

MAY 15 1984

MEMORANDUM FOR: Robert E. Browning, Director  
 Division of Waste Management

FROM: Michael J. Bell, Deputy Director  
 Division of Waste Management

SUBJECT: MINUTES OF MAY 3, 1984 MEETING WITH DOE TO DISCUSS  
 COMMISSION'S PRELIMINARY DECISION ON THE DOE SITING  
 GUIDELINES

The minutes of the subject meeting are enclosed.

Original Signed by  
MICHAEL J. BELL

Michael J. Bell, Deputy Director  
Division of Waste Management

Enclosures: Minutes

cc: Carol Hanlon, DOE

WM Record File

WM Project

Docket No.

PDR

LPDR

Distribution:

(Return to WM, 623-SS)

DIST

WM s/r 113

NMSS r/f

MBell

RBoyle

CPflum & r/f

JBunting

PAItoniare

MKnapp

JTGreeves

LHigginbotham

HMiller

SMCoplan

JLinehan

JKennedy

DMattson

JWolf

FCameron

*Handwritten:* WMRF R/F  
CF  
PDR

8406180139 840515  
PDR WASTE  
WM-1 PDR

*Handwritten:* PDR

IFC	WMP	WMP	WMP	WM		
IAME	CPFLUM:jd	RBOYLE	HMILLER	MBELL		
DATE	84/05/07	05/11/84	05/13/84	05/15/84		

MINUTES OF THE MAY 3, 1984 MEETING WITH DOE  
ON THE COMMISSION'S PRELIMINARY DECISION ON  
THE DOE SITING GUIDELINES

On May 3, 1984 the NRC staff and DOE concluded their meetings on the Commission's preliminary decision on the DOE siting guidelines. Lists of meeting participants (Enclosure 1) and observers (Enclosure 2) are enclosed. At a previous meeting held on April 18, 1984, DOE distributed proposed guidelines to the NRC staff. The NRC staff reviewed this revision and returned a mark-up and comments (Enclosure 3) to DOE on April 27, 1984. After considering NRC staff comments, DOE sent another draft of proposed guidelines to the NRC staff on May 1, 1984 (Enclosure 4). This latest draft of the guidelines was distributed to the observers at the May 3 meeting along with the NRC mark-up of the previous draft.

Dr. Michael Bell, NRC, opened the meeting. Dr. Bell announced that he would first like to discuss the guideline revisions and then discuss the public comments on the Commission's preliminary decision.

With respect to Appendix D of the proposed guidelines, the NRC staff suggested word changes in the opening paragraph that would require DOE to make a stronger commitment to use the kinds of information in Appendix D as a basis for nominating and recommending sites for characterization. The NRC staff also suggested that DOE acknowledge, in the same paragraph, the uncertainties associated with developing conceptual models for the various guidelines. DOE agreed to make the changes.

On page 12 of Subpart B of the proposed guidelines, DOE identifies the guidelines that do not require site characterization as a prerequisite for their application. The NRC staff noted that, according to Appendix C, DOE would make the same level of finding on these guidelines as it would on those guidelines that require site characterization. The NRC staff suggested that DOE make a higher level finding on guidelines that do not require site characterization as a prerequisite for their application.

DOE responded that it could not make a definitive finding on all the guidelines that do not require site characterization prior to nominating sites. DOE agreed, however, to evaluate whether the level of "findings" they would make on disqualifying conditions that do not require site characterization as a prerequisite for their application could be elevated. DOE also agreed to clarify that the term "site characterization" on page 12 of Subpart B refers to the definition of site characterization in the NHPA.

On page 13 of Subpart B, the NRC staff requested that DOE state that the environmental assessments, prepared for each nominated site, will contain or reference the information found in Appendix D. DOE agreed.

On page 14 of Subpart B, the proposed guidelines state that the Secretary shall make a preliminary determination that sites, selected for characterization, are suitable for development of repositories under the guidelines that do not require site characterization as a prerequisite for their application. The NRC staff asked if this preliminary determination was meant to satisfy the provisions at §114(f) of the NHPA. If so, the staff recommended that the determination be based on all guidelines and not just those that could be applied before site characterization.

DOE stated that the determination would be used to satisfy the requirement at §114(f) of the NHPA and that the determination would be based on all guidelines. However, as an alternative, DOE is considering the deletion of its reference to the preliminary determination from the guidelines.

On page 6 of Subpart C, DOE changed the wording of the disqualifying condition for geohydrology from the previous draft. The condition now states that DOE will consider groundwater pathways "of likely and significant radionuclide travel." The NRC staff questioned whether the word "significant" would make the condition inconsistent with the NRC performance objective in 10 CFR Part 60.

