Waste Management
Office of Repository Development
1551 Hillshire Drive
Las Vegas, NV 89134-6321

QA: N/A
Project No. WM-00011

JAN 30 2004

OVERNIGHT MAIL

ATTN: Document Control Desk
Chief, High-Level Waste Branch DWM/NMSS
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

**REFERENCES SUPPORTING KEY TECHNICAL ISSUE (KTI) AGREEMENT
RESOLUTION**

References: (1) Ltr, Schlueter to Ziegler, dtd 12/23/03
(2) Ltr, Ziegler to Chief, High-Level Waste Branch (NRC), dtd 12/23/03

In your letter of December 23, 2003 (Reference 1), you requested to be informed of the U.S. Department of Energy's (DOE) plans for how and when supporting documentation referenced within our recent responses to the KTI agreements would be made available to the U.S. Nuclear Regulatory Commission (NRC). You also provided a list of specific references that your staff has determined necessary for completion of NRC staff review of recently submitted agreement responses.

Our letter of December 23, 2003 (Reference 2) provided DOE's general plans for making references available to NRC, which included posting primary references, such as Analysis and Model Reports, to the Office of Civilian Radioactive Waste Management (OCRWM) website as they are approved. This website is accessible by NRC, NRC contractors, and external parties. We also stated that, consistent with DOE policy, draft and preliminary references are not approved for public release, but could be made available for NRC and NRC contractor representatives review in the NRC Onsite Representative office, or at another mutually agreed upon offsite location.

This letter provides a more detailed response as to the status and projected availability of the references requested by NRC, and also provides additional information as to actions DOE is taking to improve future agreement responses, as follows:

- The enclosed table provides a specific status for each of the 50 requested references. As of the date of this letter, 21 references are publicly available [20 are posted to the OCRWM website (three of which are also available in the NRC ADAMS system) and one is available on the U.S. Geological Survey website]. The remaining requested references will be made available when approved for external release, currently estimated by March 31, 2004. The requested references will be made available by transmitting them to you under DOE cover letter, and also by posting the documents on the OCRWM website where appropriate.

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- To expedite the resolution of NRC staff questions on the Technical Basis Documents and KTI agreement responses because of references that are not yet available, DOE will work with NRC staff to identify the specific questions or information needed from the references to complete NRC's review. Where feasible, and if it would result in significant improvement in the availability date, we will extract this information from the draft references, accomplish appropriate reviews, and transmit it to NRC under separate cover. We believe that this approach is more responsive and is a more efficient way to resolve NRC staff questions than just providing the requested referenced documents. And, as previously stated, these references can also be made available for review in the interim in the NRC Onsite Representative office, or at another mutually agreed upon location, in accordance with the *Agreement Between DOE/OCRWM and NRC/NMSS Regarding Prelicensing Interactions*, dated November 16, 1998.
- For the Technical Basis Documents and KTI agreement responses remaining to be submitted, to the extent practicable, these will be prepared in a manner that does not rely on references that are not currently available. Alternatively, the Technical Basis Documents and KTI agreement responses can be held until such time that associated references have been approved. These limited exceptions will be evaluated on a case-by-case basis and discussed with you prior to submittal to take your concerns and preferences into consideration.
- Additionally, to better facilitate your staff's review of the agreement responses, we will provide specificity in the reference citations in future Technical Basis Documents and KTI agreement responses, and/or provide sufficient information such that the need to refer to references is minimized to the extent practicable.

There are no new regulatory commitments in the body of, or enclosure to, this letter. If you would like to discuss this matter further, or if you have any questions, please contact me at (702) 794-5567 or April V. Gil at (702) 794-5578.


