

WM2014 Conference Panel Report

PANEL SESSION 32: US DOE Featured Site: Hanford - Accomplishments and Challenges of WM, D&D and ER - Part 1 of 2

Co-Chairs:

Briant Charboneau, *US DOE –RL, USA*
John Morse, *US DOE –RL, USA*

Panel Reporter: **Cameron Hardy**, *US DOE –RL, (Sonya Johnson, CH2M HILL PRC substituting)*

Panelists:

- **Matthew S. McCormick**, *Manager, US DOE Richland Operations Office*
- **Scott Sax**, *President, Washington Closure Hanford*
- **John C. Fulton**, *President and CEO, CH2M HILL Plateau Remediation Company*
- **Frank Armijo**, *President, Mission Support Alliance*

More than 125 people attended this session that focused on the Hanford Site's recent progress, challenges and planned efforts in radioactive waste management, waste disposition, environmental remediation, decontamination and decommissioning (D&D) and water stewardship. The session featured project overviews by the manager of the U.S. Department of Energy Richland Operations Office (DOE-RL) and the senior leaders of each of DOE-RL's three prime contractors. Several members of the audience asked questions of the presenters (13 questions received).

The following is a summary of the panel session:

Matt McCormick opened the session by discussing the scope of Hanford cleanup and provided an overview of the landscape, the process that led to contamination, the regulatory framework, and the strategy for cleanup. Highlights of his remarks included an explanation of the genesis and purpose of DOE-RL's 2015 Vision which helped identify near-term cleanup along the river corridor and central plateau and resulted in visible, tangible cleanup progress. DOE-RL will produce decision documents that will lead to final cleanup with the goal of moving contamination away from the river and conducting surface remediation.

Scott Sax described Washington Closure Hanford's (WCH) scope, stating that its scope is approximately 91 percent complete, and that the company has a safety record of more than 3 million hours without a lost workday case. WCH's primary scope is remediating and revegetating waste sites along the Columbia River, and one of its key accomplishments is operating the Environmental Remediation Disposal Facility (ERDF). A recent accomplishment was the complex effort to lift and transport a reactor (whole) to ERDF for disposal, yielding a significant risk reduction and cost savings. WCH removed the underground T Vault and discovered contamination beneath. Remaining work includes finishing chromium waste sites along the Columbia River, cleanup and transition of 84 square miles, completion of waste sites in the 300 Area, completing cleanup scope at reactor sites and addressing radioactive hazards at the 618/11 Burial Grounds and 324 Building and waste sites below.

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John Fulton provided an overview of CH2M HILL's scope for cleanup of Hanford's central plateau. The company's scope includes reducing risks on the Hanford Site by removing some of DOE's highest hazard waste streams and facilities, from cleaning up billions of gallons of contaminated groundwater plumes before they reach the Columbia River, to removing highly radioactive "sludge," to decommissioning and demolishing the Plutonium Finishing Plant (PFP) that once stored secret stores of material for the nation's defense. Accomplishments in 2013 include reaching 68% completion of PFP deactivation, treating 1.9 billion gallons of groundwater, and surpassing \$1 billion in cumulative awards to small business.

The largest challenge facing CH2M HILL is safely and compliantly demolishing the PFP by the September 30, 2016. Another priority is to progress with the closure of the Waste Encapsulation Storage Facility (WESF) by removing the strontium/cesium capsules currently stored there. The capsules will likely go into dry storage. A key part of CH2M HILL's path forward is creating closure documents. In the next five years there will be a tremendous change in the landscape of Hanford -- when cleanup is complete, approximately 10 - 15 square miles of the inner area will be left for long-term waste management.

In 2014, CH2M HILL plans to demolish 9 facilities in PFP. The contractor projects it will reach treatment of 2 billion gallons of groundwater and complete the construction of the 105-KW Annex (sludge transfer facility), and begin procurement and engineering to remove the capsules from WESF.

Frank Armijo described the Mission Support Alliance (MSA) contractor's scope. MSA is the site services contractor and is the service provider and partner to the entire site with a key role of understanding and helping site contractors reach all of their goals. One of MSA's first initiatives was the development of site-wide safety standards to ensure consistency in safety training and standard procedures and requirements across the board. The company also focused on helping identify efficiencies and services to accelerate cleanup. These include: efficient vehicles, hybrid vehicles and a secure wireless canopy across the site to ensure that contractors have tools and technology at their disposal. MSA also installed a system to reduce telephone costs across the site, implemented a plan to migrate the entire site to thin clients (smaller computers), and began shrinking the site's infrastructure footprint to coincide with cleanup. The contractor's biggest challenge is supporting cleanup and site needs with antiquated infrastructure. An Infrastructure Services and Alignment Plan is available at Hanford.gov.

Matt McCormick closed by outlining the next steps for DOE-RL, including obtaining final footprint of the inner area, starting waste shipments to the Waste Isolation Pilot Plant, making infrastructure upgrades to sustain cleanup and placing capsules in dry storage.