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	PDR -	DOE/NRC	
	STE	Characterization Issue Clarification Meeting	• •
	LPDR	Richland, WA	
Distribution:	иТ	June 13-16, 1983	WM DOCKET CONTRO
		Meeting Notes	CERTER
(Return to WM, E	523-SS)	On	
		UII	183 JUN 27 P3:3
	HOLLED DOCCECE AND	DECONICE TO UNA TOCHE DECOLUTION AND DIAM FOR	
	ARATION" (May 25,	RESPONSE TO NRC ISSUE RESOLUTION AND PLAN FOR 1983)	SCP PREP-
	ATTENDEES:	List of attendees is attached.	
	AGENDA:	Attached.	
Ć.	PURPOSE:	To review Tables 2 and 3 of the May 25 document agreement (or disagreement) on the "Statement "BWIP Disposition" columns; to proceed as far agreement on the "BWIP Comments" column; to id items for future discussion.	of Item" and as possible in
	NRC COMMENTS:	(1) With the changes adopted during discussion the May 25 document represents a satisfact concerns expressed in the DSCA. The "BWII be fully evaluated, because these are base and test plans that, in large part, are not	tory tabulation of P Comments" can not ed on test results
		(2) As a basis for further interactions on si	

d on test results t available to NRC. e characterization activities, in the interest of focusing these on licensing information needs, the NRC must have access to

test data as it is developed, to test plans in the for-

- (3) A key technical area that needs more attention, is the coupled hydrologic-mechanical response of the repository host rock to the thermal pulse from waste emplacement. This is a novel problem in underground excavation, the testing time may be long and there is presently little concensus on what is needed for site characterization.
- FOLLOW-UP BY DOE: (1) Develop a revised May 25 document that incorporates the results of the June 13-15 meeting.

mative stage and to QA documentation.

- (2) Propose timing for a series of technical meetings (hydrology test plans to begin July 11).
- Develop a policy for direct telephone communication on technical topics between named individuals on NRC and DOE/RHO staffs.
- (4) Investigate and put into action a procedure for release to interested parties information in the RHO engineering release system.
- FOLLOW-UP BY NRC: (1) Provide clarification of several items in the "Statement of item" column.
 - (2) Provide a technical position on waste package reliability

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(already in the mail).

- Provide, by the end of June, the draft quality assurance review plan.
- (4) Provide background material on the alternative design provisions of 10CFR60.

Original signed by Robert J. Wright, NRC June 16, 1983

Enclosures

ATTENDEES AT THE DOE/NRC SITE CHARACTERIZATION ISSUE CLARIFICATION MEETING

June 13-16, 1983

DEPARMENT OF ENERGY-RICHLAND OPERATIONS OFFICE

- O. L. (Lee) Olson
 D. J. (Dave) Squires
 R. P. (Pierre) Saget
 A. G. (Art) Lassila

NUCLEAR REGULATORY COMMISSION

- M. R. (Malcolm) Knapp
 F. R. (Bob) Cook
 R. J. (Bob) Wright
 J. T. (John) Greeves
 P. T. (Paul) Prestholt
 P. S. (Phil) Justus
 T. (Tilak) Verma

STATE OF WASHINGTON

- D. (Don) Provost
- H. (Harry) Tanaka J. (James) Voss*

ROCKWELL HANFORD OPERATIONS**

- M. J. (Mick) Apted
- R. C. (Ron) Arnett
- S. M. (Steve) Baker G. S. (Scott) Barney J. D. (Jim) Bazemore R. W. (Bob) Bryce

- P. M. (Peter) Clifton

- R. A. (Raul) Deju
 T. O. (Tom) Early
 L. R. (Larry) Fitch
 R. J. (Ralph) Gimera

- R. L. (Ron) Jackson G. K. (Gary) Jacobs L. L. (Larry) Johnson
- (Kunsoo) Kim

DOE-OVERVIEW COMMITTEE

Pat Domenico - Texas A. M.

Jay Smith - Jay Smith & Associates

WESTON, INC.

