

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 19, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Matthew Duncan and Brandon Weathers, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending November 19, 2021

DNFSB Staff Activity: R. Jackson traveled to Y-12 to review the Uranium Processing Facility project.

Federal Oversight: NPO Y-12 has had some turnover among its facility representatives over the past year and a half since NPO Y-12 had ten fully qualified personnel (see 6/12/20 report). There are currently ten facility representatives; ten are needed per the most recent staffing analysis. Of the ten, four are fully qualified, two are qualified but are working to be qualified on the facilities they are currently assigned, and four are interim qualified. For safety system oversight personnel, NPO Y-12 needs three full time equivalents. There are three people that are fully qualified and three more in the qualification process.

OREM has two facility representatives for the Transuranic Waste Processing Center and one at the uranium-233 facilities (Buildings 3019 and 2026). The most recent staffing analysis determined that the Transuranic Waste Process Center needed 3 facility representatives. While most of OREM's facility representatives are qualified, none of the OREM facility representatives are currently fully qualified on the facilities they are currently assigned due to the pandemic. OREM has not performed a self-assessment of the program recently. DOE Standard 1063-2017 states that "Field Element Managers shall ensure that their FR Programs are evaluated periodically (not to exceed three years) relative to the requirements of this standard." For safety system oversight personnel, OREM needs three and has two that are fully qualified and one in the qualification process. OREM would like to hire a fourth to spread the workload but believes they have adequate coverage today.

Radiological Control: There were four personnel contamination events at Y-12 during the past two weeks. The first person had contamination on a shoe after inadvertently stepping back into the contaminated area while doffing anti-contamination shoe covers in Building 9212. The second person had contamination on the hair, neck, and shirt after performing knockout activities in the Building 9202 foundry. The third person had contamination on a shoe after unexpected removable contamination was discovered on an item in Building 9204-2E. And the fourth person had contamination on a shoe after tracking residual contaminated material into Building 9215 from a recent project in an alley outside of Building 9204-2E. Surveys did not detect any additional spread of contamination outside or inside the building.

There have been 23 personnel contamination events this calendar year so far. All but one of them (see 1/22/21 report) were below the threshold for ORPS reportability. The radiological control organization performs in field reviews for all contamination events regardless of severity. For the event in Building 9204-2E, the responsible manager opted to use the abnormal event investigation process as well. During the last decade at Y-12, contamination events per 10,000 radiological work permit entries have ranged between approximately 0.5 to 2.5. For fiscal year 2021, there were 29 total at a rate of 1.29.