EM UPDATE
U.S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT

Tank Waste Treated for Hanford Site TBI Demonstration

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Hanford Site tank operations contractor Washington River Protection Solutions staff monitor a Test Bed Initiative (TBI)demonstration. Pictured are Operator Matt Fiorito, left, TBI Operations Engineer Jaryd Anderson, center, and TBI Engineer Keenan Moll, right.

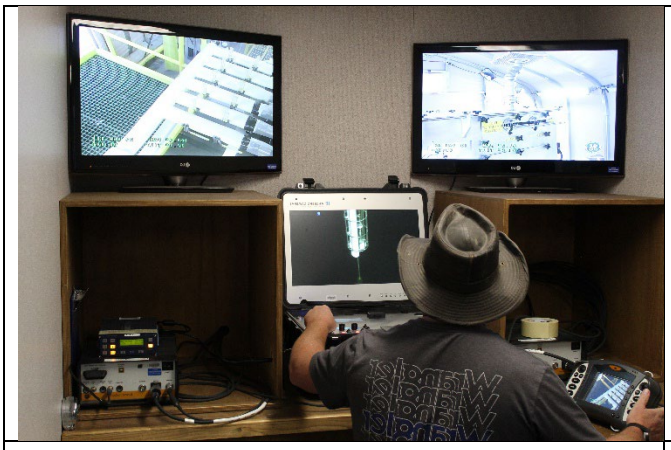
RICHLAND, Wash. — About 2,000 gallons of radioactive and chemical tank waste is one step closer to disposal as part of a treatment technology demonstration at the **Hanford Site**.

Hanford tank operations contractor Washington River Protection Solutions (WRPS) recently completed treatment operations of the **Test Bed Initiative** (TBI) demonstration project. This project utilized a treatment system placed inside one of the site's massive underground waste storage tanks to remove cesium and other solids from 2,000 gallons of low-activity tank waste, removing over 98% of the radioactivity.

"This was an exciting project for our Operations team," said Peggy Hamilton, WRPS Retrievals & West Operations manager. "Removing waste from a tank is nothing new,

but using a treatment system placed inside a tank is something we have not done at this scale on the Hanford Site, and it's an exciting accomplishment."

Watch this **video** for more information.



Nuclear chemical operators, like Joe McCoy, pictured, monitor the pretreatment activities of the Hanford Site's Test Bed Initiative demonstration, utilizing cameras placed inside a temporary shelter.

Industrial hygiene technicians with tank operations contractor Washington River Protection Solutions monitor the area where the Test Bed Initiative demonstration is operating at the Hanford Site.

To support the current 2,000-gallon TBI activity, the Washington State Department of Ecology conducted a public comment period earlier this year, including a public information session, before issuing a research, development and demonstration permit for the 2,000-gallon TBI in July.

"The TBI demonstration project does not impact operations to immobilize tank waste in glass under the **Direct-Feed Low-Activity Waste** Program and supports the Department's goal to consider additional options for safely and efficiently treating low-activity waste at Hanford," said Katie Wong, U.S. Department of Energy Office of Environmental Management **Tank Farms** Programs Division.

Samples of the treated waste will now be sent for laboratory testing. This testing, combined with robust packaging, will ensure that the treated low-activity waste is well below the limits for safe **transportation** and commercial disposal in Texas and Utah. In the extremely unlikely case of a severe accident, the highest potential radiation exposure for an individual would be less than that from a single abdominal x-ray.

The TBI demonstration and shipment will provide valuable information supporting the Department's commitment to safely and efficiently progressing Hanford cleanup.