

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 15, 2013

TO: S. A. Stokes, Acting Technical Director
FROM: M. T. Sautman and D. L. Burnfield, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending March 15, 2013

Maintenance: The site reps have been reviewing maintenance data and talking to maintenance managers across SRS. Despite tight budgets, safety equipment is being maintained in compliance with Technical Safety Requirements (TSR) and resources are dedicated when problems occur. In addition, a focus by SRNS and SRR on preventive maintenance (PM) has reduced the number of PM deferrals and completely eliminated PM delinquencies (keeping in mind that SRNS reduced the number of annual PM hours by 12,000 hours and tank farms is suspending more than 300 PMs this year). However, focusing the declining resources on PMs and safety equipment has resulted in negative corrective maintenance (CM) trends. For example, the total CM backlog hours (excluding outage CM) is increasing in most facilities, some as high as 50 or 180% over the last 12 months. Meanwhile, facility maintenance crews have shrunk as much as 60% from their peak levels in 2012. This reduction is on top of voluntary and involuntary separations and layoffs of staff augment and construction staff last autumn. The combined effect has caused the number of weeks for the existing facility crews to work off the current CM backlogs to dramatically increase, doubling or nearly quadrupling for some facilities. As the backlog grows, the amount of CM hours for work requests > 90 days old have significantly increased. At many facilities, 80 to 90% of the CM backlog is now more than 90 days old. Due to a number of factors with how the CM backlog hours are determined, the actual CM backlog hours are likely higher than what is in the database. Furthermore, the shift to a 32-hour work week in April is likely to worsen the trends in most SRNS facilities or those that utilize site-wide maintenance crews. Increases in CM backlogs and PM deferrals occurred after the furloughs in late 2012. Finally, upcoming furloughs and the demographics of the remaining maintenance workers make them very vulnerable to departures during the next five years.

Modular Caustic Side Solvent Extraction Unit (MCU): SRR shut down MCU because of a variable frequency drive (VFD) fault on the extraction contactor bank. SRR then began troubleshooting and found that the number 1 extraction contactor was not rotating. They attempted to reverse the leads and turn the contactor with no success. They now plan to flush the contactor with distilled water and if that does not work to perform an acid flush.

H-Canyon: Despite wrapping a truck trailer (used for transporting transuranic waste culverts) in plastic and conducting a conditional release before it left the truckwell airlock, radiological protection inspectors identified fixed (103,000 dpm α) and transferable (107 dpm α) contamination on the trailer equipment when it arrived in E-Area.

Saltstone: SRR began its first grouting campaign of 2013. Some delays were initially encountered due to problems with a screw feeder.

K-Area: The new diesel fire pump completed acceptance testing.

HB-Line: A DOE facility representative identified that first line managers repeatedly assumed the duties of the Shift Operations Manager (allowed per the TSR) without having the qualifications to act as a Facility Emergency Coordinator, if needed.

Tank Farms: SRS is preparing the necessary lockout testing and load testing of the uninterruptible power supplies in support of the consolidation of the 1F and 74F control rooms. An operational submersible transfer pump is in place to replace the failed pump in Tank 4. SRR has also completed the planning for lowering the suspended submersible mixing pump (SMP) into Tank 8 as well as placing another SMP into Tank 13.