

**Statement for the Record by the  
Under Secretary for Science, Paul M. Dabbar  
June 20, 2019, DNFSB Public Hearing on  
Safety Management of Waste Storage and Processing in the  
Defense Nuclear Facilities Complex**

On behalf of the Department of Energy (DOE), I welcome the opportunity to provide remarks for the **Public Hearing on Safety Management of Waste Storage and Processing in the Defense Nuclear Facilities Complex**. I believe that this hearing provides opportunities for open and transparent discussions between the Defense Nuclear Facilities Safety Board (DNFSB) and DOE senior leaders, and that the panel session objectives are of mutual importance to DOE, DNFSB and our stakeholders, to ensure our top priority of adequate protection of our workers, the public, and the environment.

We recognize the Office of Environmental Management (EM) mission can be hazardous, presents inherent risks, and requires the use of proper controls to ensure safe operations and adequate protection of public health and safety. A common theme for the hearing is the potential for chemical reactions to occur in the DOE waste storage inventory. We extensively analyzed the root causes of both the Waste Isolation Pilot Plant (WIPP) and Accelerated Retrieval Project (ARP) events and view them as distinctly different. In the event leading to the 2014 release at WIPP, the reactive nature of the waste was directly due to the use of inappropriate materials in the processing of the well-known waste stream. The corrective actions stemming from the analysis of the WIPP event are designed to prevent future such events at WIPP. We consider these corrective actions to be highly successful, resulting in a robust National Transuranic Waste (TRU) Program and in the strengthening of the WIPP Waste Acceptance Criteria (WIPP WAC) that prevents unacceptable waste forms from being sent to WIPP.

In contrast, the 2018 ARP event involved legacy waste being processed for stabilization and visual examination, not yet ready to demonstrate compliance with the WIPP WAC, or be certified for shipment to WIPP. Some of its waste stream components lacked origin and process information and were packaged with other known materials causing an over pressurization. Lessons learned from the WIPP event inform our waste processing and packaging activities across the EM Complex, the processes and controls developed to protect WIPP do not apply directly to the activities or issues involved in the ARP event.

The ARP event provides a significant opportunity to evaluate our work and apply lessons learned; something that is particularly important when dealing with legacy waste and/or decades old waste with uncertain characteristics. While this type of waste must be dealt with, we must ensure appropriate controls are in place to protect our workers, the public and the environment. I fully expect that these lessons learned will be embraced and utilized as we continue our work.

To that end, the Department values the sharing of lessons learned that will significantly minimize the risk of recurrence and maximize worker protection not only at WIPP, but at other generator sites across the DOE enterprise. Following completion of an extensive root cause analysis for the ARP event, a Safety Alert was generated and issued by the Associate Principal Deputy Assistant Secretary for EM Field Operations to all the EM waste processing sites. All waste

processors including TRU waste processors, received this notification. The Safety Alert shares the Lessons Learned from the 2018 ARP event and requires sites to take specific actions and provide responses to headquarters.

We also provided this Safety Alert to the National Nuclear Security Administration, and other DOE program offices. EM is currently working with the Associate Under Secretary for Environment, Health, Safety, and Security, to issue a formal Operating Experience Report incorporating objectives of the Safety Alert, to all the DOE program offices that process waste.

In conclusion, the Department believes that the DNFSB provides valuable insight and advice to inform the work done by DOE in lowering the environmental risk posed by legacy waste from the Cold War. This work requires us to stabilize or treat hazardous waste streams – and legacy waste streams that unavoidably lack complete information and documentation. For such waste with uncertain or unknown components, the potential for adverse chemical reactions cannot be eliminated with 100 percent confidence. Nevertheless, the Department takes very seriously its responsibility to address the public health and safety and environmental risks associated with these legacy waste streams.

Thank you.