

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 18, 1998

TO: G.W. Cunningham, Technical Director

FROM: Paul F. Gubanc, Oak Ridge Site Representative

SUBJ: Activity Report for Week Ending December 18, 1998

Board member Dr. John Mansfield, accompanied by staff member Don Owen, was at Y-12 on Thursday and Friday to conduct tours of selected Y-12 facilities and the U-233 storage facility (Building 3019) at ORNL. Dr. Mansfield also participated in Y-12 recognition ceremony activities.

A. Y-12 Enriched Uranium Operations (EUO) Restart: On December 16, DOE-Oak Ridge Operations (ORO) amended the EUO Authorization Agreement and authorized the restart of EUO Phase-A2 processes. Unfortunately, process startup activities were delayed by a day due to authorization basis (AB) implementation problems, specifically:

1. The contractor (LMES) had committed to implement the new operational safety requirements (OSR) by midnight but had not developed a formal plan for doing so.
2. The approved OSRs were not provided to the Shift Manager until 0830. The EUO AB List (which defines what constitutes the AB) was not updated until about noon. Until then, the Shift Manager was dependent on draft documents and verbal assurances of what his AB was.
3. Having made no provisions for implementing a new criticality alarm OSR, EUO was forced to suspend casting operations until the OSR was satisfied.

Formal implementation planning for AB changes has previously been an issue between YSO and LMES. LMES currently has an open action to develop a formal procedure on how to implement AB changes. I reemphasized the need for expeditious progress with senior LMES management.

B. Y-12 Uranium Warehouse: DOE has made Critical Decision One (CD-1) on plans to construct a new enriched uranium warehouse at Y-12. Design work will start in 1999 with construction planned for 2001-2005. The new warehouse is the first in a series of capital projects planned to replace and consolidate current uranium storage and manufacturing facilities at Y-12.

C. ORNL U-233 Inspection Plan: On December 18, Dr. Mansfield, Mr. Owen and I toured ORNL Building 3019 and discussed their plans for inspecting the U-233 inventory.

1. ORNL has not yet developed objective inspection criteria for the several different inspections currently planned (e.g., visual, smearable contamination, radiography, neutron assay).
2. ORO and ORNL have not yet determined what level of operational readiness evaluation will be conducted. Since some of these cans have not been handled in many years, and some of the inspection techniques are new, a rigorous readiness evaluation would appear appropriate.
3. Only five operators are currently dedicated to Building 3019. Also, retrieval of material from the tube vaults requires crafts not currently assigned to 3019. Executing the inspection plan is expected to require additional staffing (incl. security forces) who have yet to be trained.
4. Radiological control practices currently employed at 3019 (e.g., step-off areas, personnel surveys, protective clothing) will not adequately support the increased personnel flow for the inspection program. Facility management has not yet formulated plans to address this need.

Current ORNL plans envision an April 1999 start for the inspections. This appears very optimistic.

cc: Board members