DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 22, 2023

TO: Timothy J. Dwyer, Acting Technical Director

FROM: Clinton Jones and Frank Harshman, Resident Inspectors

SUBJECT: Oak Ridge Activity Report for Week Ending September 22, 2023

Conduct of Operations: The resident inspectors attended a shift manager/shift technical advisor continuing training forum. CNS instituted the new training forum as part of the ongoing effort to implement an enhanced level of Conduct of Operations (CONOPS) performance within the organization. The head of Y-12 Quality Operations delivered the presentation, explaining the role of his department and discussing different tagging methods for quality acceptance of equipment and products. The forum will cover different organizations or topics monthly and encourage participation from the attendees. The forum was well attended, with a majority of the personnel being newly hired. In addition to the forums, CNS published two plans that focus on CONOPS within facility operations management (FOM) and Y-12 in general. The FOM Improvement to CONOPS Health Plan established a team with a charter to provide oversight and input to the operational excellence process. The CONOPS Continuum Plan expands on the CONOPS manual, integrating industry standards and the utilization of Disciplined Operations Specialists. The Continuum Plan, as it applies to the wider Y-12 complex, has had minimal results. Since its issuance, several site issues have occurred, including fires and criticality safety events whose causes were deeply rooted in CONOPS failures (see 4/21/2023 and 5/5/2023 reports), compelling CNS management to revisit its implementation strategy. The FOM specific plan proposes additional mentoring, training, performance testing, and expectations. Due to the high rate of personnel turnover and low FOM staffing levels in the various facilities, full implementation of this plan will be a challenge. In the resident inspectors' opinion, the mentoring piece is having a positive effect due to personnel being able to learn from outside of their assigned facility giving them a big picture perspective. Until staffing levels are maintained where the extra workload from planning performance testing and analyzing the resulting data can be utilized, that portion of the plan will fall short of expectations.

Special Nuclear Material Vehicle (SNMV): CNS paused SNMV operations when a safety analysis engineer discovered a deficiency in the implementation of a Specific Administrative Control (SAC) associated with inventory limits for the SNMV. Loading of the SNMV is governed by administrative procedures, however the procedures did not directly implement the hazardous material inventory control (HMIC) SAC cited in the SNMV Technical Safety Requirements (TSR). Contributing to this, the responsibility for implementation of the various HMIC SAC requirements were distributed among various facilities so that no singular entity was responsible for the totality of the requirements. CNS reviewed past shipping records and concluded that the SNMV did not exceed the allowable material limit in any shipment. CNS resumed SNMV shipments once a new procedure had been created to implement the SAC. CNS also issued a report to document how the controls for classified materials are implemented in unclassified procedures. The resident inspectors attended the event investigation and reviewed the newly created procedure. The resident inspectors inquired about the implementation of the new procedure during the event investigation, finding the answers satisfactory. The resident inspectors also discussed the matter with the NPO nuclear safety specialist with no issues noted.