

See Part 1  
Final

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MEMORANDUM FOR: Michael J. Bell, Chief  
High-Level Waste Licensing  
Management Branch  
Division of Waste Management

FROM: F. Robert Cook  
High-Level Waste Licensing  
Management Branch  
Division of Waste Management

WM-10  
PDR  
(Return to WM. 620-55)

SUBJECT: REPORT OF TRIP TO BASALT WASTE ISOLATION PROJECT;  
PACIFIC NORTHWEST LABORATORY (PNL) AND GENERAL ATOMICS

Summary:

A. BWIP Meeting (Waste Package Issues)

Detailed minutes of this meeting and various observations and comments concerning this meeting are contained in Attachments A, B, C, D, and E.

The major observation concerning the BWIP Waste Package meeting is the Project's apparent dependence on the geology to provide the necessary integrity in the repository system. The NRC waste package team emphasized the importance of multiple barrier concepts, described in the draft rule and intended to provide the reliability in the overall system necessary to provide reasonable assurance that the EPA standard will be met. This issue is included in the minutes of the meeting, Attachment E.

B. PNL Meetings

PNL personnel (McKee, Robinson and Jensen) presented the results of their DOE tasks in the area of resource recovery from high-level waste and the benefits from separately handling Cs<sup>137</sup> and Sr<sup>90</sup> in various repository designs. The results of the study show that the thermal resistivity of the backfill is a key factor in deciding whether or not it is economically desirable to remove these isotopes from the waste form for

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commercial high-level waste. The results of these studies are on file in the Materials Section.

Results of recent waste form studies at PNL under Mr. McVay's cognizance were also reviewed. BNL (Swyler's) report, Attachment B, contains the results of this reievew.

C. General Atomics Meeting

The minutes of this meeting are contained in Attachment F. This (GA) work appears to be pertinent to preparing a reliability analysis which includes containers as barriers.

ORIGINAL SIGNED BY

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Enclosures:  
As stated

- cc: J. B. Martin
- R. E. Browning
- M. McNeil
- E. A. Wick
- L. W. Rossbach

"Pre-Decisional in Nature" *MPB*

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