Joseph D. Ziegler, Director
Office of License Application and Strategy

OLA&S:TCG-0544

Enclosure:
Status of TBDoc References from 12/23/03
NRC Letter

cc w/encl:
G. P. Hatchett, NRC, Rockville, MD
D. D. Chamberlain, NRC, Arlington, TX
D. B. Spitzberg, NRC, Arlington, TX
R. M. Latta, NRC, Las Vegas, NV
B. J. Garrick, ACNW, Rockville, MD
H. J. Larson, ACNW, Rockville, MD
W. C. Patrick, CNWRA, San Antonio, TX

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cc w/encl: (continued)

Budhi Sagar, CNWRA, San Antonio, TX
W. D. Barnard, NWTRB, Arlington, VA
J. R. Egan, Egan & Associates, McLean, VA
J. H. Kessler, EPRI, Palo Alto, CA
M. J. Apted, Monitor Scientific, LLC, Denver, CO
Rod McCullum, NEI, Washington, DC
R. R. Loux, State of Nevada, Carson City, NV
Pat Guinan, State of Nevada, Carson City, NV
Alan Kalt, Churchill County, Fallon, NV
Irene Navis, Clark County, Las Vegas, NV
George McCorkell, Esmeralda County, Goldfield, NV
Leonard Fiorenzi, Eureka County, Eureka, NV
Andrew Remus, Inyo County, Independence, CA
Michael King, Inyo County, Edmonds, WA
Mickey Yarbro, Lander County, Battle Mountain, NV
Spencer Hafen, Lincoln County, Pioche, NV
Linda Mathias, Mineral County, Hawthorne, NV
L. W. Bradshaw, Nye County, Pahrump, NV
Mike Simon, White Pine County, Ely, NV
R. I. Holden, National Congress of American Indians, Washington, DC

cc w/o encl:

C. W. Reamer, NRC, Rockville, MD
A. C. Campbell, NRC, Rockville, MD
L. L. Campbell, NRC, Rockville, MD
J. D. Parrott, NRC, Las Vegas, NV
N. K. Stablein, NRC, Rockville, MD

Status of TDoc References from 12/23/03 NRC Letter

ENCLOSURE

Reference	Status	Comments
TBDoc 12: BIOSPHERE		
Biosphere Model Report. MDL-MGR-MD-00001 Rev. 00	On OCRWM Web Page Sent to NRC 21 Jan 04	
Inhalation Exposure Input Parameters for the Biosphere Model. ANL-MGR-MD-000005 Rev. 02	On OCRWM Web Page Sent to NRC 21 Jan 04	
Characteristics of the Receptor for the Biosphere Model. ANL-MGR-MD-00005 Rev. 02	On OCRWM Web Page Sent to NRC 21 Jan 04	
Agricultural and Environmental Input Parameters for the Biosphere Model. ANL-MGR-MD-000006 Rev. 01	On OCRWM Web Page Sent to NRC 21 Jan 04	
Environmental Transport Input Parameters for the Biosphere Model. ANL-MGR-MD-000007 Rev. 01	On OCRWM Web Page Sent to NRC 21 Jan 04	
Soil-Related Input Parameters for the Biosphere Model. ANL-NBS-MD-000009 Rev. 01	On OCRWM Web Page Sent to NRC 21 Jan 04	
Nominal Performance Biosphere Dose Conversion Factor Analysis. ANL-MGR-MD-000009 Rev. 02	On OCRWM Web Page Sent to NRC 21 Jan 04	
Disruptive Event Biosphere Dose Conversion Factor Analysis. ANL-MGR-MD-000003 Rev. 02	On OCRWM Web Page Sent to NRC 21 Jan 04	
Disruptive Event Biosphere Dose Conversion Factor Sensitivity Analysis. ANL-MGR-MD-000004 Rev. 00	On OCRWM Web Page Sent to NRC 21 Jan 04	In ADAMS - ML003720791
Input Parameter Values for External and Inhalation Radiation Exposure Analysis. ANL-MGR-MD-000001 Rev. 01	On OCRWM Web Page Sent to NRC 21 Jan 04	In ADAMS - ML010400326
Biosphere Process Model Report. TDR-MGR-MD-000002 Rev. 00 ICN 01	On OCRWM Web Page Sent to NRC 21 Jan 04	In ADAMS - ML003737529
TBDoc 8: COLLOIDS		
Waste Form and In-Drift Colloids-Associated Radionuclide Concentrations: Abstraction and Summary. MDL-EBS-PA-000004 Rev. 00	Expect to send to NRC by 1 Mar 04 On OCRWM Web Page	
Drift-Scale Coupled Processes (DST and THC Seepage) Models. MDL-NBS-HS-000001 Rev. 02	Expect to send to NRC by 1Mar 04	

