

**WRPS Announces the Limited Use of Full Face Air Purifying Respirators (FFAPR)  
at AP Farms**

Hanford Atomic Metal Trades Council (HAMTC) selected the Center for Construction Research and Training (CPWR) as its independent reviewer to evaluate AP Farm's air-purifying respirator (APR) cartridge test results. CPWR based their evaluation on work performed by Pacific Northwest National Laboratory (PNNL) and WRPS to evaluate the effectiveness of Air purifying respirators at tank farms. The evaluation incorporated the review and analysis of reports, including [PNNL-25860 Analysis of Respirator Cartridge Performance Testing on a Hanford AP Tank Farm Primary Exhauster Slipstream](#) (September 2016) as well as interviews with staff from WRPS, PNNL, and leaders and representatives of HAMTC and Building Trades.

After considering engineering controls, administrative controls, properly fitted respiratory protection, and a conservative cartridge change out schedule, CPWR concurred with WRPS's proposal to use the full face air purifying respirators (FFAPR) equipped with either the Scott 7422-SC1 (Chemical - multipurpose) or the Scott 7422-SD1 (Chemical- multipurpose/P100) cartridges.

Initially, the use of FFAPR at AP Farm is limited to low hazard, non- intrusive tasks performed during non-waste disturbing activities. Tasks include performing operator rounds, conducting radiological surveys, preventive maintenance, visual inspections, equipment calibrations, housekeeping, job setup and take down, construction activities, etc. Workers will continue to be allowed to voluntarily upgrade to Self-Contained Breathing Apparatus (SCBA) per company policy.

CPWR recommended that WRPS update its Industrial Hygiene Exposure Assessment Strategy to implement a targeted, sampling and monitoring program for tank farm work activities. WRPS Industrial Hygiene Department is developing a sampling plan specific to the data collection needs for this effort. In concurrence with the CPWR recommendations, WRPS will collect periodic measurements of the AP stack vapor concentration for comparative analysis.

WRPS thanks all the workers that supported the design, mock up, and field executions thus far. Those efforts have resulted in a path forward to transitioning from SCBA to FFAPRs at AP Tank Farm. The process and methodology lays the groundwork and paves a path to evaluate other farms and activities for FFAPR use.

The complete third party analysis can be found in: [Third Party Qualified Independent review: Hanford Tank farm Respirator Cartridge Testing](#), (Report No. 2, Review of Use of Full Face Air Purifying Respirators in AP Tank Farms for Low-Hazard Tasks, January 31 2017.)