

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 20, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
J. J. McConnell, Deputy Technical Director
FROM: R. T. Davis/ T. D. Burns
SUBJECT: SRS Report for Week Ending February 20, 2004

Staff members John Contardi, Matt Duncan, Dave Gutowski and Rich Tontodonato were on-site this week reviewing the status and safety basis for neptunium processing in HB-Line Phase II. In addition, the staff team reviewed the status of High Level Waste salt processing.

FB-Line: Last week, operators in FB-Line inadvertently violated a Criticality Safety Limit (CSL) for the Non-Destructive Assay (NDA) room. The error was identified and FB-Line management elected to return the item to the vault. Subsequent analysis indicates that the item was safe; however, the movement of this material into the NDA room was not analyzed at the time and violated the Technical Safety Requirements. Fissile material movements were suspended and a recovery plan was developed by WSRC.

During plutonium oxide stabilization activities, three cans of oxide were moved to the FB-Line vaults in convenience cans because of questions concerning the material content. These three cans were the only convenience cans stored in the vault. However, the cans were not identified as being unique or anomalous. CSLs were established for the NDA room for several types of containers; however, limits were not established for a convenience can. As a part of the normal vault assay, one of the convenience cans was identified for assay. Operators questioned which limit applied for the convenience can but concluded that the item was similar to a bagless transfer can and transferred the item into the NDA room. Subsequently, FB-Line management concluded that the item did not meet the appropriate CSL. The item was then returned to the vault without contacting criticality engineering to evaluate the situation.

The initial transfer of material into the NDA room represents a break down in the criticality control program at FB-Line. In addition, facility response to the situation (i.e., moving the item without appropriate analysis) indicates a further break down in criticality control. Discussions with WSRC management indicates that they recognize the significance of these issues and are taking appropriate actions. Fissile material movement have resumed under senior supervisory watch.

Office of Oversight and Performance Assurance (OA): This week, the OA assessment team provided an outbrief on the results of their January 26, 2004 to February 5, 2004 review of site safety and emergency management programs (site rep weekly, 1/23/04). Overall, the OA team found the site integrated safety management and emergency management programs to be strong. However, specific areas for improvement were identified. These include integration of hazard controls into activity-level work planning and implementation of the Unreviewed Safety Question process to manage changes affecting facility safety bases.