Status of TBDoc References from 12/23/03 NRC Letter

Reference	Status	Comments
Features, Events, and Processes in UZ Flow and Transport. ANL-NBS-MD-000001 Rev. 02	Expect to send to NRC by 1 Mar 04	
EBS Radionuclide Transport Abstraction. ANL-WIS-PA-000001 Rev. 01F	Expect to send Rev 01 to NRC by 31 Mar 04	
Radionuclide Transport Models under Ambient Conditions. MDL NBS-HS-000008 Rev. 01A	Expect to send Rev 01 to NRC by 1Mar 04	
Saturated Zone Colloid Transport. ANL-NBS-HS-000031 Rev. 01A	Expect to send Rev 01 to NRC by 1Mar 04	
SZ Flow and Transport Model Abstraction. MDL-NBS-HS-000021 Rev. 00	Expect to send Rev 00 to NRC by 1Mar 04	Rev. 00A and Rev. 00 were referenced in the Colloid TBDoc and appendices. Reference to Rev 01 should have been Rev. 00.
Mertz, C.J.; Finch, R.J.; Fortner, J.A.; Jerden, J.L., Jr.; Yifen, T.; Cunnane, J.C.; and Finn, P.A. 2003. Argonne National Laboratory.	Expect to send copy to NRC by 1 Mar 04	
In-Package Chemistry Abstraction. ANL-EBS-MD-00037 Rev. 02	Expect to send Rev 02 to NRC by 1Mar 04	Reference to Rev 01D I Appendix H should have been Rev 02.
Particle Tracking Model and Abstraction of Transport Processes. MDL-NBS-HS-00020 Rev. 00A	Expect to send Rev 00 to NRC by 1 Mar 04	The reference in the TBDoc to Rev. 00 should have been Rev. 00A.
TBDoc1: SATURATED ZONE FLOW & TRANSPORT		
Site-Scale Saturated Zone Transport Model. MDL-NBS-HS-000010 Rev. 01A	Expect to send Rev 01 to NRC by 1Mar 04	
Saturated Zone Colloid Transport. ANL-NBS-HS-000031 Rev. 01A	Expect to send Rev 01 to NRC by 1Mar 04	
Site-Scale Saturated Zone Flow Model. MDL-NBS-HS-000011 Rev. 01A	Expect to send Rev 01 to NRC by 1Mar 04	

Status of TDoc References from 12/23/03 NRC Letter

Reference	Status	Comments
SZ Flow and Transport Model Abstraction. MDL-NBS-HS-000021 Rev. 00A	Expect to send Rev 00 to NRC by 1Mar 04 On OCRWM Web Page	
Saturated Zone In-Situ Testing. ANL-NBS-HS-000039 Rev. 00A	Expect to send Rev 00 to NRC by 1 Mar 04	
Geochemical and Isotopic Constraints on Groundwater Flow Directions and Magnitudes. ANL-NBS-HS-000021 Rev. 01A	Expect to send Rev 01 to NRC by 1 Mar 04	
Features, Events, and Processes in SZ Flow and Transport. ANL-NBS-MD-000002 Rev. 02A	Expect to send Rev 02 to NRC by 1 Mar 04	
Site-Scale Saturated Zone Flow Model. MDL-NBS-HS-000011 Rev. 01A Pre-Check Copy	Expect to send Rev 01 to NRC by 1Mar 04	Two different versions of the Draft were referenced in the TDoc.
B.5.3 Source Data Listed by Data Tracking Number		
GS010908314221.001. Geologic Map of the Yucca Mountain Region, 1:50,000, by C.J. Potter, R.P. Dickerson, D.S. Sweetkind, R.M. Drake II, C.A. San Juan, E.M. Taylor, C.J. Fridrich and W.C. Day.	This map is available in multiple formats online at: http://pubs.usgs.gov/imap/i-2755/	
GS011008314211.001. Interpretation of the Lithostratigraphy in Deep Boreholes NC-EWDP-19D1 and NC-EWDP-2DB Nye County Early Warning Drilling Program.	Expect to send to NRC by 1 Mar 04	
GS021008312332.002. Hydrogeologic Framework Model for the Saturated-Zone Site-Scale Flow and Transport Model, Version YMP_9_02.	Expect to send to NRC by 1 Mar 04	
GS030108314211.001. Interpretation of the Lithostratigraphy in Deep Boreholes NC-EWDP-18P, NC-EWDP-22SA, NC-EWDP-10SA, NC-EWDP-23P, NC-EWDP-19IM1A, and NC-EWDP-19IM2A, Nye County Early Warning Drilling Program, Phase III.	Expect to send to NRC by 1 Mar 04	

