

Dr. Charles G. Interrante, Program Manager  
Metallurgy Division - Corrosion Section  
National Bureau of Standards  
U.S. Department of Commerce  
Gaithersburg, MD. 20899

Dear Dr. Interrante:

We have reviewed NBS' Monthly Letter Report for January 1988 for FIN A-4171, "Evaluation and Compilation of DOE Waste Package Test Data." Our comments are presented below.

1. As recommended in our comments on the December 1987 Monthly Letter Report (MLR), reports selected for review should be assigned a priority according to NBS' best judgment. These priorities should be stated in the monthly letter reports. Without having seen the five new reports identified for review, the Aines report on test plans for glass waste forms probably merits an A priority on the ground that if NRC has any input with respect to the content of the test plans, it should be communicated to DOE as soon as possible. The Wilson report on leaching behavior of spent fuel is also an A. The McCright progress report on testing of advanced conceptual design metal barrier materials and the Smith report on the influence of copper on Zircaloy cladding degradation are B priority only because of the constraints of resources. The Knauss report on tuff and J-13 ground water interactions is probably a C because this work should be followed by Geochemistry.

The 16 reports on which work is continuing should also be assigned letter priorities and their review integrated with the schedule for the above five. Also, an estimate should be given as to how nearly complete each of these 16 reviews is.

2. Similarly, some indication of the degree of completion of the reviews of the various chapters of the PNL Glass Leaching Study should be given. The MLR should indicate preliminary findings of the reviewer to expedite identification of potential problem areas. Any reservations about the findings should be outlined in the General Comments section.

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3. Where other documents are identified that are relevant to the one being reviewed, the review should include an entry showing whether these related documents are already in the database and how they may be accessed.
4. On pg 4, the MLR states that no new reports on waste form degradation were identified in January. The MLR should state what accession lists or bibliographies were scanned.
5. In some of the reviews, extensive detail is included, e.g. alloy compositions. Only selected details should be included in the review on because the database is intended to locate for the user those few documents that most directly relate to answering his questions. He will prefer, at this stage in the technology of information retrieval, to refer to the original document if he needs details. It is not likely that any definitive conclusions would be made by any user of the database from the abstracted information. One reason is that numerical data may not be cited accurately (e.g., proofreading errors). Another reason for not including details is that the time spent in entering such information is preferably spent on assessing the quality of the work.
6. The MLR should report how many documents are in the database, how many have been given critical reviews, how many are undergoing review, and how many are waiting to be reviewed.
7. As stated last month, Task 2 (Identification of Additional Data Required) should specifically state what has been accomplished each month, even if no additional data needs have been identified.
8. Under Task 3, Laboratory Testing, the report on detection of stress corrosion crack propagation should explain why the data are being processed if there was an oxygen leak. How much has the schedule been affected by the delays due to instrument repairs and recalibrations. Will any milestone be reached in February?
9. With respect to the work on corrosion of waste package materials, some preliminary information should be given each month to elaborate on what is meant by "continuously improving measurement techniques" and "incorporation of ideas from published work by other laboratories".

10. The work on corrosion behavior of Zircaloy cladding appears to be progressing satisfactorily. We are looking forward to the investigator's discussion and interpretation of the passivation findings.
11. The summaries of essentially all of the 90 papers presented at the 1987 MRS Symposium is a worthwhile achievement. The MLR should state whether a search of the database could access these reviews individually or could the user scan them only after accessing the main document?

Actions resulting from this letter are considered to be within the scope of FIN A-4171. No changes in costs or delivery of contracted products are authorized. Please notify me immediately if you feel this letter will result in additional costs or delay in delivery of contracted products.

Sincerely,



Charles H. Peterson  
Materials Engineering Section  
Technical Review Branch  
Division of High-Level Waste Management  
Office of Nuclear Material Safety  
and Safeguards

cc: Dr. Neville Pugh, Director  
Metallurgy Division

Dr. Dale Hall, Group Leader  
Corrosion Group, Metallurgy Division

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LETTER TO: Dr. Charles G. Interrante, Program Manager  
Metallurgy Division - Corrosion Section  
National Bureau of Standards  
U.S. Department of Commerce  
Gaithersburg, MD. 20899

FROM: Charles H. Peterson  
Materials Engineering Section  
Technical Review Branch  
Division of High-Level Waste Management  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: NRC COMMENTS ON NBS JANUARY 1988 MONTHLY LETTER REPORT

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<b>Ticket close out per letter to Dr. Charles Interrante from Charles Peterson on 88/03/09.</b>		<b>RBallard</b>	<b>2/23</b>	
REMARKS		<b>CPeterson</b>		

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