



**Department of Energy**  
Savannah River Operations Office  
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MAY 27 1998

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  
Implementation Plan - Reference Documents**


The following reports are supporting reference documents for the Recommendation 96-1 deliverables issued to you in my letter dated May 27, 1998, and are enclosed for your information.

1. Nuclear Magnetic Resonance, Electron Paramagnetic Resonance, and Molecular Modeling Studies of Sodium Tetrphenylborate Systems at Pacific Northwest National Laboratory (U), WSRC-TR-97-0110, Rev. 0
2. Pilot-Scale Benzene Retention and Release Demonstration (U), WSRC-TR-97-0360 Rev. 0
3. Laboratory-Scale Study of Parameters Influencing Benzene Retention and Release in Potassium Tetrphenylborate Slurries (U), WSRC-TR-97-00375
4. Nitrogen Flow Rates Required to Maintain Bulk Vapor Space Concentration Limits for ITP Waste Tanks 48 and 49 (U), M-CLC-H-01426
5. Impact of Water Additions on Benzene Releases from Tank 48H (U), WSRC-TR-97-00385
6. Revised Task Technical and QA Plan for In-Tank Precipitation Benzene Retention Bench-scale Parameter Tests (U), WSRC-RP-97-11, Rev. 1
7. The State of Benzene in ITP Slurry Using Nuclear Magnetic Resonance Measurements (U), WSRC-RP-97-934, Rev. 0
8. Task Technical Plan for Pilot-Scale Benzene Retention and Release Demonstration (U), WSRC-RP-97-7, Rev. 0
9. Apparent Benzene Solubility in Tetrphenylborate Slurries (U), WSRC-TR-97-00362, Revision 0
10. Liquid Mixing in Tank 48, WSRC-TR-97-00348, Rev. 0
11. ITP Waste Tanks Seismic Sloshing Horsepower (U), T-CLC-H-00316
12. Task Technical Plan to Study the Effects of Solids on the Apparent Solubility of Benzene in Simulated ITP Salt Solutions (U), WSRC-RP-96-775, Revision 1
13. Task Technical Plan for ITP Slurry Benzene Retention and Release Mechanism (U), WSRC-RP-97-321, Revision 0
14. ITP Cycle 1 Demonstration Test Decision Logic, HLW-ITP-97026
15. Task Technical Plan for Radioactive Tests in Support of the In-Tank Precipitation Facility (U), WSRC-RP-97-0059, Revision 0
16. Tetrphenylborate Solids Stability Tests (U), WSRC-TR-97-0285, Rev. 0
17. Qualitative Evaluation of the Potential for a Large Episodic Combustible Gas, M-CLC-01516
18. Task Technical Plan for Radioactive Tests in Support of the In-Tank Precipitation Facility (U), WSRC-RP-97-0059, Rev. 1

19. Decomposition of Triphenylborane with Enhanced Comprehensive Catalyst under Aerated and Inert Conditions (U), WSRC-TR-97-0325, Rev. 0
20. Projected Variation in Feeds to the In-Tank Precipitation Process (U), OPS-DTZ-97-0004
21. Decomposition Studies of Filtered Slurries using the Enhanced comprehensive Catalyst (U), WSRC-TR-97-00383, Rev. 0
22. Tetraphenylborate solids Stability Tests (U), WSRC-TR-97-0185, Rev. 0
23. The Role of Oxygen in the Copper-Catalyzed Decomposition of Phenyl Borates in Aqueous Alkaline Solutions (U), WSRC-TR-97-0069
24. Statistical Investigation Into the Decomposition Rates of Tetraphenylborate and Its Daughter Compounds (U), WSRC-TR-97-00403, Revision 0
25. Summary of Chemistry Program Assessment for Support of DNFSB 96-1 Implementation Plan (U), WSRC-RP-97-0987
26. ITP Solids Stability Operating Window Tests, WSRC-TR-98-00072, Rev. 0
27. Task Technical and Quality Assurance Plan for Tetraphenylborate Salt Solubility in High Ionic Strength Salt Solutions, WSRC-TR-98-00071, Revision 0
28. Kinetic Studies of Inhibitor Agents for the Decomposition of Sodium Tetraphenylborate, WSRC-TR-98-00123, Rev. 0
29. The Solubility of Phenylborate compounds in Benzene, WSRC-TR-98-00129
30. Radioactive Testing Results in Support of the In-Tank Precipitation Facility, WSRC-TR-98-00070, Revision 0
31. Tetraphenylborate Solubility in High Ionic Strength Salt Solutions, WSRC-TR-98-00103
32. Excess Sodium Tetraphenylborate and Intermediates Decomposition Studies, WSRC-TR-98-00099, Rev. 0
33. Effect of Palladium form on Tetraphenylborate Decomposition Rate, WSRC-TR-98-00073, Rev. 0

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

Sincerely,

  
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ED:JWM:eeh

PC-98-0042

33 Enclosures

cc w/o Enclosures:

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