

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 2, 1998

TO: G.W. Cunningham, Technical Director

FROM: Donald Owen, Acting Oak Ridge Site Representative

SUBJ: Activity Report for Week Ending October 2, 1998

Mr. Gubanc continued his personal leave this week and plans to return on October 5, 1998.

A. Y-12 Building 9212 Elevated Uranium Levels Update: As previously reported, elevated levels of uranium were observed in bioassay data for one individual working in Building 9212 E-Wing casting operations. The estimated dose for this individual has been determined to be 865 mrem (50 year CEDE). This dose approaches but does not exceed the LMES annual administrative limit of 1000 mrem. Bioassay data for five other individuals has been collected that indicate individual doses from about 30 mrem to 200 mrem. While the data for the higher exposed individual indicate predominantly class Y material (less soluble, persistent), data for the five other individuals indicate a mixture of class Y and class W material (more soluble, less persistent). A total of 12 individuals are under radiological work restriction and about 60 operations and support personnel are being monitored for elevated levels. Possible causes under review include overall E-Wing contamination control and work practices in the casting knockout line and material handling areas in E-Wing. This review is expected to take several more weeks to obtain further data and determine all corrective actions. All of E-Wing will remain posted as a respirator area pending corrective actions.

B. Emergency Lighting in Y-12 Buildings 9212 and 9215: The Board's letter of January 30, 1998 forwarded a staff observation that adequate emergency lighting coverage in Buildings 9212 and 9215 had not been verified in preparing for restart of operations with enriched uranium. Subsequent surveys by Y-12 showed the need for extensive upgrades to assure adequate evacuation capability. A compensatory measure for personnel to carry flashlights in most areas of Buildings 9212 and 9215 was implemented during the upgrades. Approximately 440 emergency lighting units have been installed over the last several months. All generally accessible areas in these buildings have now been verified by Y-12 as adequately covered by emergency lighting and the compensatory measure for flashlights has been withdrawn.

C. Criticality Safety Program Evaluation of the Y-12 Plant: At the request of the DOE Y-12 Site Office (DOE-YSO), personnel from the DOE Office of Nuclear and Facility Safety (EH-3) are conducting a review of the criticality safety program at Y-12. The EH-3 team is focusing on the adherence of the Y-12 program to applicable ANSI/ANS criticality safety standards as well as implementation of the Y-12 program in the major nuclear facilities. The EH-3 review team finished the initial site visit this week that included facility walk-downs, interviews and other information gathering. The team will complete the review and provide results to DOE-YSO during the next few weeks. No major safety deficiencies with the Y-12 program or current implementation were identified, but recommendations for improvement in certain areas are being developed.

cc: Board members