

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending January 24, 2014

Uranium Processing Facility (UPF): Last week, the NNSA Acting Administrator issued a memorandum requesting that the Oak Ridge National Laboratory (ORNL) Director assemble a team to develop and recommend an alternative approach to the UPF Project. The Administrator's memorandum provided specific objectives for this alternative approach, including: the replacement of Building 9212 capabilities no later than 2025 for no more than \$6.5 billion, the preservation of existing design elements to the extent practical, the consideration of newer metal purification technologies with lower space demands, and the use of the same location near the Highly Enriched Uranium Materials Facility while considering the eventual consolidation of the remaining enriched uranium capabilities to enable reduction of the protected area footprint. The Administrator requested that the ORNL Director provide the results of this review by April 15, 2014.

Aging Infrastructure: The B&W General Manager sent a letter and report to NPO that updates the risk of Potable Water System (PWS) failures and the activities being pursued to lower that risk. The PWS feeds all of the fire suppression systems at Y-12. The report documents an evaluation that identified the most vulnerable cast iron piping and targeted this piping for replacement based on the consequences or impact to operations if it were to fail. The letter also discusses B&W's near-term goal to identify and isolate low-use sections of at-risk cast iron piping. B&W is also piloting an effort this year to utilize in situ technologies that allow sections of piping to be lined or coated without the need to excavate.

Solid Waste Storage Area (SWSA)-5: Last week, the site representative accompanied the OREM facility representative (FR) to observe venting operations of contact-handled transuranic (TRU) waste drums recently retrieved from SWSA-5 facilities (see 10/25/13 report). Workers performed the operations with help from an experienced supervisor, who supported the activity by reading each procedure step prior to execution. The contractor, URS/CH2M Oak Ridge LLC (UCOR), also provided enhanced oversight for the operations by instituting a senior supervisory watch. During the past several months, UCOR personnel and the OREM FR provided input to improve the usability of the procedure, which the workers were able to execute seamlessly.

Radiological Control (RADCON): Last week, a radiological engineer reviewed work activities at the Groundwater Treatment Facilities and identified several radiological work permit (RWP) compliance issues. Records for the past month indicated that workers had used the wrong RWP or had failed to sign in on the correct RWP for filter replacement activities on the groundwater system. The fact-finding meeting for this event revealed that a new RWP was issued in December, just before the holidays, to address filter replacements; however, not all workers were briefed on the new RWP. Workers on back shifts who were not briefed and did not have coverage from RADCON personnel were sometimes confused about which RWP applied to these activities. In each of these cases, workers donned personal protective clothing consistent with previous guidance and experience and had no evidence of external contamination.

This week, the RADCON organization conducted a short briefing for all radiological workers at Y-12 in response to a series of recent radiological events. The briefing slides listed these recent radiological events and attributed the cause of each to the failure of workers to follow existing controls. The slides then reiterated the existing controls and emphasized that the success of the RADCON programs depends on worker performance.