H. (Hank) Bermanis

J. H. (Joe) LaRue L. S. (Leo) Leonhart L. S. (Leo) Leonhart
P. E. (Phil) Long
M. M. (Peg) McCarthy
E. L. (Ernie) Moore
L. T. (Larry Murphy
M. F. (Mike) Nicol
S. M. (Sue) Price
A. C. (Tony) Rutz
P. F. (Pat) Salter
M. J. (Mike) Smith
A. M. (Ann) Tallman
D. A. (Dave) Turner
M. I. (Marc) Wood

^{*} Golder Associates

^{**} RHO Staff Attended Applicable Sessions Only.

MEETING AGENDA DOE/NRC SCR/DSCA ISSUE CLARIFICATION

June 13-16, 1983 Richland, Washington

MONDAY, June 13	
- 1135 Jadwin Conference Room 9:00 - 9:15 - DOE Welcome and Introductions 9:15 - 9:45 - NRC Opening Comments 9:45 - 10:00 - Protocol for Meetings	O. L. Olson R. J. Wright L. R. Fitch
Team 1 - 5th Floor Conference Room, PBB 10:00 - 5:00 - Groundwater	S. M. Baker R. W. Bryce L. S. Leonhart R. L. Jackson
Team 2 - 4th Floor Conference Room, PBB 10:00 - 5:00 - Waste Form/Waste Package	M. J. Smith P. F. Salter E. L. Moore M. I. Wood M. J. Apted
TUESDAY, June 14	
Team 1 - 4th Floor Conference Room, PBB 8:00 - 5:00 - Performance Assessment	R. C. Arnett P. M. Clifton G. K. Jacobs
Team 2 - 5th Floor Conference Room, PBB	N 1 Codeb
8:00 - 5:00 - Geochemistry	M. J. Smith P. F. Salter M. J. Apted G. S. Barney T. O. Early P. E. Long
WEDNESDAY, June 15	
Team 1 - 4th. Floor Conference Room, PBB 8:00 - 5:00 - Geology/Site Selection/Environmental Factors	" S. M. Price A. M. Tallman M. M. McCarthy
Team 2 - 5th Floor Conference Room, PBB	
8:00 - 5:00 - Geoengineering/Repository Design/Quality Assurance	K. Kim L. L. Johnson D. A. Turner M. F. Nicol L. T. Murphy
THURSDAY, June 16 - 5th Floor Conference Room, PBB	
8:00 - 12:00 - NRC Caucus. Additional discussions as needed. 1:00 - 2:00 - Briefing on 10 CFR-60 Final Rule. 2:00 - 5:00 - Close Out. DOE/NRC/BWIP Management Debriefing.	Staff M. R. Knapp O. L. Olson

Meetings will consist of informal discussions and point-by-point review of NRC concerns. No formal briefings will be given.

OTSPOSITIONS AND RESPONSES TO SPECIFIC NRC COMMENTS (FROM APPENDICES B AND C OF THE DSCA)

A - Agree C - Requires Further Clarification D - Disagree X - Programmatic Impact

