

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 27, 2004

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJ: Activity Report for Week Ending August 27, 2004

Todd Davis was out of the office from Tuesday through Friday.

A. Microwave Casting. As reported on June 10th, BWXT management had presented their plans on proceeding with microwave casting of enriched uranium to YSO. The prototype campaign is to consist of up to 15 casting runs conducted in the enriched uranium operations building. The level of readiness review had been under discussion between YSO and BWXT and plans in June had projected line management declaration of readiness by August. Since June, BWXT has still not proposed the level of readiness review via a Startup Notification Report revision and decisions are not expected for a few weeks. This delay could interfere with proper exercise of the readiness process if not accounted for in overall project planning. The site rep. discussed this observation with YSO management.

B. Highly Enriched Uranium Materials Facility (HEUMF). As noted last week, the HEUMF Preliminary Documented Safety Analysis (PDSA) and YSO Safety Evaluation Report (SER) had been approved. Following this action, NNSA Headquarters approved the Critical Decision 3 milestone this week to allow the HEUMF project to proceed with awarding the main construction contract. YSO in turn formally authorized BWXT to award the construction contract.

C. Wet Chemistry Startup. On Friday, the site rep. observed the first attempt to start up the Primary Extraction system. Following system lineup and start of extraction equipment operation, the feed solution flow was abnormally low given that the control valve was nearly full open. The operations crew (including "first use" management and technical oversight personnel) decided to shutdown the system. A blockage of the feed line is suspected and troubleshooting actions were being determined.

D. Tracking of Surveillances. A criticality safety engineer performing an annual review of criticality safety for a precipitation process in the enriched uranium operations building identified that uranium holdup surveys were overdue. The governing criticality safety requirements call for the surveys to be performed every two months and the surveys had not been performed since March. At the critique of this issue on Thursday, it was identified that the completed March survey was erroneously entered into the surveillance tracking database as March 2007 (vs. 2004) and therefore the database did not prompt a requirement in May 2004 to perform the next required survey. This event calls into question the rigor of tracking such surveillances and the corrective actions discussed at the critique did not appear to directly address the issue. The site rep. discussed this observation with Y-12 management who indicated they would followup on the issue.

cc
Board Members