Jessie H. Roberson Daniel J. Santos Joyce L. Connery

Bruce Hamilton, Acting Chairman DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Washington, DC 20004-2901



August 14, 2018

The Honorable James Richard Perry Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-1000

Dear Secretary Perry:

The Defense Nuclear Facilities Safety Board has completed an evaluation of the Department of Energy's progress on Board Recommendation 2012-1, Savannah River Site Building 235-F Safety. We recognize that DOE plans to initiate removing material from the highest contaminated cells soon.

While actions have been taken to remove combustibles and ignition sources, a fire that results in a radiological release is still credible. The facility relies on the ventilation system in many of the accident scenarios, but the ventilation and confinement systems cannot be credited to function during a post-seismic fire. In the postulated accident scenario of a seismic-initiated fire, the calculated dose consequence to the co-located worker remains orders of magnitude above 100 rem total effective dose.

Executing the remaining Implementation Plan deliverables needs to remain a priority for this reason, and also because:

1. The current institutional level of knowledge of 235-F's history, systems, and hazards, and the availability of workers with hands-on experience handling high plutonium-238 contamination will only decrease with time. The workforce will likely never be in a better position to perform this work safely.

2. The condition of the structure, systems, and components is degrading and will continue to degrade. Stopping or extending remediation will increase the life cycle costs due to the need to deal with failing penetrations, an aging sand filter, risks of a ground level release, and increased costs of maintenance.

Pursuant to 42 U.S.C. §2286a(a), the Board is providing this advice for your information and use.

Yours truly,

Hamilt Bruce Hamilton

Acting Chairman

c: Mr. Joe Olencz