ITEM REFERENCE	STATEMENT OF ITEM - COMMENTS CODE/REMARKS	BWIP DISPOSITION	BWIP COMMENTS
Sec. 12.4.3 p. 12.4-37 Para. 4	Lines 31-32, "The maximum and minimumyears, respectively."/6, 11, 13	A	The sentence will be changed to say that for selected parameters, compliance is achieved.
Sec. 12.4.3 p. 12.4-38, 39 Figure 12- 13, 12-14	Figures 12-13 and 12-14/6, 11, 13	А	Groundrules for the analysis will be clarified by adding a sentence or two at the front of 12.4.3 to indicate that this is representative, not worst case.
Sec. 12.4.3 p. 12.4-40 Para. 2	"The SCR states that the 2-D model results show that the traveltimes are sufficiently long to ensure compliance with the EPA standard."/12"Given the preliminary nature of the analysis, the uncertainty associated with the data choice and the limited scope of the analysis, this conclusion is not justified."	A	The word "assure" will be changed to "indicate, for the reference conditions utilized in the analysis."
Sec. 12.4.3 p. 12.4-40 Para. 2	Lines 11-13, "The groundwaterto 37,000 years."/6, 11, 13	Α	The statement will be modified to clarify that this is a current snapshot, not a firm conclusion.
Sec. 12.4.3 p. 12.4-41 Figure 12-1	Figure 12-15/6, 11, 13	A	The statement will be modified to clarify that this is a preliminary finding, not a firm conclusion
Sec. 12.4.3	Lines 9-11, "At 10,000 yearsthe downstream end."/6, 11, 13	Α.	No change is needed.
p. 12.4-42 Para. 2	Lines 43-bottom, "(1) A fault developsthe repository."/4->6?	D XA	The analysis is strictly illustrative and makes no claim to be otherwise.
Sec. 12.4.3 p. 12.4-42 Para. 5	The SCR states that the hydraulic conductivity chosen for the fault zone is 10 ⁻⁷ m/s./6"Choice of this value needs to be justified since it will have a direct impact on results."	A	A paragraph will be added to provide rationale for the assumptions.
Sec. 12.4.3 p. 12.4-42 Para. 6	The SCR states that the fault analyzed is located 0.8 km from the repository./6"on page 12.4-42 the report also stresses the importance of fault location but conclusions are based on only one fault location."	A :	Additional discussion of the technical rationale will be provided in Chapters 5 and 12.
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DISPOSITIONS AND RESPONSES TO SPECIFIC HRC COMMENTS (FROM APPENDICES B AND C OF THE DSCA)

A - Agree C - Requires Further Clarification D - Disagree X - Programmatic Impact

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	ITEM REFERENCE	STATEMENT OF ITEM - COMMENTS CODE/REMARKS	BWIP DISPOSITION	BWIP COMMENTS
	Sec. 12.4.3 p. 12.4-37 Para. 4	Lines 31-32, "The maximum and minimumyears, respectively."/6, 11, 13	Α	The sentence will be changed to say that for selected parameters, compliance is achieved.
)	Sec. 12.4.3 p. 12.4-38, 39 Figure 12- 13, 12-14	Figures 12-13 and 12-14/6, 11, 13	A	Groundrules for the analysis will be clarified by adding a sentence or two at the front of 12.4.3 to indicate that this is representative, not worst case.
	Sec. 12.4.3 p. 12.4-40 Para. 2	"The SCR states that the 2-D model results show that the traveltimes are sufficiently long to ensure compliance with the EPA standard."/12"Given the preliminary nature of the analysis, the uncertainty associated with the data choice and the limited scope of the analysis, this conclusion is not justified."	A	The word "assure" will be changed to "indicate, for the reference conditions utilized in the analysis."
	Sec. 12.4.3 p. 12.4-40 Para. 2	Lines 11-13, "The groundwaterto 37,000 years."/6, 11, 13	A	The statement will be modified to clarify that this is a current snapshot, not a firm conclusion.
	Sec. 12.4.3 p. 12.4-41 Figure 12-15		A	The statement will be modified to clarify that this is a preliminary finding, not a firm conclusion
	Sec. 12.4.3	Lines 9-11, "At 10,000 yearsthe downstream end."/6, 11, 13	Α.	No change is needed.
	p. 12.4-42 Para. 2	Lines 43-bottom, "(1) A fault developsthe repository."/4->6? why not closer? or worse?	D &A	The analysis is strictly illustrative and makes no claim to be otherwise.
	Sec. 12.4.3 p. 12.4-42 Para. 5	The SCR states that the hydraulic conductivity chosen for the fault zone is 10-7 m/s./6"Choice of this value needs to be justified since it will have a direct impact on results."	. A	A paragraph will be added to provide rationale for the assumptions.
١		The SCR states that the fault analyzed is located 0.8 km from the repository./6"on page 12.4-42 the report also stresses the importance of fault location but conclusions are based on only one fault location."	A	Additional discussion of the technical rationale will be provided in Chapters 5 and 12.
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DISPOSITIONS AND RESPONSES TO SPECIFIC NRC COMMENTS (FROM APPENDICES B AND C OF THE DSCA)

