

**Department of Energy**

Washington, DC 20585

July 17, 2000

RECEIVED  
00 JUL 19 AM 9:48  
DNF SAFETY BOARD

The Honorable John T. Conway  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW  
Suite 700  
Washington, DC 20004-2901

Dear Mr. Chairman:

Thank you for your May 23, 2000, letter concerning the Savannah River Site's plans for returning Tank 49 to a high-level waste storage mission.

I am enclosing a copy of a memorandum from the Savannah River Site's Assistant Manager for High-Level Waste to the Westinghouse Savannah River Company that conveys my expectations and those of the Department of Energy for the proposed strategy for the disposition of the current Tank 49 material.

The Board's staff has been involved in weekly conference calls with the Savannah River High-Level Waste personnel concerning development of the disposition strategy and safety basis. It is currently anticipated that the details of the strategy will be shared with the Board in early August prior to commencing material disposition operations.

Thank you for your continuing interest and valuable comments.

Sincerely,

A handwritten signature in cursive script that reads "Carolyn L. Huntoon".

Carolyn L. Huntoon  
Assistant Secretary for  
Environmental Management

Enclosure



**memorandum**

Savannah River Operations Office (SR)

DATE: JUN 19 2000

REPLY TO  
ATTN OF AMHLW-ED (Barber/(803)208-1791)

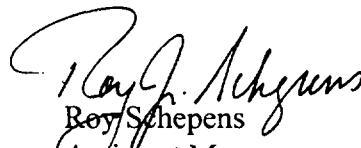
SUBJECT: Disposition of Tank 49 Material (Ltr, Conway to Huntoon, 5/23/2000)

To: Mark W. Frei, Deputy Assistant Secretary for Project Completion (EM-40), HQ

In the referenced letter, the Defense Nuclear Facility Safety Board urges the Department of Energy to develop a sufficient understanding of the risks and uncertainties related to the proposed disposition method for Tank 49 material, so that a bounding analysis of the hazards can be performed. Tank 49 currently holds wash water containing benzene-generating byproducts from the 1983 demonstration of the In-Tank Precipitation Process. As such, an adequate understanding of the benzene generation, retention, and release phenomena is necessary consistent with Recommendation 96-1.

The Board's perspectives and insight are consistent with SR's expectations and have been conveyed to the contractor in the attached letter. In addition, a weekly conference call has been established with the Board's staff to ensure an ongoing dialog is maintained and that their issues are resolved as the disposition strategy and supporting safety basis are developed. The details of this strategy will be briefed to the Board in late July prior to commencing material disposition operations.

If you have any questions please contact me or have your staff contact Don Barber at the above number.

  
Roy Schepens  
Assistant Manager  
for High Level Waste

ED:DAB:kl

PC-000-039

Attachment:  
Ltr, Schepens to Poulson, 5/25/00

MAY 25 2000

Mr. W. G. Poulson,  
Vice President and General Manager  
High Level Waste Management Division  
Westinghouse Savannah River Company  
Aiken, SC 29802

Dear Mr. Poulson:

SUBJECT: Disposition of Tank 49 Material

Reference: Letter, John Conway, Chairman DNFSB to Carolyn Huntoon, Assistant Secretary for Environmental Management, dated May 23, 2000

The U. S. Department of Energy (DOE) – Savannah River Operations Office (SR) has been involved in the recent discussions on the strategy (addition of heat and copper) for the disposition of the material in Tank 49 and found a general lack of documentation to support this strategy. A general overview of this strategy was discussed with DOE on May 17, 2000 and with DNFSB Staff on May 25, 2000. During the May 25, 2000 discussions, the DNFSB staff reinforced DOE's concern of a lack of documentation providing the details and basis for this proposed strategy.

On May 23, 2000, the DNFSB issued a letter to the Assistant Secretary for Environmental Management detailing their concern that the risks and uncertainties associated with this proposed strategy must be sufficiently understood such that a bounding analysis of the hazards can be performed. It is DOE's expectation that the details for this strategy and the basis for it be documented and address the issues discussed in the DNFSB letter along with the following items:

- Possible and expected effects on the entire HLW System including Tank 48, Tank 50 and Saltstone. This should include the effects of an emergency transfer from Tank 48 to Tank 49 during the disposition process and following the process with Tank Farm waste in Tank 49.
- Possible system upsets from this disposition method (addition of heat and copper) and what are the proposed recovery plans from such upsets. This should include the addition of copper having no effect on benzene generation and the addition of copper causing the instantaneous generation of all possible benzene.
- The uncertainties in this disposition method and what controls will be established to account for these uncertainties. This should include explaining how this complete decomposition method has been demonstrated in the laboratory and explain the potential implication from the 1997 Tank 49 samples which showed copper levels in Tank 49 were previously higher than the proposed copper addition.

Mr. W. G. Poulson

2

You are requested to provide this documentation by June 9, 2000.

The action directed by this letter is considered by the Government to be within the scope of the existing contract and does not authorize any delay of delivery or additional costs to the Government either direct or indirect. If the contractor considers that any action taken by this letter will result in a contract price increase or delay in delivery, the contractor shall promptly notify the undersigned and the Contracting Officer orally and confirm the notification in writing within five (5) days of the basis for the notification and await further direction from the Contracting Officer.

This has been discussed with Marshall Miller of your staff. If you have any questions, please contact me or have your staff contact Don Barber at extension 208-1791.

Sincerely,

*Signed by*

Roy Schepens  
Assistant Manager  
for High Level Waste

ED:DAB:kl

PC-00-033

cc:

M. Miller, WSRC, 704-56H  
J. Carter, WSRC, 704-3N

bcc:

D. A. Barber, ED  
S. M. Aleman, ED  
AMHLW Rdg File  
ED Rdg File  
Mngrs Rdg File  
DMC, 703A, #992778  
IMS  
File Code