DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 2, 2016

TO:Steven Stokes, Technical DirectorFROM:Bradford Sharpless, Idaho Cleanup Project Cognizant EngineerSUBJECT:Idaho National Laboratory (INL) Report for August 2016

DNFSB Staff Activity: The Board's staff did not conduct any on-site activities at INL during August 2016. The Board's staff provided an average of 1.3 man-weeks of on-site oversight per month for the first eleven months of fiscal year 2016.

Advanced Mixed Waste Treatment Project (AMWTP): On August 31, a representative from manufacturer 3M notified Fluor's Respiratory Projection Program Administrator that one lot of 3M TR-600 Powered Air Purifying Respirator (PAPR) filters was possibly packaged using an excessive vacuum force, potentially damaging the filter gasket (see photo). PAPRs are used by AMWTP operators as part of their personal protective equipment in airborne contamination environments.



Fluor personnel at AMWTP are conducting a full inventory of the facility's 3M filters and are removing any from the suspect lot. They found one box in an issuing area that contained filters from the suspect lot. The box held one filter of the original five, confirming that some of the filters had been used in field operations. As not all filters in the suspect lot are defective and AMWTP operators conduct full inspections of their filters, including the gaskets, prior to use. Therefore, Fluor management personnel are reasonably confident that no operators actually used defective filters in the field.

Integrated Waste Treatment Unit (IWTU): Outage "H" continues at IWTU as Fluor personnel work to resolve technical challenges prior to the restart of the facility's processing systems and the start radioactive waste processing operations. Activities taking place as part of Outage H include:

- A redesign of the Denitration Mineralization Reformer's (DMR) auger-grinder.
- Analysis associated with the possibility of incorporating a manway into the DMR to facilitate replacement of the fluidizing ring header.
- Bench testing experiments to evaluate chemical and hydrodynamic properties of the DMR's fluidized bed.