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Sec. 12.4.3 p. 12.4-37 Para. 4	Lines 31-32, "The maximum and minimumyears, respectively."/6, 11, 13	Α	The sentence will be changed to say that for selected parameters, compliance is achieved.
Sec. 12.4.3 p. 12.4-38,	Figures 12-13 and 12-14/6, 11, 13	A	Groundrules for the analysis will be clarified by adding a sentence or two at the front of 12.4.3 to indicate that this is representative, not worst case.
Figure 12- 13, 12-14			Chart direct to represent the north description
Sec. 12.4.3 p. 12.4-40 Para. 2	"The SCR states that the 2-D model results show that the traveltimes are sufficiently long to ensure compliance with the EPA standard."/12"Given the preliminary nature of the analysis, the uncertainty associated with the data choice and the limited scope of the analysis, this conclusion is not justified."	A	The word "assure" will be changed to "indicate, for the reference conditions utilized in the analysis."
Sec. 12.4.3 p. 12.4-40 Para. 2	Lines 11-13, "The groundwaterto 37,000 years."/6, 11, 13	А	The statement will be modified to clarify that this is a current snapshot, not a firm conclusion.
Sec. 12.4.3 p. 12.4-41 Figure 12-1		A	The statement will be modified to clarify that this is a preliminary finding, not a firm conclusion
Sec. 12.4.3 p. 12.4-42	Lines 9-11, "At 10,000 yearsthe downstream end."/6, 11, 13	A	No change is needed.
Para. 2	Lines 43-bottom, "(1) A fault developsthe repository."/4->6? why not closer? or worse?	@ xA	The analysis is strictly illustrative and makes no claim to be otherwise.
Sec. 12.4.3 p. 12.4-42 Para. 5	The SCR states that the hydraulic conductivity chosen for the fault zone is 10 ⁻⁷ m/s./6"Choice of this value needs to be justified since it will have a direct impact on results."	. A	A paragraph will be added to provide rationale for the assumptions.
Sec. 12.4.3 p. 12.4-42 Para. 6	The SCR states that the fault analyzed is located 0.8 km from the repository./6"on page 12.4-42 the report also stresses the importance of fault location but conclusions are based on only one fault location."	A :	Additional discussion of the technical rationale will be provided in Chapters 5 and 12.
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DISPOSITIONS AND RESPONSES TO SPECIFIC HRC COMMENTS (FROM APPENDICES B AND C OF THE DSCA)

A - Agree C - Requires Further Clarification D - Disagree X - Programmatic Impact

	ITEM REFERENCE	STATEMENT OF ITEM - COMMENTS CODE/REMARKS	BWIP DISPOSITION	BWIP COMMENTS
	Sec. 12.4.3 p. 12.4-37 Para. 4	Lines 31-32, "The maximum and minimumyears, respectively."/6, 11, 13	A	The sentence will be changed to say that for selected parameters, compliance is achieved.
	Sec. 12.4.3 p. 12.4-38, 39	Figures 12-13 and 12-14/6, 11, 13	A	Groundrules for the analysis will be clarified by adding a sentence or two at the front of 12.4.3 to indicate that this is representative, not worst case.
)	Figure 12- 13, 12-14			
	Sec. 12.4.3 p. 12.4-40 Para. 2	"The SCR states that the 2-D model results show that the traveltimes are sufficiently long to ensure compliance with the EPA standard."/12"Given the preliminary nature of the analysis, the uncertainty associated with the data choice and the limited scope of the analysis, this conclusion is not justified."	A	The word "assure" will be changed to "indicate, for the reference conditions utilized in the analysis."
	Sec. 12.4.3 p. 12.4-40 Para. 2	Lines 11-13, "The groundwaterto 37,000 years."/6, 11, 13	A	The statement will be modified to clarify that this is a current snapshot, not a firm conclusion.
	Sec. 12.4.3 p. 12.4-41 Figure 12-15		A	The statement will be modified to clarify that this is a preliminary finding, not a firm conclusion
)	Sec. 12.4.3 p. 12.4-42	Lines 9-11, "At 10,000 yearsthe downstream end."/6, 11, 13	Α,	No change is needed.
	Para. 2	Lines 43-bottom, "(1) A fault developsthe repository."/4->6? why hat closer? or worse?	@ ,8/A	The analysis is strictly illustrative and makes no claim to be otherwise.
	Sec. 12.4.3 p. 12.4-42 Para. 5	The SCR states that the hydraulic conductivity chosen for the fault zone is 10 ⁻⁷ m/s./6"Choice of this value needs to be justified since it will have a direct impact on results."	. A	A paragraph will be added to provide rationale for the assumptions.
		The SCR states that the fault analyzed is located 0.8 km from the repository./6"on page 12.4-42 the report also stresses the importance of fault location but conclusions are based on only one fault location."	A :	Additional discussion of the technical rationale will be provided in Chapters 5 and 12.
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DISPOSITIONS AND RESPONSES TO SPECIFIC NRC COMMENTS (FROM APPENDICES B AND C OF THE DSCA)

