

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director
FROM: Wayne Andrews and David Kupferer, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending December 16, 2011

Readiness Assurance. Y-12 procedures allow B&W to implement Continuing Operations Plans (COPs) in lieu of performing a readiness assessment prior to restarting production operations that have been shut down for more than a year (see the 8/5/11 and 11/18/11 reports). During the past five years, B&W approved nine COPs; seven of the nine approved COPs were subsequently canceled (two were cancelled during the past three months). The first COP B&W completed was related to using SST-E trucks to transfer material to the Highly Enriched Uranium Materials Facility (HEUMF). The second COP B&W completed was related to shearing hood operations in the special processing area of Building 9212 (see the 11/18/11 report). B&W formally approved restart of shearing hood operations on November 22nd. Therefore, no COPs remain outstanding. B&W and YSO have requested guidance from NNSA Headquarters on whether DOE Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, allows for COPs to be used as a basis for not needing to perform readiness assessments prior to restarting nuclear operations.

Transuranic Waste Processing Center (TWPC). Wastren Advantage, Inc (WAI) initiated operation of its drum venting system in September 2010 (see the 9/10/10 report). The purpose of this capability is to vent several hundred waste drums involving both inner and outer drums. WAI has processed more than half of the subject drums and expects to complete operation of the drum venting system in 2012. Some waste drums will need to be processed that cannot be vented in the drum venting system because they are either too large (e.g., 110-gallon drums) or include nested configurations of more than two drums. WAI is planning to vent these unusual drums using a puncturing device in the box breakdown area of the main process building. WAI is developing a revision to the TWPC Documented Safety Analysis (DSA) to support this new activity.

In May 2008, WAI commenced processing of remote-handled (RH) transuranic waste in its new hot cell (see the 5/23/08 report). Since that time, WAI has processed about 90 of the 350 total RH casks. WAI has identified that approximately 70% of the RH waste inventory is actually contact-handled (CH) waste and further identified that 190 of the remaining 260 RH casks contain waste that is predominately CH waste. To improve its operational productivity and efficiency, WAI determined that additional capacity for processing CH waste at TWPC is necessary. WAI is currently constructing a Cask Processing Enclosure (CPE) to process the 190 RH casks that have been determined to generally consist of CH debris waste. WAI is expanding the 30-ton crane bay enclosure concurrently with constructing the CPE within the crane bay. The design of the CPE includes the following: a confinement ventilation system, a dry-pipe fire suppression system, hoists and lifting fixtures, a transfer cart system, a cask tilt station, a liquid handling system, and a work enclosure (including a breathing air system for workers who are sorting and separating the waste). The confinement ventilation and fire suppression systems of the CPE will be connected to the existing safety-significant ventilation and suppression systems in the main processing building. WAI has submitted a revision of the TWPC DSA to DOE-ORO for approval to address CPE operations.

WAI has submitted a startup notification report to DOE-ORO that proposes a contractor readiness assessment prior to startup of the CPE and that the TWPC General Manager be the startup authority. DOE-ORO is reviewing WAI's proposal. WAI plans to conduct its RA in February and commence CPE operations in April.