



**OFFICE OF RIVER PROTECTION**

P.O. Box 450, MSIN H6-60  
Richland, Washington 99352

**DEC 21 2018**

18-TF-0123

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

Chairman Hamilton:

**IMPLEMENTATION PLAN FOR DEFENSE NUCLEAR FACILITIES SAFETY BOARD  
RECOMMENDATION 2012-2**

Reference: ORP letter from B.T. Vance, to B. Hamilton, DNFSB, "Completion of Defense Nuclear Facilities Safety Board Recommendation 2012-2 Implementation Plan Action 2-2," 18-TF-0056, dated July 23, 2018.

Revision 1 of the U.S. Department of Energy, Office of River Protection (ORP), Implementation Plan for Defense Nuclear Facilities Safety Board (Board) Recommendation 2012-2, indicates the following for Actions 2-3 and 2-4.

Action 2-3: Approve the safety basis amendment revising the flammable gas controls to use safety-significant (SS) real-time flow monitoring instrumentation.

Deliverable: A copy of the safety evaluation report approving the safety basis amendment revising the flammable gas controls to use SS real-time flow monitoring.

Expected Delivery Date: September 2018

Action 2-4: Implement a safety basis amendment revising the flammable gas controls to use SS real-time monitoring.

Deliverable: A letter to the Board forwarding the notice of implementation.

Expected Delivery Date: December 2018

As previously noted in the Reference, ORP completed Action 2-2 to install the SS flow monitors in each of the double-shell tanks where the flammable gas hazard exists. These SS real-time flow monitors were installed as part of a wireless infrastructure, providing signals to an SS alarm panel located in the central control room in Building 274-AW. To finalize implementation of these new instruments and alarms, Actions 2-3 and 2-4 will be completed along with extensive testing, procedure development, and training.

The project has experienced delays due to the complexity of implementing this first of a kind wireless SS flow system. ORP and its contractor are applying lessons learned from previous wireless automation tank farm projects, including Action 3-1 for the ORP 2012-2 Implementation Plan for SS annulus level detection. The project team has increased the planned duration of the readiness and turnover activities and revised the delivery dates for Actions 2-3 and 2-4, now forecast for September 2019 and December 2019 respectively.

Although completion of the remaining SS flow instrument actions are progressing more slowly than originally anticipated, the existing Tank Farms Documented Safety Analysis, Technical Safety Requirements, and operations procedures continue to provide a safe Tank Farms operational posture until final instrument testing, turnover, and safety basis implementation are completed.

A schedule of these remaining activities is enclosed and has been discussed with Hanford Resident Inspectors. ORP will continue to work with the Board and keep you apprised of ongoing implementation efforts for Recommendation 2012-2.

If you have any questions, please contact me, or you may contact Robert G. Hastings, Assistant Manager, Tank Farms Project, at (509) 376-9824.



Brian T. Vance  
Manager

TF:SHP

Attachment

cc w/attach: See page 3

DEC 21 2018

Chairman Bruce Hamilton  
18-TF-0123

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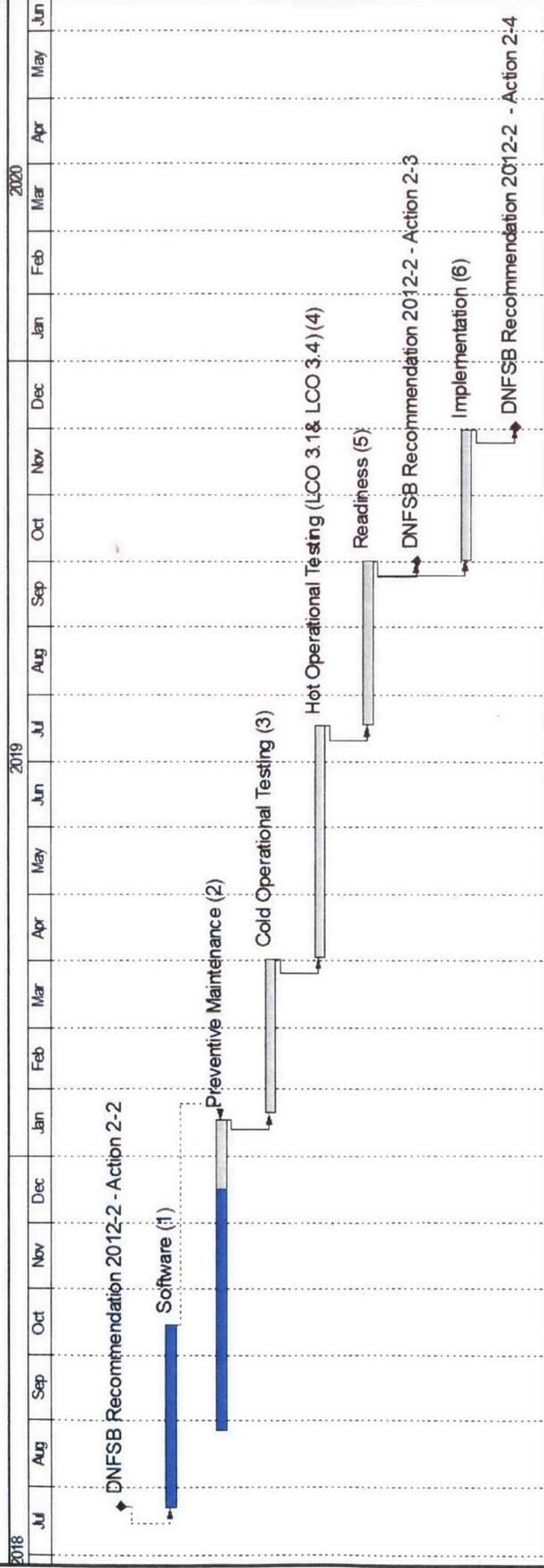
cc w/attach:

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B.K. Caleca, DNFSB  
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M.A. Gilbertson, EM-2  
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D.C. Larsen, WRPS  
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WRPS Correspondence Control

# **Attachment 18-TF-0123**

**Schedule of the U.S. Department of Energy (DOE), Implementation Plan  
for Defense Nuclear Facilities Safety Board Recommendation 2012-2  
Actions 2-3 and 2-4.**

## DNFSB Recommendation 2012-2 Phase 2 (Actions 2-2, 2-3, 2-4) - Install SS Flow Instruments



### Key Activities During Commissioning of SS Flow Instrumentation

1. Software requirement evaluations
2. 100+ equipment calibrations
3. Software functional testing
4. Vent & Balance field tuning for all DST tanks
5. Assemble all project documentation & complete Safety Basis Amendment (SBA)
6. Turnover of all new systems, controls and procedures