

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 19, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
J. J. McConnell, Deputy Technical Director
FROM: J. S. Contardi SRS Site Representative
SUBJECT: SRS Report for Week Ending November 19, 2004

Board Vice-Chairman, A. J. Eggenberger, and Board member, J. E. Mansfield, were on-site Wednesday along with staff members J. K. Fortenberry, R. E. Tontodonato, and M. P. Duncan. Site personnel briefed the Board on several site activities. Specific areas of interest to the Board included Department of Energy (DOE) plans for facility utilization to support nuclear material stabilization, implementation of National Defense Authorization Act Section §3116 legislation, and startup activities for the Tritium Extraction Facility.

Fee Reduction: On Monday, DOE issued a Notice of Intent to the Westinghouse Savannah River Company (WSRC) for a fee reduction of \$1,000,000. A subcontractor fatality on July 26, 2004, and “a series of other industrial events and near-misses under WSRC’s control which occurred on the Savannah River Site” were cited as reasons for the fee reduction. WSRC has two weeks to identify mitigating factors that DOE may consider when determining the final fee reduction.

Unvented Waste Drums: The Solid Waste Management Facility (SWMF) contains approximately 3,200 unvented transuranic (TRU) waste drums, 400 of which are outside of concrete culverts. This week, SWMF personnel identified more than 100 drums that contained a flammable head space atmosphere at the time of venting. Thus far, nearly 12,000 drums have been processed through the vent and purge facility. The flammable atmosphere in an unvented drum may invalidate assumptions in the Documented Safety Analysis, which assumed oxygen would be depleted in a sealed drum. SWMF personnel have declared a Potential Inadequacy in the Safety Analysis (PISA) and implemented the following compensatory measures:

- Movement of an unvented TRU drum will be performed using remote mechanical means, and manual handling will be performed only when necessary as specified in procedures using safe drum handling techniques,
- The number of movements of an unvented TRU drum will be minimized prior to processing in the Drum Venting System,
- The number of unvented TRU drum located outside of culverts will not be increased above the number outside of culverts at the time of PISA declaration.

3H Evaporator: On October 2, the deactivated warming coil on the 3H evaporator failed (site rep. weekly 10/8/04), which allowed waste to migrate outside of the evaporator cell. The warming coil has been flushed and the leak site was visually identified. The warming coil has been capped at the cell wall and the evaporator was restarted this week. WSRC personnel have concluded the failure mechanism was mechanical abrasion of the warming coil tube.