

-- ,



WM-81-475

9/10

Infut bur ok?

AUG 1 8 1831

Mr. John B. Martin, Director Division of Waste Management U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dear Mr. Martin:

Department of Energy Washington, D.C. 20545

Enclosed is the agenda for the NRC visit to the Department's Basalt Waste Isolation Project in Richland, Washington from September 22-24, 1981. We are pleased to be able to provide this briefing for you. We would appreciate receiving copies of your draft and final trip reports, as provided in the past.

(Return to WM, 623-SS

Please contact Carl Newton of this office or Dave Squires of our Richland office if any questions arise.

Sincerely,

any W. Amede

pour des vie ou

00197

have a hour of the former of t

Colin A. Heath, Director Office of Waste Isolation Nuclear Waste Management and Fuel Cycle Programs Office of Nuclear Energy

Enclosure

cc: F. Arsenault Division of Health, Siting and Environment

•

8303280073 810819 PDR WASTE WM-10 PDR

·	AGENDA FOR NUCLEAR REGULATORY COMMISSION VISIT BASALT WASTE ISOLATION PROJE RICHLAND, WASHINGTON	
• • •	September 22-24, 1981	• •• •
	AT <u>TENDEES (Tentative)</u>	
• •	NRCKE-PBDOEJ. MartinA. LindsayM. KnappJ. RitchieM. BellB. SchmidtJ. GreevesD. WatsonP. Prestholdtplus ∿15 NRC consultants	
	RockwellONI; (TBD)M. Glora	
j	September 22, 1981 - Federal Building - Room G53	
	10:00a Welcome and Introduction	R. B. Goranson/ L. R. Fitch
•.	10:104 Overview of BWIP Activities 10:40a Waste Package, General Discussion to: to Cover the Following Topics:: 12:00p 1. Solubilities of radionuclide-bearing phases in the BWIP waste/water/rock systems	R. A. Deju M. J. Smith
	 Mineralogy of fractures; likely phase transfor- mations of the fracture filling minerals under anticipated repository conditions; and the effect these changes will have on permeability and sorption 	i
	 Sorptive properties and sorptive capacity (Kd) of secondary mineral phases that line fractures 	•
	4. Petrological and mineralogical characterization of the Umtanum flow; this requires access to cores, core logs, thin sections, photographs and reports	
	5. Water chemistry data for the Grande Ronde	

A Agenda for h	
- 12: 00p	Lunch
1:00p to 2:30p	Repository - ESTF and Conceptual Design - General H. B. Dietz Discussion to Cover the Following Topics :
	1. Exploratory Shaft Test Facility (ESTF)
	a. Current version of the design for the ESTF
•	b. Location of the ESTF and the options to collocate the ESTF with the planned geologic repository or to locate the ESTF away/apart from the planned repository
	c. Construction methods, shaft sinking methods and hydrologic testing around the shaft
	d. Parameters, tests, and procedures planned for the ESTF: the correlation of the planned tests etc. with the design of the ESTF; and the application of the test results to the planned design of the repository
	e. Correlation of geologic and hydrologic investigations at the site with the planned test facility, in particular, development of stress measurements and plans for hydrofracturing
	2. Near-Surface Test Facility (NSTF)
	a. Bases for the correlation of the NSTF test results with the geologic conditions at the planned repository depth and with the development of the repository design
	3. Borehole and Shaft Sealing Investigations
	4. Conceptual Design
	a. Report on Functional Design Criteria (RHO-BWI-CD-38, Rev. 3)
	 Interface of the site investigations and design of the repository
	c. Current version of the concept design
2: 30p	Break
2:45p to 5:00p	Site - Geology, Hydrology, Geophysics - Remote D. J. Brown Sensing - General Discussion to Cover the Following Topics
	•••
	· · · · · · · · · · · · · · · · · · ·

Agenda for NRC V	/1s1t	(Page 3)	•	
	Hydr	ology and Geology		
	-5	Groundwater modeling: history of model dev present status, interpretation of the flow interactions between and within hydrologic use of curvi-linear cross sections.	elopment, field, units,	
• • •	b.	Values of parameters for groundwater modeli methods of selection, sensitivity analyses.	ng:	· · ·
	c.	Water budget for deep aquifers, including e inter-basinal flow.	ffects of `	, • • • • •
	d.	Groundwater flow field: current version, c interpretation, effect of structural featur as anticlines.	urrent es such	· :
•	c.	Elevations of the water table along the Pas boundary (as shown in Plate III-9, RHO-BWI-	co Basin ST-5).	
-	f.	Possible hydraulic connections between hydr units and upper aquifers, e.g., Columbia Ri channel.	ologic ver paleo-	
	g.	Strucutral control of the Columbia River wi Site.	thin the	
	h.	Hydrologic testing history for each well th data for groundwater modeling.	at provides	
••••	i.	The NRC would like to obtain a copy of the logs for each well that penetrates the Wana	following pum:	
•	•	 Lithologic, including drillers comments, lost circulation, etc. 	notes on	
	· ·	o Resistivity	 	
		o S.P.	·	а. Х.
		o Neutron - epithermal neutron		
		n Sonic	·	
		o Birdwell 3-D or formation density.		
2.	GEO	physics	• .	· ·
•	а.	Review the seismic reflection program for Creek syncline, Gable Butte and Gable Moun	the Cold tain.	
	Ь.	NRC would like to obtain selected copies of shallow seismic sections of the above.	f deep and	
•			· ·	
	•	: . ·		0-14- Luinin, <u></u>
· · . ·				

2 × 5	Agenda_for_	NRC Visit L	/ge 4)	· · · · · ·
•	• • • •	3: Remote	Sensing .	
	•	a. Geo dis inc and	logic remote sensing data and products for cussed in RHO-BWI-3A-43, page 14, lett para luding imagery, interpretive overlass, prod reports	Rockwell graph. ucts
	September 2	<u>1981</u> - 8:	00a Meet in Federal Building - Room 353	· ·
	8:10a	Leave for N	STF, Tour the Facility	B. C. K. Moravek
•	1:00p	Return to F Break up in	ederal Building - Room TBD to groups as follows:	• · · •
		Group I	Hydrology (Field trip to drill rig if possible)	*F. A. Deluca
	•	Group II	Modeling	R. E. Gephart
/		Group III.	Design (ESTF, NWRB)	H. B. Dietz .
•		Group IV	Geochemistry (Visit Core Lab if Possible)	M. J. Smith
		Group V	Licensing	L. R. Fitch

September 24, 1981

1

8:008	Individual groups continue with the addition :f 2 new groups formed from existing Groups I-V.	•
	Group V1 Quality Assurance	M. F. Nicol
· · · · · · · · · · · · · · · · · · ·	Group VII Geophysics	T. A. Curran
12:30p	Lunch	
1:30p	All return to Federal Building, Room G53; fo- general discussion. All sessions completed :y 5:00p.	

ŧ

.. :

*The BWIP person heading each group will be responsible for arranging a meeting place for that group.