



Department of Energy
Washington, DC 20585

DEC 11 2017

The Honorable Sean Sullivan
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, DC 20004

Dear Chairman Sullivan:

Revision 1 of the Department of Energy (DOE) Implementation Plan (IP) for the Defense Nuclear Facilities Safety Board (Board) Recommendation 2012-2, *Hanford Tank Farms Flammable Gas Safety Strategy*, indicates that DOE will inform the Board in writing when Action 3-1 is completed - "Provide [safety-significant (SS)] annulus level detectors in each of the [double-shell tank (DST)] annuli where the flammable gas hazard exists". On December 27, 2016, DOE informed the Board that the December 2016 IP expected delivery date would be extended to the fourth quarter of calendar year 2017 due to DOE's focus on higher priority mission impacts. This letter is to advise the Board that, due to the issue described below, the expected completion date for Action 3-1 and its related deliverable is now the fourth quarter of fiscal year 2018.

Established safety controls have and will continue to ensure adequate protection of tank farm workers. The existing waste level detectors in the DST's annuli also continue to meet environmental requirements. Compensatory measures (such as flammable gas measurements to ensure flammable gases do not exceed 25 percent of the lower flammability limits) are in place to safeguard the operability of the DST primary ventilation systems and to ensure that flammable gases cannot accumulate to hazardous flammability levels.

Progress towards completion of Action 3-1 has been made as well. All SS annulus level detectors, wireless communication transmission panels inside the tank farms, and central control room instrumentation panels have been installed and functionally tested, and operational testing has begun. However, a power interruption during operational testing of the annulus level detector wireless communication system caused an interruption in communications and an issue was identified in reestablishing the link between the Hanford Tank Farm equipment and the wireless communication system. To resolve this issue, DOE and the Tank Farm Operations Contractor are taking a multi-staged approach to evaluate alternative wireless access point systems and are working to mitigate the effects of power interruptions. Identifying, testing, implementing, and documenting an alternative system will further delay the expected delivery date for Action 3-1 to the fourth quarter of fiscal year 2018.

DOE will continue to work with the Board staff and will keep you apprised of ongoing implementation efforts for Recommendation 2012-2.



If you have any questions, please contact Mr. Benton Harp, Deputy Site Manager, Office of River Protection, at (509) 376-1462.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Owendoff', with a horizontal line extending from the middle of the signature.

James M. Owendoff
Principal Deputy Assistant Secretary for
Environmental Management