DOE responded that it would not delete the word "significant" and explained why. By qualifying the groundwater pathway as "significant," DOE stated that it would not have to disqualify sites where pathways carry a very small volume of groundwater. In addition, the word "significant" makes the condition applicable to both the saturated and unsaturated zone. If "significant" were deleted, DOE believes that the condition would apply only to the saturated zone.

The NRC suggested an additional disqualifying condition that would protect aquifers that are major sources of groundwater (Enclosure 3). DOE stated that it would consider the condition if NRC would not object to DOE's defining "a major source of groundwater." DOE added that the condition was not needed because other guidelines protect groundwater sources.

On page 11 of Subpart C, DOE gives a disqualifying condition for an active dissolution front projected on the basis of the geologic record over the Quaternary Period. The NRC staff requested that DOE change the condition to consider dissolution features projected on the basis of the geologic record (reference to the Quaternary Period would be deleted).

DOE agreed to delete its reference to the Quaternary Period but preferred to use dissolution front rather than dissolution features. DOE reasoned that in evaluating this condition, the dissolution front, not feature, would be the focus of concern. DOE added that dissolution features, such as subsidence, may not have a pronounced effect on waste isolation.

#### Discussion of Public Comments on the Commission's Preliminary Decision

NRC staff noted that several of the public comments on the Commission's preliminary decision would need to be addressed before the Commission could make a final decision on concurrence.

Dr. Bell stated that most commenters requested another opportunity to comment on the revised guidelines before the Commission concurs in them. Dr. William Bennett, DOE, replied that DOE does not intend to issue the guidelines for another round of public comments. Dr. Bell stated that the Commission will likely hold an open meeting prior to concurring in the guidelines.

Dr. Bell continued by stating that some commenters object to DOE's use of system performance assessments in deciding which sites to nominate and select for characterization. Dr. Bell noted that these commenters were concerned that DOE may over-emphasize engineered barriers in these performance assessments. Dr. Bell gave proposed wording for §960.3-2-4 of Subpart B, page 15 of the proposed guidelines (Enclosure 5). The proposed revision would require a reduced contribution from engineered barriers and a greater emphasis on natural properties of the site when recommending sites for repository development.

DOE replied that the proposed guidelines clearly state that engineered barriers would not be used to compensate for a site's geologic weakness. DOE did not commit to incorporate the proposed §960.3-2-4 but agreed to study the proposal.

Dr. Bell stated that some commenters were concerned over how DOE resolved condition 3(h) of the Commission's preliminary decision. Condition 3(h) of the Commission's preliminary decision states that "DOE should modify the guidelines so that they are consistent with the Commission's definition of 'anticipated processes and events' and 'unanticipated processes and events'". During the previous meetings between the DOE and NRC staff, DOE responded to condition 3(h) by proposing to delete the terms in the guidelines that the Commission found were inconsistent with these terms. Several commenters noted that if DOE deleted its terms it would also eliminate the ranking of the postclosure guidelines. (DOE uses its terms to divide the postclosure into two groups; one being ranked higher than the other).

Dr. Bennett responded that he did not recall any consensus among the states which commented to DOE, on how the guidelines should be ranked.

Dr. Bell asked the meeting observers if any of the state representatives could articulate why states wanted DOE to rank their guidelines. Mr. Robert Halstead, representing the State of Wisconsin, stated that Wisconsin objected to the postclosure guidelines taking precedence over preclosure guidelines because some preclosure guidelines would have a greater bearing on public health and safety. Mr. Halstead continued, that states, in general, asked for a ranking of guidelines so that they would have a better understanding of how the guidelines would be applied.

Dr. Bell noted that Appendix C of the proposed guidelines shows how the guidelines will be applied and might be an alternative way of satisfying the same concern.

Dr. Bell stated that some comments on the preliminary decision differed with the Commission statement that DOE's use of available data is not in conflict with the Nuclear Waste Policy Act (Act). Based upon the commenter's reading of Section 112(b)(3) of the Act, several commenters believe that DOE may use available data only when deciding which sites to recommend for characterization, but when nominating sites for characterization, the Act, does not allow DOE to rely solely on available data. Instead, the commenters stated that DOE should acquire a specified level of data, regardless of whether or not this data is available, before nominating sites for characterization.

Dr. Bennett stated that prior to nominating sites, DOE would drill boreholes in the vicinity of potentially acceptable sites and gather other geologic information. Hence, data that may not be available now would be available when DOE nominates sites. Dr. Bennett added that DOE has already acquired sufficient data to nominate sites for the first repository.

