

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 21, 2006

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for the Week Ending April 21, 2006

Staff member David Kupferer was at Oak Ridge this week to perform site representative duties.

A. Oxide Conversion Facility. This week, Oxide Conversion Facility (OCF) personnel successfully completed a second conversion operation with a larger batch size than used in the initial operation. Unlike the initial operation, there was a clear indication of an exothermic reaction in both the reduction fluid bed and the hydrofluorination fluid bed. The product material was transferred to the product glovebox and canned on Thursday with visual indication that uranium tetrafluoride was produced. During OCF startup activities observed by the site reps., operator adherence to procedures and conduct of operations have been generally satisfactory; however, a YSO Facility Representative did note a deficiency this week with implementation of a required independent validation step during system shut-down.

B. Y-12 Conduct of Operations. Earlier this month, a criticality safety deficiency was noted in the Enriched Uranium Operations building because of degradation (i.e., holes) in the stainless steel floor. As a result, restrictions were placed on liquid transfers in the area. These restrictions were communicated to the facility via a Memorandum of Conversation or Conference (MOCC), issued by Nuclear Criticality Safety program personnel. Last week, a transfer occurred that was not consistent with the restrictions identified in the MOCC. Based on this issue and the conduct of operations issues noted last week regarding failure to isolate a steam condensate system, the site reps. discussed initial corrective actions with BWXT personnel. Actions to address the improper liquid transfer are in development. To address the condensate system event, BWXT conducted separate training for shift managers and operators to emphasize proper conduct of operations including formality in communications. The training materials utilized were largely a summary of Y-12 procedure use and communications requirements but did not address the specific problems identified from the event against these Y-12 requirements. In addition, these actions were noted by BWXT personnel as being limited to the Enriched Uranium Operations building. Lessons learned from this event may be appropriate for communication across other nuclear facilities. The site reps. discussed these observations with YSO and BWXT management.

C. ORNL Tank W-1A Soil Sampling. As reported last week, Bechtel Jacobs Company (BJC) started their Readiness Assessment (RA) and numerous issues were being pursued by the RA team. On Monday, BJC management decided to suspend the RA. DOE-ORO and BJC personnel noted to the site reps. that the main reasons for the RA suspension involved excessive simulation in the demonstration, questions on change control of procedures, incomplete specification of training requirements in the project training plan, and improper designation and formatting of certain controls in procedures. BJC personnel noted that the RA is intended to be resumed by mid-May.