Status of TBDoc References from 12/23/03 NRC Letter

Reference	Status	Comments
GS030408314211.002. Subsurface Geologic Interpretations Along Cross Sections Nye-1, Nye-2, and Nye-3, Southern Nye County, Nevada -- 2002.	Expect to send to NRC by 1 Mar 04	
TBDoc 3, WATER SEEPING INTO DRIFTS		
Abstraction Of Drift Seepage. MDL-NBS-HS-000019 Rev 00	Expect to send to NRC by 1Mar 04 On OCRWM Web Page	
Drift-Scale Coupled Processes (DST and TH Seepage) Models. MDL-NBS-HS-000015 Rev. 02C	Expect to send Rev 02 to NRC by 31 Mar 04	Reference to Rev 00C should have been Rev 02C
UZ Flow Models And Submodels. MDL-NBS-HS-000006 Rev. 01	Expect to send to NRC by 1Mar 04 On OCRWM Web Page	
Drift Degradation Analysis. ANL-EBS-MD-000027 Rev. 02	Expect to send to NRC by 1 Mar 04	This document was already sent to NRC (letter dated 12/16/03, Ziegler to DCD)
Seepage Calibration Model And Seepage Testing Data. MDL-NBS-HS-000004 Rev. 02	Expect to send to NRC by 1Mar 04 On OCRWM Web Page	
In Situ Field Testing Of Processes. ANL-NBS-HS-000005 Rev. 02B	Expect to send Rev 02 to NRC by 1 Mar 04	
Drift Scale THM Model. MDL-NBS-HS-000017 Rev. 00	Expect to send to NRC by 1Mar 04 On OCRWM Web Page	
Drift-Scale Coupled Processes (DST and THC Seepage) Models. MDL-NBS-HS-000001 Rev. 02	Expect to send to NRC by 1Mar 04 On OCRWM Web Page	
Seepage Model For PA Including Drift Collapse. MDL-NBS-HS-000002 Rev. 02	Expect to send to NRC by 1Mar 04 On OCRWM Web Page	
Thermal Testing Measurements Report. ANL-NBS-HS-000041 Rev. 00	Expect to send to NRC by 1Mar 04 On OCRWM Web Page	

Status of TDoc References from 12/23/03 NRC Letter

Reference	Status	Comments
TDoc 13: VOLCANIC EVENTS		
Characterize Eruptive Processes at Yucca Mountain, Nevada. ANL-MGR-GS-000002 Rev. 01C	Expect to send to NRC by 1 Mar 04	
Atmospheric Dispersal and Deposition of Tephra from a Potential Volcanic Eruption at Yucca Mountain. MSL-MGR-GS-000002 Rev. 00D	Expect to send to NRC by 1 Mar 04	
Igneous Intrusion Impacts on Waste Packages and Waste Forms. MDL-EBS-GS-000002 Rev. 00	Expect to send to NRC by 1 Mar 04	
Dike/Drift Interactions. MDL-MGR-GS-000005 Rev. 00E	Expect to send Rev 00 to NRC by 1 Mar 04	
Number of Waste Packages Hit by Igneous Intrusion. ANL-MGR-GS-000002 Rev. 00C	Expect to send Rev 00 to NRC by 1 Mar 04	
Characterize Framework for Igneous Activity at Yucca Mountain, Nevada. ANL-MGR-GS-00001 Rev. 01C	Expect to send Rev 01 to NRC by 1 Mar 04	