

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 29, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending March 29, 2019

DNFSB Staff Activity: F. Bamdad, M. Bradisse, L. Lin, M. McCoy, P. Meyer, S. Sircar, and A. Velazquez met with ORP and Tank Farms personnel to discuss the Tank Farms Safety Basis. D. Brown and A. Velazquez walked down WESF and met with project personnel to discuss dry cask storage of WESF capsules. M. McCoy was onsite for resident inspector augmentation.

Waste Encapsulation and Storage Facility (WESF): A resident inspector attended a Plant Review Committee (PRC) meeting that the contractor held to evaluate a potential PISA related to crane movements in the WESF canyon. Pool cell and outdoor crane use have administrative controls to prevent an object dropping onto the cesium and strontium capsules stored in the pool cells. A recent observation determined that, although the canyon crane traverses over the pool cell cover block at one end of the canyon, its use is not controlled by a similar administrative control. The PRC determined that the potential for an impact to the pool cell cover block was an unanalyzed condition and declared a PISA. Facility personnel have placed an administrative hold on canyon crane use until compensatory actions are defined and implemented.

Building 324: Work to install a camera into the B hotcell was stopped when in-process surveys discovered contamination levels that voided the radiological work permit (RWP) limit. The work team met to discuss the event. They noted that they had encountered problems with running and puddling of the fixative during their work and that the contamination was found where excess fixative had collected during use. Some individuals also stated that they believe that existing RWP limits are too conservative and cause unnecessary disruption of work. The resident inspector notes that there have been a number of difficult radiological control conditions over the past several months. In each case, the workers have responded appropriately. However, the frequency and potential severity of the events may indicate a need to review existing assumptions related to radiological conditions and further evaluate radiological control methods.

REDOX Facility: The resident inspector observed a drill that simulated a fire in the REDOX facility. The facility response was hampered by delays in obtaining radiological control technician and nuclear chemical operator resources. The delays stemmed from the dispersed nature of the project work force and the lack of effective communications to recall and deploy required support personnel. Additionally, there were delays in classifying the event and sending required notifications that, unless improved, could adversely affect a response to an actual event.

Tank Farms: The resident inspector observed a drill that simulated a spray release of tank waste that resulted in the contamination and injury of a worker. Although there was good initial response by the event discoverers, the field team deployment was not timely enough to provide prompt support for emergency responders. Additionally, the exercise uncovered internal and external communication weaknesses, and a need for some individuals to improve their use of checklists and procedures.