

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 16, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: M.T. Sautman, SRS Site Representative
SUBJECT: SRS Report for Week Ending November 16, 2007

Transuranic (TRU) Waste: In light of issues from last week's Management Assessment drill, subject matter experts reviewed the adequacy of the Fire Department's bunker gear for a worst case TRU waste transportation accident and the preferred mitigation strategy. The Site Rep observed a subsequent table top drill of this worst case transportation accident that was played through accident recovery. In general, the response was satisfactory although the turnover briefing of incident command was terse. Shipping will commence after Thanksgiving.

H Material Disposition: The Site Rep observed coached table top drills that are being performed for each shift at H Canyon and HB-Line to improve performance following the annual site exercise. (See 7/6/07 weekly report). The H-Canyon training provided clear expectations for what each position was to perform and then reinforced these expectations by roleplaying through a series of accident scenarios. The Site Rep provided several observations on how the effectiveness and relevance of HB-Line's training could be improved. In addition, a reanalysis of firefighter stay times (for fighting a HB-Line fire while wearing Self Contained Breathing Apparatus) justified an increase from a very restrictive three minutes to a more manageable thirty minutes.

H Canyon: The error-prone and administratively burdensome sump flush program was identified as the site's number one priority for replacement with an engineered control. After conducting an alternatives study, engineers are considering inserting a plate with many stainless steel chains hanging down from it into the geometrically unfavorable sumps. A recent study will not allow reducing the assumed concentration of flush solutions from the current 400 g/l U-235.

HB-Line: A dissolver charge basket was placed on hold pending an Engineering evaluation of undissolved sludge in the basket. However, due to a lack of status control, an operator used this basket for the next dissolver charge where some of this sludge dissolved.

Modular Caustic-Side Solvent Extraction Unit (MCU): As part of the ongoing Management Self Assessment, the Site Rep observed the control room response to an emergency drill involving a MCU explosion and fire. No major issues were identified at the control room.

Defense Waste Processing Facility (DWPF): DWPF was shut down much of the week due to lack of feed in the Melter Feed Tank, lack of storage space for canisters awaiting decontamination, and later problems with transferring feed to the melter.

Heavy Water Components Test Reactor: A DOE Facility Representative identified that annual inspections required by a Surveillance and Maintenance Plan had not been performed since 2001.