

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

~~DEC 20 1996~~

The Honorable John T. Conway
Chairman, Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W., Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

SUBJECT: Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 96-1
Deliverable - Test Plan for Catalytic Decomposition of Soluble Tetraphenylborate
(TPB)


Enclosed is the subject test plan which provides the first scheduled deliverable (Commitment # 3, Milestone # 5.2.2-1) for the DNFSB Recommendation 96-1 Implementation Plan.

This test plan describes the methodology and approach for determining the primary catalyst(s) and the reaction mechanisms and rate constants necessary to describe and understand the decomposition of soluble TPB. The testing under this test plan will involve three separate tasks which include: 1) decomposition studies of TPB slurries; 2) sodium TPB decomposition catalyst identification studies; and 3) studies of TPB decomposition intermediate products. The results of these test activities will be documented in a report, "Final Report on Catalytic Decomposition of Soluble TPB," which is identified in the 96-1 Implementation Plan as an October 1997 deliverable to the DNFSB. These results will be used, along with the results of other test activities described in the 96-1 Implementation Plan, to understand and document the benzene generation mechanisms at the In-Tank Precipitation Facility and determine an overall bounding benzene generation rate.

The U. S. Department of Energy, Savannah River Operations Office, has completed the actions for the first deliverable identified under this milestone and proposes its closure. Copies of the deliverable have been provided and discussed with your staff.

Please direct any questions to me or W. F. Spader at (803) 208-7409.

Sincerely,


A. Lee Watkins
Assistant Manager
for High Level Waste

ED:JWM:sf

PC-97-0016

Enclosure:
Test Plan DNFSB Recommendation
96-1 Implementation Plan

The Honorable John T. Conway

2

cc w/enclosure:

M. P. Fiori, Manager, SR

S. P. Cowan (EM-30), HQ

R. E. Erickson (EM-32), HQ

W. F. Spader, ED, 704-S

A. B. Poston, AMESHQ, 703-47A

M. B. Whitaker, Jr., (S-3.1), HQ