Mr. Wolf, NRC, observed that the confusion over when available data should be used arises from different interpretations of §112(b)(3) of the NWPA. One could argue that, according to the NWPA, DOE could not conduct borings or excavations at a site unless the Secretary certifies that the information is needed in order to nominate the site. In another reading of §112(b)(3), one could argue that the Secretary's certification would be needed only to gather information after nominating but before recommending sites for characterization. Mr. Wolf stated that DOE could end the confusion by including in the guidelines the Secretary's certification that would allow DOE to gather the information necessary to nominate sites.

However, DOE believes that it has interpreted §112(b)(3) of the NWPA correctly and finds no need for the Secretary's certification in the guidelines.

#### Comments from observers

Ms. Linda Lehman, representing the Yakima Indian Nation, commented on the NRC concurrence process, uncertainties in modeling and guideline ranking. Ms. Lehman stated that the Commission should ask the public for comments on the final guidelines prior to concurring in them. Ms. Lehman stated that the guidelines should acknowledge the uncertainties in data collection as well as the models that rely on the data. Ms. Lehman concluded that the commenters requested a ranking of guidelines to ensure that DOE makes an equitable comparison between potentially acceptable sites.

Mr. Ronald Forsythe, Mississippi, urged DOE to adopt the disqualifying condition for major sources of groundwater proposed by the NRC staff. Mr. Forsythe noted that EPA may define a major source of groundwater in proposed 40CFR191 and DOE could use this definition in their guidelines. Mr. Forsythe also suggested that DOE delete the word "significant" from the disqualifying condition for geohydrology and use the term "dissolution features" rather than "dissolution front" in the disqualifying condition for dissolution. Mr. Forsythe concluded that Mississippi is concerned that there be a parity of data from site to site to ensure that sites are compared on an equal basis.

#### Schedule

Dr. Bennett stated that DOE plans to submit final guidelines to the Commission during the week of May 7, 1984. The cover letter from Michael Lawrence, DOE, to Chairman Palladino, NRC will summarize DOE's response to the Commission's conditions for concurrence and will state that DOE does not intend reissue the guidelines for public comments. Dr. Bell suggested that DOE send copies of the final guidelines to state governors.

Dr. Bell stated that the Commission may hold another open meeting approximately one month after receipt of the guidelines. After the meeting, the Commission would vote on whether or not it will concur in the guidelines. Dr. Bell projected that the Commission could make a final decision on the guidelines in June, 1984.

#### Summary of meeting record

The DOE and NRC staff met on March 14, March 21, March 28, April 4, April 18, and May 3, 1984, to resolve the Commission's conditions for its concurrence in

the DOE siting guidelines. The meetings were open to the public and all but the first meeting were announced in the Federal Register. Transcripts of the March 28 and April 18 meeting were provided by DOE. Minutes of the March 14, March 21, April 4, and May 3 meetings were provided by the NRC staff. The minutes of each meeting were sent to observers for that meeting and the minutes and transcripts are available to the general public at the NRC public document room, 1717 H. Street, N.W., Washington, D.C. 20555.

MEETING PARTICIPANTS

NRC

Michael J. Bell  
Hubert J. Miller  
James Wolf  
F. X. Cameron  
Regis R. Boyle  
John Trapp  
Chris G. Pflum

DOE

William Bennett  
William Hewitt - Weston, Inc.  
Robert Mussler  
Carol Hanlon  
Paul Gnirk - RE/SPEC

MEETING OBSERVERS

Linda Lehman  
Yakima Indian Nation  
(612) 894-9359

Dean Tousley  
Harmon, Weiss & Jordan  
(202) 328-3500

Robert Halstead  
State of Wisconsin  
(608) 266-9810

Homer Lowenberg  
Lowenberg Associates  
(301) 530-3740

Clyde Jupiter  
U.S. Nuclear Regulatory Commission  
Office of Policy Evaluation  
(202) 634-3295

David Siefken  
Roy F. Weston, Inc.  
(301) 963-6817

Frances Seghers  
Nucleonics Week  
(202) 463-1653

David Berick  
Environmental Policy Institute  
(202) 544-2600

David Meyer  
Newman & Holtzinger  
(202) 862-8400

Thomas Magness  
Council on Environmental Quality  
(202) 395-5750

J. R. Rollo  
USGS  
(703) 860-6082

Peter McGrath  
Science Applications, Inc.  
(703) 556-7224

Dan Egan  
U.S. EPA  
(703) 557-8610

Steve Frank  
U.S. DOE/PS&E  
(202) 252-1979

Alvin Bicker  
MS Bureau of Geology  
(601) 354-6228

Kelly Haggard  
MS Dept of Energy & Transportation  
(601) 961-4733

Ronald J. Forsythe  
Nuclear Waste Program/MDET  
(601) 961-5733

Emilie Charles  
State of Utah  
(202) 624-7704