PANEL SESSION 56: Tuesday Featured Site - Hanford - Richland Operations Office, Hanford, Washington

Co-Chairs: **Mark Heeter,** *US DOE RL, Communications*
Sonya Johnson, *CH2M PRC, Communications*

Panel Reporter: **Moses Jaraysi,** *CH2M PRC, Environmental Programs*

Panelists:

1. **Tom Fletcher,** *Deputy Manager, Richland Operations Office*
2. **William Johnson**, *President, Mission Support Alliance*
3. **Ty Blackford**, *President and CEO, CH2M PRC*
4. **Alex Smith**, *Program Manager, Nuclear Waste Program, Washington State Department of Ecology*

The Hanford Featured Site – Richland Operations Office discussed the many projects ongoing in both the River Corridor and the Central Plateau. The session was well attended and proved to be of interest.

Summary of Presentations

Tom Fletcher, Deputy Manager of Richland Operations, started the session by discussing the Hanford 2020 Vision of Safe, Secure and Compliant (Contractual, Regulatory and Compliance Agreement) Mission Accomplishment by an Engaged and Motivated Workforce. A major accomplishment will be the completion of the River Corridor cleanup project scheduled for September 2019. With all (6) River Corridor CERCLA RI/FS Records of Decision Completed and Approved by December of 2019. Also, slated for December of 2019 is to have all (except K Area and 618-11) River Corridor Record of Decision Waste Site Remedial Actions Completed and All Groundwater Remedial Actions Implemented. Many more major projects such as 618 – 10 and the start of the K Basins sludge removal and transfer are also expected to be completed during the time between now and the end of 2019. In addition, RL would have made much progress towards the disposition of the 324 building and contaminated site underneath.

Central Plateau project highlights include taking PFP to slab on grade by September of 2017. Cesium/Strontium Capsules Capital Asset Project CD-3 (Green), Storage Cask Fabrication, Construction of the Capsule Storage Area and WESF Modifications Initiated by December 2019. All Central Plateau Groundwater Interim and Final CERCLA Records of Decision Issued, Remedies Selected, and Treatment Capacity Increased to 1.3 Billion Gallons a Year for 200 East and 200 West Areas by end of 2019.

Risk Reduction Areas include:

- Deploy groundwater treatment technologies
- Uranium sequestration & treatment
- Expansion of groundwater treatment systems
- Moving the cesium and strontium capsules to interim dry storage

Bill Johnson, President of the Mission Support Alliance (MSA), a consortium of companies which includes Leidos, Jacobs and Centerra, opened the session by identifying key infrastructure projects at Hanford. MSA provides the site-wide integration function. Thus far, MSA has supplied over 400,000,000 gallons of water, 100 miles of waterlines, 28,000 dosimetry measurements, 200,000 MW of power, over 500 sq. miles of secure wireless transport, 375 fire responses since 2009 and 182,000 paychecks, just to mention a few of their services.

Successes in 2016 enabled Hanford Footprint reduction. MSA achieved cost savings and avoidances through: User-based services; culture change, and operational excellence. MSA is very aware of balancing costs on aging infrastructure vs emerging infrastructure needs. Johnson stated, "It takes many different types of expertise to realize a shared vision."

MSA are working on many infrastructure challenges: posed by both; aging infrastructure elements, and needs for new infrastructure.

Alexandra Smith, Head of the Nuclear Waste Program of the Washington State Department of Ecology (Ecology), discussed the Hanford Facility Dangerous Waste Permit. The permit was initiated in 1989 and has grown to be a document of over 60,000 pages. Ecology's job is to:

- Ensure that Hanford cleanup follows state and federal laws to protect human health and the environment
- In particular, protect the Columbia River
- Protect, preserve and enhance the state's air, land and water for current and future generations

Ecology is authorized to enforce Federal laws (RCRA) in lieu of Federal regulation by the EPA. Ecology implements RCRA through the following:

- Hazardous Waste Management Act - 1976
- Dangerous Waste Regulations
- Federal RCRA exempts strictly radioactive materials

The Permit is a living document that is required to be reissued every 10 years. The permit has been modified many times during its 18-year existence and many units have been added and removed.

Ty Blackford, President and CEO of CH2M Hill Plateau Remediation Company (CHPRC) started his presentation by discussing the scope of CHPRC's work at Hanford. The scope includes: PFP, Sludge Treatment Project, River Corridor Cleanup (618-10, Bldg. 324 and ERDF), WESF, Groundwater Treatment, Waste Operations, Central Plateau Cleanup, Canyon Disposition initiation. Progress to date includes:

- 2,875m3 of transuranic waste retrieved
- More than 196 buildings demolished
- Record-breaking groundwater treatment, removing more than a half million pounds of contaminants.
- Began demolishing Plutonium Finishing Plant
- 1st phase of highly radioactive sludge retrieved; successfully completed sludge removal equipment testing at the Maintenance and Storage Facility to support 2nd phase of sludge removal; installation of equipment in K Basin was completed ahead of schedule

DOE Transitioned the River Corridor Cleanup Contract scope scope at the end of FY16 to CH2M PRC that included:

- 618-10 and associated waste sites remediation will be completed in the 4th quarter of FY17
- Building 324 Disposition Project – maintaining hazardous building and addressing contamination found below for eventual demo of the building

DOE and CHPRC continue to make progress on moving highly radioactive sludge away from the Columbia River. Completed cold test of sludge removal equipment at MASF and moved equipment to K Basin for installation.

The Plutonium Finishing Plant work is also progressing well since demolition began at the end of FY 16 and is on track for completion in FY 17. Electrical isolation was completed this past weekend and it is planned to complete demo of PRF and Americium Recovery Facility this spring.

Another major risk reduction DOE and CH2M is taking is to prepare for the eventual transfer of cesium and strontium capsules from an aging facility to dry storage. We have completed ventilation upgrades in the aging facility and awarded a subcontract for the design and fabrication of a cask storage system for eventual transfer of cesium and strontium capsules to dry storage.