

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 November 18, 2011

Uranium Processing Facility (UPF). Staff members J. Abrefah, T. Cutler, M. Dunlevy, D. Grover, C. Johnson, R. Tontodonato, and W. Von Holle visited Y-12 to perform a preliminary design review of UPF chemical processing, disassembly, surveillance, and manufacturing equipment.

ORNL Building 3019/Uranium-233 Disposition. This week, Isotek completed its readiness assessment (RA) for retrieving, inspecting, overpacking, and shipping Zero Power Reactor (ZPR) plates to the Nevada Nuclear Security Site (NNSS, see the 11/11/11 report). The RA team identified two findings—one pre-start and one post-start—and concluded that the project team has demonstrated readiness to safely conduct the ZPR shipping campaign. Isotek plans to expeditiously address the pre-start finding to allow for DOE to initiate its RA by December 5th. Isotek expects to begin shipments of ZPR material by the end of this calendar year and transfer all the ZPR material by July 2012. Concurrently, DOE-ORO and Isotek are continuing preparations for the direct disposition of the Consolidated Edison Uranium Solidification Project (CEUSP) canisters to NNSS. The project team intends to minimize the timeframe between completing the shipments of ZPR material and initiating shipments of CEUSP material.

Readiness Assurance/Building 9212 Operations. 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 shutdown for more than a year (see the 8/5/11 report). This contractual allowance is based on using COPs to ensure the deliberate and systematic maintenance of equipment, procedures, and personnel qualifications during periods in which there is no programmatic need to perform the subject operations. The site representatives note that DOE Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, does not include an allowance for COPs to be used as a basis for circumventing the requirement to perform readiness assessments prior to restarting nuclear operations. In November 2008, B&W approved a COP for the shearing hood in the special processing area of Building 9212. During the past three years, the COP required that (a) calibrations and preventive maintenance of the shearing equipment continue to be performed, (b) an operator and supervisor continue to maintain their qualifications associated with shearing operations, and (c) the shearing hood be operated every six months using the approved procedure and surrogate material (i.e., aluminum). On October 13th, B&W resumed operations in the shearing hood. On Monday, production management determined that completion of the COP requirements had not been formally verified and approved as required by Y-12 procedures. On Thursday, B&W convened a critique and established that, in accordance with the COP, shearing equipment had been properly maintained and calibrated, operations using surrogate material and actual procedures had been performed every six months, and operators and supervisors had properly maintained their qualifications.

Work Planning and Control. In response to recent assessments that have indicated weaknesses in B&W's work planning and control processes including a review by the Board's staff (see the 8/19/11 report), B&W issued a comprehensive Performance Improvement Plan this week. B&W's plan identifies several improvement actions including revising Y-12 procedures to (a) improve coordination and integration, (b) enhance requirements for performance of more detailed task-specific hazard analyses, and (c) remove standard industrial hazards from the Job Hazard Analyses process. B&W plans to issue the revised procedures in February 2012.