CHAPTER 12

A - Agree C - Requires Further Clarification D - Disagree X - Programmatic Impact

ITEM	·	BWIP	
REFERENCE	STATEMENT OF ITEM - COMMENTS CODE/REMARKS	DISPOSITION	BWIP COMMENTS
Sec. 12.4.3 p. 12.4-37 Para. 4	Lines 31-32, "The maximum and minimumyears, respectively."/6, 11, 13	A	The sentence will be changed to say that for selected parameters, compliance is achieved.
Sec. 12.4.3 p. 12.4-38, 39	Figures 12-13 and 12-14/6, 11, 13	A	Groundrules for the analysis will be clarified by adding a sentence or two at the front of 12.4.3 to indicate that this is representative, not worst case.
Figure 12- 13, 12-14			that this is representative, not not so dusti-
Sec. 12.4.3 p. 12.4-40 Para. 2	"The SCR states that the 2-D model results show that the traveltimes are sufficiently long to ensure compliance with the EPA standard."/12"Given the preliminary nature of the analysis, the uncertainty associated with the data choice and the limited scope of the analysis, this conclusion is not justified."	A	The word "assure" will be changed to "indicate, for the reference conditions utilized in the analysis."
Sec. 12.4.3 p. 12.4-40 Para. 2	Lines 11-13, "The groundwaterto 37,000 years."/6, 11, 13	A	The statement will be modified to clarify that this is a current snapshot, not a firm conclusion.
Sec. 12.4.3 p. 12.4-41 Figure 12-15		A	The statement will be modified to clarify that this is a preliminary finding, not a firm conclusion
Sec. 12.4.3	Lines 9-11, "At 10,000 yearsthe downstream end."/6, 11, 13	Α.	No change is needed.
p. 12.4-42 Para. 2	Lines 43-bottom, "(1) A fault developsthe repository."/4-6? why hat closer? or worse?	D &A	The analysis is strictly illustrative and makes no claim to be otherwise.
	The SCR states that the hydraulic conductivity chosen for the fault zone is 10-7 m/s./6"Choice of this value needs to be justified since it will have a direct impact on results."	. A	A paragraph will be added to provide rationale for the assumptions.
	The SCR states that the fault analyzed is located 0.8 km from the repository./6"on page 12.4-42 the report also stresses the importance of fault location but conclusions are based on only one fault location."	A	Additional discussion of the technical rationale will be provided in Chapters 5 and 12.

DISPOSITIONS AND RESPONSES TO SPECIFIC HRC COMMENTS (FROM APPENDICES B AND C OF THE DSCA)

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ITEM REFERENCE	STATEMENT OF ITEM - COMMENTS CODE/REMARKS	BWIP DISPOSITION	BWIP COMMENTS
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Sec. 12.4.3 p. 12.4-41 Figure 12-1		A	The statement will be modified to clarify that this is a preliminary finding, not a firm conclusion
Sec. 12.4.3 p. 12.4-42	Lines 9-11, "At 10,000 yearsthe downstream end."/6, 11, 13	Α.	No change is needed.
Para. 2	Lines 43-bottom, "(1) A fault developsthe repository."/4-6? why nut closer? or worse?	D &A	The analysis is strictly illustrative and makes no claim to be otherwise.
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Para. 2	Lines 43-bottom, "(1) A fault developsthe repository."/4->6? why not closer? or worse?	D XA	The analysis is strictly illustrative and makes no claim to be otherwise.
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