

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending February 27, 2015

Staff members H. Massie, R. Oberreuter, and A. Poloski were at Y-12 to observe the Aging Infrastructure Management Workshop (see below).

Aging Infrastructure Management Workshop: CNS hosted a workshop this week to allow DOE/NNSA contractor organizations from various sites across the complex and representatives from the nuclear power industry to share lessons learned in managing aging infrastructure. Common issues were recognized and several different approaches to address these issues were discussed. Some of the common issues related to the degradation of facility-level systems such as electrical, ventilation, and fire protection systems. One example of an approach to address these issues was the Integrated Facility Aging Management (IFAM) program at the Savannah River Site, which was presented in some detail and appeared to have a level of success in identifying issues associated with aging systems and components.

Building 9212: On February 11, 2015, a safety-significant conductivity probe in the wet-vacuum system (WVS) did not pass its monthly surveillance test. The conductivity probe is in a trap in the WVS suction lines and the unit is designed to close an isolation valve upon detection of liquids to prevent transfer of fissile solutions to uncontrolled geometries. During the surveillance, the probe failed to close the isolation valve upon introduction of a test liquid. When this occurred, the operator informed the Building 9212 Shift Manager who entered the applicable limiting conditions of operation for the WVS. Upon inspection, the system engineer discovered the probe had become unthreaded from its mounting fixture, which prevented its operation. As part of the corrective actions from this discovery, Production management is revising the WVS's quarterly preventive maintenance instructions to include a step to check that the probe is properly seated to the mounting fixture.

Building 9731: On February 12, 2015, the Plant Shift Superintendent (PSS) dispatched Fire Department (FD) personnel and a Hazardous Materials (HAZMAT) team to Building 9731 due to a report from a Security Police Officer (SPO) of an airborne irritant inside the building. When the SPO entered the building, he experienced throat irritation and coughing, and he immediately exited the building. Building 9731 is a legacy facility and not normally occupied, but a technician from the Development organization was conducting a research-related work activity in the facility that required the evaporation of a lithium hydroxide solution. FD personnel established an incident command post outside the facility and entered the building using respiratory protection. They noted a small puddle of condensate that had dripped from the exhaust duct associated with this evaporation operation. The response team shut down the evaporation equipment, which stopped the condensate drip. The technician that had been attending the work was not in the facility when the FD arrived, but he did not note any abnormal condition prior to leaving. The door the SPO entered was not near the evaporation equipment, but the response team did not find any other potential source of the airborne irritant. The results from the CNS investigation into the cause of the event will be discussed at a critique meeting scheduled for early next week.

NNSA Production Office (NPO): Last week, the NNSA Administrator announced that Geoff Beausoleil has been named as the next NPO Manager. The current NPO Manager, Steve Erhart, will stand up the NNSA Office of Policy.