



Department of Energy  
Savannah River Operations Office  
P.O. Box A  
Aiken, South Carolina 29802

AUG 28 1996

Dr. Carl J. Paperiello  
Director  
Office of Nuclear Materials and Safeguards  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Dear Dr. Paperiello:

**SUBJECT: Savannah River Site (SRS) High Level Waste (HLW) Tank Closure; Classification of Residual Waste as Incidental**

The U.S. Department of Energy (DOE) Savannah River Operations Office (SR) is preparing to close the first of 51 HLW storage tanks at SRS by the end of this calendar year. Our respective staffs have been discussing the classification of the small amounts of residual high level waste remaining in the tanks, subsequent to waste removal operations, as "incidental" for the purposes of determining whether the Commission would be required to exercise licensing and related regulatory authority for the closed tanks. DOE will safely manage the residual high level "incidental" waste in accordance with existing DOE Orders and orders currently being revised to include the "incidental" waste terminology.

DOE has prepared the enclosed *Regulatory Basis for Incidental Waste Classification at the Savannah River Site High Level Waste Tank Farms* for the Commission's review and acceptance of the methodology for the "incidental" classification as logical and consistent with the Commission's rulings and requirements. DOE utilized the guidance provided in the Bernero, Nuclear Regulatory Commission to Lytle, DOE, letter dated March 3, 1993, as the basis for the "incidental" waste determination and has discussed this approach with your staff in a number of meetings and telephone conferences. DOE appreciates the efforts and the support of the Commission in developing the technical justification for classifying the residual waste as "incidental".

The South Carolina Department of Health and Environmental Controls (SCDHEC) and the Environmental Protection Agency (EPA) have been working closely with DOE-SR in determining closure criteria that will be protective of human health and the environment. The resulting *Industrial Wastewater Closure Plan for F and H Area High Level Waste Tank System* was formally approved by both SCDHEC and the EPA. The regulator approval of the closure plan is contingent upon the Commission's acceptance of the "incidental" waste determination methodology.

As previously discussed with the Commission's staff, Construction Technology Laboratories (CTL), Inc., a subsidiary of the Portland Cement Association, is currently formulating and testing the reducing grout that will be used to stabilize and bind up the residual waste in the tanks subsequent to waste removal operations. CTL is scheduled to complete the testing and verification of the required properties of the grout to assure the performance objectives for tank closure are met and provide a final technical report to DOE-SR by September 17, 1996. We will gladly forward a copy of that report to the Commission's staff. It should be noted that DOE-SR will not close any HLW tanks unless the CTL technical report provides verification that the grout meets tank closure performance objective requirements.

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Dr. Carl J. Paperiello

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As the first tank to be closed, Tank 20 is scheduled to undergo pouring of the reducing grout on September 27, 1996, DOE would appreciate the Commission's support in reviewing of the enclosed document on a expedited basis. As previously mentioned, initial and subsequent comments from the Commission's staff have been included in this submittal.

This effort has the support of not only the regulators but the Citizens Advisory Board, which follows and makes recommendations relative to activities at the SRS, and the general public. All parties involved consider closure of the HLW tanks as the right thing to do. With the Commission's support, this activity will become a reality and the first HLW tank in the DOE complex will be closed.

My staff is available to provide any level of detail briefing necessary regarding this effort. Any questions may be directed to me or Charles E. Anderson at (803) 208-6084.

Sincerely,



Mario P. Fiori  
Manager

PB-96-0171

Enclosure  
Regulatory Basis for Incidental  
Waste Classification at the SRS  
HLW Tank Farms

cc:  
S. Cowan, EM-30, HQ  
R. Erickson, EM-32, HQ

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The staff will keep the Commission informed of further developments in this matter.

Attachment: 8/28/96 ltr (DOE to NRC)

cc: OGC  
OPA  
OCA  
SECY

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NAME	MFederline	JGreeves		CPaperiello	HThompson		JTaylor	
DATE	9/6/96	9/06/96		9/06/96	9/13/96		9/13/96	

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staff's estimate is that a review of DOE's methodology for residual waste classification will necessitate approximately 1-1.5 full-time equivalents over a period of 5 to 6 months including support from the Center for Nuclear Waste Regulatory Analyses. This includes time allocated for Commission review of the results of the staff's evaluation of this methodology.

In response to the August 28, 1996, letter, the Staff will advise DOE of the scope and schedule of the planned review, as well as the need for funding before conducting this review. Mr. Fiori, DOE Manager of the Savannah River Operations Office, is concerned about the time required for NRC review and concurrence beyond September 1996. While he has stated to NMSS management that he was informed by his staff that NRC had committed to perform this work verbally in an April meeting and subsequent phone calls, NRC staff involved stated that no such commitments have been made. Nevertheless, NRC staff plans to meet with DOE and discuss scope, funding and schedule on September 17, 1996.

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staff's estimate is that a detailed review of DOE's methodology for residual waste classification will necessitate approximately 1.2 full-time equivalents over a period of 5 to 6 months. This includes time allocated for Commission review of the results of the staff's evaluation of DOE's tank closure plans. In response to the August 28, 1996, letter, the staff will advise DOE of the scope and schedule of the planned review, as well as the need for funding ~~prior to~~ <sup>before</sup> conducting this review.

The NRC staff will keep the Commission informed of further developments in this matter.

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