

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 10, 2008

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending October 10, 2008

ORNL Building 3019/Uranium-233 Disposition: DOE-ORO approved the Safety Design Strategy document submitted by Isotek (see the 9/19/08 site rep. report) as part of implementation of DOE Standard 1189, *Integration of Safety into the Design Process*. DOE-ORO noted that the recent decision to construct a new building adjacent to Building 3019 for processing down-blended solution needs to be incorporated into the next revision of the Safety Design Strategy document. The DOE-ORO approval also forwarded numerous technical comments requiring resolution in subsequent Safety Design Strategy revisions. Among the DOE-ORO comments was the need to revise the fire mitigation strategy and determine the proper functional classification (safety-significant or safety class) of installed fire suppression systems.

Also, DOE-ORO personnel informed the site reps. that Isotek and DOE are completing a re-baselining effort for the U-233 Downblending and Disposition Project. Isotek is to submit a project re-baselining package to DOE-ORO in early November. DOE-ORO personnel also noted that Isotek is in the process of obtaining a new Architect/Engineer for the portion of the design involving uranium dissolution and downblending.

Unreviewed Safety Question Determination (USQD) Process: As part of the Y-12 Throughput Improvement Program, Y-12 has been revising the USQD process to reduce the number of USQDs performed (see the 6/6/08 site rep. report). Each of the past several years, B&W has performed more than 1000 USQDs that identified three or less positive USQs. Several criteria are used to screen proposed changes (e.g., facility or procedure changes) from entering the USQD process such as like-for-like component replacement and typographical procedure revisions. B&W recently issued a pilot procedure that, once implemented, would allow designated individuals (required to have a minimum of 24 months safety basis related experience) to screen proposed changes if it is *readily apparent* that the proposed change would not result in a positive USQ. This expert-based USQ screening process is being piloted in the Assembly/Disassembly Building for the next six months. During this pilot phase, the formal USQD process will continue to be exercised regardless of the outcome of the expert screening. Prior to determining whether or not the pilot process was effective, the site reps. consider that B&W may need to identify criteria that will be used to determine whether reviewers are appropriately applying the term *readily apparent*.

Performance Based Incentives (PBIs): YSO recently issued the Fiscal Year (FY) 2009 Performance Evaluation Plan (PEP). The PEP describes the criteria that will be used to determine B&W's fee for managing and operating Y-12 during FY 2009 and includes a description of specific PBIs. Noteworthy safety-related PBIs include the following: (a) continuing preparations to relocate nuclear material to the Highly Enriched Uranium Materials Facility, (b) replacing electrical panels, supply fans, and sprinkler heads in Building 9212, and (c) risk reduction of buildings 9201-5 and 9204-4 including efforts to de-inventory the facilities to below Hazard Category-3 quantities of special nuclear material during the next two years.