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MEMORANDUM FOR: Robert J. Wright  
BWIP Project Manager  
High-Level Waste Technical  
Development Branch  
Division of Waste Management

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

SUBJECT: DRAFT 2 CONCLUSION AND COMMENTS, BWIP SCA, COMMENTS ON

Your memo of January 3, 1983 requested comments on the subject document.  
Comments follow.

a. Revise the last sentence of C.2.1 as follows: "Specific requirements for individual barriers or barrier systems in proposed 10 CFR 60 are intended to assure design activities do not degrade or compromise the functional capabilities of a barrier or the system are contained, for example, in Sections §60.133 and 60.135."

b. In the third sentence of C.2.1 delete the term "protective systems" and substitute "barriers" to be consistent with terminology in 10 CFR 60.

c. Add a final sentence to C.2.1 as follows: "Therefore, it is intended that failure of any given barrier to function as desired will not lead to failure of other barriers to contain or control release of radionuclides. Without such independence of function, the staff considers sufficient overall reliability will not be demonstrable at licensing."

d. The bullets under C.2.2 should make it clear that the conclusions or statements are BWIP project conclusions and statements. For example, the second bullet second sentence, it's hard to tell whether the idea is a BWIP or a staff position.

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WM Project WM-10  
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e. The last bullet in C.2.2 should be changed as follows: "The SCR provides no discussion of the reliability design criteria for the waste package and other engineered barrier system components. The desired relative reliabilities of the natural and the engineered barriers are likewise missing. The staff considers that of the barriers in the overall repository system, the waste package with its three major barriers, provides the potential for demonstrating the greatest reliability of all the barriers being considered by BWIP. Both the low carbon steel container and the borosilicate glass waste form have a base of data over a varied range of conditions which could substantially validate performance projections for containment and release respectively."

f. Revise C.4.6 in accordance with the attachment of my memorandum to you of December 28, 1982. See attached.

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

Enclosure:  
As stated

OFC : WMHL <i>ML</i>	:	:	:	:	:	:	:
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Attachment

Proposed wording for SCA conclusions:

Section C.1.1.6 - Conclusions -

Revise the 4th sentence as follows: "Second with respect to 60.11(a)(6)(ii) the description of a conceptual design is inadequate in the following respects: a) Reliability design criteria for each component of the engineered system and applicable to their respective functional or performance roles in the multiple barrier system are not described. b) Different engineered systems and components are described without specific statements that any constitute the conceptual design to be described in accordance with 60.11(a)(6)(ii). Discussions relative to "conceptual designs" on pages 17.3-3, 14.3-2, 11.6-4; descriptive material in Chapter 10 and the discussion of "reference" designs in Chapter 11 create ambiguity in this regard.

Enclosure