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FOR THE U.S. DEPARTMENT OF ENERGY

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OAK RIDGE, TENNESSEE 37831

October 27, 1994

Ms. Deborah DeMarco, Project Manager
U. S. Nuclear Regulatory Commission
Mail Stop T8-A-23
Washington, D. C. 20555

Dear Ms. DeMarco:

Subject: Final Criteria Report for Task 7 Under JCN L1376

Enclosed please find the final criteria report for Task 7, "Basis for Licensing Requirements for SNM Disposal at a Low-Level Waste Disposal Facility" under JCN L1376. This final report, "Criticality Safety Criteria for License Review of Low-Level Waste Facilities" by C. M. Hopper, R. H. Odegaarden, C. V. Parks, and P. B. Fox has been extensively revised from the draft report provided to the NRC on July 29, 1993. In particular, this final report addresses and resolves the issues and comments identified by the ORNL and NRC staff and documented in the December 20, 1993 letter from C. V. Parks requesting additional funding for this Task. This report has been delayed from the original July 31, 1994 completion date due to a DOE request that C. M. Hopper dedicated full-time effort to lead a high-priority health and safety assessment of criticality safety issues related to plutonium storage and use at ORNL.

The report as presented here has been reviewed by the authors and peer-reviewed again by independent ORNL staff. The report format is that requested by the NRC for publication as a NUREG/CR. However, the process of having the report reviewed by a technical editor and cleared for publication is still in process. Our plans are to provide you with a publication-ready manuscript by December 15, 1994. If you or the NRC technical staff have minor comments on the enclosed report these could be included in the publication-ready manuscript if received by November 30. There will be no additional costs for editing and clearance of this report.

Please contact C. V. Parks at 615-574-5280 or me at 615-576-2049 if you have any questions regarding this report.

Sincerely,

M. T. Naney
M. T. Naney
ORNL Project Manager

CVP:MTN

Enclosure

cc: R.C. Hogg, NRC (w/enclosure)
C.V. Parks
C.E. Pugh
R.D. Thompson, NRC

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PDR WASTE
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Attachment 2