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MEMORANDUM FOR: Distribution

FROM: Everett A. Wick

SUBJECT: PRE-BWIP MEETING ON JULY 29, 1982

The minutes of the subject meeting are attached.

Everett A. Wick
High-Level Waste Licensing
Management Branch
Division of Waste Management

"Pre-Decisional in Nature" 8/26/82

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DATE	8/3/82				

MEETING REPORT: NRC/BNL/SNL/GOLDER

PURPOSE: To Prepare for BWIP Waste Package Workshop on August 9-13, 1982

DATE: July 29, 1982

PLACE: Willste

ATTENDEES:	NRC/NMSS	BNL	SNL	GOLDER	NRC/RES
	E. Wick	P. Soo	M. Siegel	R. Talbot	M. McNeil
	R. Cook	K. Swyler			
	R. Wright*				
	P. Justus*				
*Part Time	D. Brooks*				

Summary of Commitments, Conclusions and Agreements

1. The purpose of the workshop is for NRC to get enough information about the Site Characterization Report (SCR) to scope the NRC analysis of the SCR by October 1, 1982.

2. BWIP does not plan to change the SCR as a result of the meeting; therefore, NRC's mission is to gather information and not to influence or provide guidance to DOE.

3. The SCR was defined by Bob Wright as the plan for the R & D that will be carried out over the next five years.

4. The waste package team will focus on metal corrosion and waste form dissolution around the waste package. The team is interested in backfill only to the extent that it influences the corrosive environment of the waste package.

5. The BWIP waste package concept is waste form or spent fuel in a canister; there are no overpacks. It appears that DOE plans to rely heavily on backfill to control release of radionuclides.

6. The Waste Package Team will focus on the rigor being observed by DOE in collecting data to be used in the analysis.

7. The waste package Team is comprised of:

   Container (2 Metallurgists) - P. Soo & M. McNeil, RES
   Backfill/groundwater chemistry with respect to radiolysis - M. Siegel (SNL), K. Swyler (BNL)
   Barrier Performance - R. Talbot (Golder Associates)
   Glass - R. Cook, E. Wick

8. RHO has 11 people on the waste package effort.

9. Phil Justus briefly enumerated data on:

   a. Repository Equilibrium Conditions
   b. Leachability of Simulated Waste Forms

10. Phil Justus said DOE is using the following key references:

    a. 1981 ONWI/NWTS 96 for Overall W/P Strategy

    b. 1980 Harry Smeds USGS Open File Report 80-165

    c. 1982 Anderson RHO/BWI-ST-25P
       This covers design concepts, function of the waste package canister, backfill

    1980 Wood RHO BWI-ST-10
    (Evaluation of W/P Performance)

11. Justus listed possible assumptions to be used by DOE in modeling spent fuel and waste packages in basalt are:

    a. Simultaneous emplacement of waste package - each package will contain 10 year old unreprocessed waste.

    b. Air in rooms above waste package is stagnant and radiation heat transfer is neglected.

    c. Ambient temperature is 65°C at repository level. Present maximum is 57°C.

    d. Basalt media are semi-infinite

    e. Basalt media are dry.

f. W/P contents are in quasi steady state equilibrium with basalt.

g Backfill regions remain unsaturated throughout analysis.

12. DOE wants to include crushed basalt in the backfill.

13. A revised workshop agenda for the meeting at Richland was developed and passed out. (Enclosure 1)

Everett A. Wick 8/2/82

Everett A. Wick
High-Level Waste Licensing
Management Branch
Division of Waste Management

ENCLOSURE 2 (continued)

Day 4

Fieldtrip 7-2
Wrap-up 2-4 Tech wrap-up
Admin wrap