DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 13, 2008

TO: Timothy J. Dwyer, Technical Director

FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives

SUBJECT: Activity Report for Week Ending June 13, 2008

Building 9212 Fire System Degradation: Late last week, B&W identified that a fire water supply pipe—part of a safety-class fire suppression system—has a small crack at a foundation wall penetration in the E-wing basement. This supply pipe has been isolated and fire patrols have been initiated per the Building 9212 Technical Safety Requirements (TSR). B&W is planning to replace the subject piping. Building personnel have observed the water that was leaking from this crack during the past several months; however, the water was collecting in a separate part of E-wing basement from where the pipe penetrates the foundation wall causing confusion as to the source of the leak. During the past two weeks, water began to collect in the vicinity of where the subject pipe penetrates the foundation wall. B&W isolated the pipe and excavated on the outside foundation and discovered the crack in the pipe. B&W contends that the small crack did not affect the ability of the system to supply adequate water pressure per the TSR and, therefore, the system's ability to perform its design function was not degraded. Similarly, B&W considers that this situation does not meet the external occurrence reporting criteria for safety system degradation and is not planning to generate an occurrence report on this event. B&W management noted to the site reps. that this pipe failure will be addressed by the B&W Continuing Safe Operations Oversight Team as part of the annual assessment of Building 9212 (in response to the Board's letter of March 13, 2007).

ORNL Building 3019/Uranium-233 Disposition: As reported on February 15th, Isotek's new senior management are planning various changes to the design for the U-233 Downblending and Disposition Project. In the last few months, DOE-ORO has assigned a new Project Manager and Deputy Project Manager for the project. In late April, DOE-ORO directed that DOE Standard 1189-2008, *Integration of Safety into the Design Process*, be included in the contract. Isotek is developing an implementation plan for DOE Standard 1189-2008 that factors in the project's design and safety analysis efforts to date. DOE-ORO personnel noted to the site reps. that Isotek is developing a Safety Design Strategy document. DOE-ORO is planning design reviews of various portions of the downblending system to be conducted during the next several months.

Isotek continues to plan the campaign to dismantle and remove contaminated equipment in preparation for modifications to Building 3019 supporting the downblending project. Isotek has submitted a Startup Notification Report (SNR) that proposes both contractor and DOE Operational Readiness Reviews (ORRs) be performed to verify readiness for the dismantlement/removal activities. The SNR also proposed that the scope of the ORRs include the activities to perform the Building 3019 downblending project modifications. DOE Headquarters has approved this SNR. Due to the design changes and latest design schedule, dismantlement and modification efforts are now planned to start in early 2009.

Transuranic Waste Processing Center (TWPC): DOE-ORO has requested that DOE Headquarters approve two SNRs regarding activities at the TWPC to receive, load, and prepare casks containing transuranic waste (both remote and contract handled) for shipping. There are no Technical Safety Requirements applicable to these activities. EnergX, the contractor that runs the TWPC, has recommended a contractor Readiness Assessment (RA) for readiness verification and, correspondingly, that the TWPC General Manager be the startup authority. A small team of subject matter experts from DOE-ORO plans to conduct formal oversight of the contractor RA.