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

SSAB Chairs Meeting Update

Betsy Connell
Associate Principal Deputy Assistant Secretary
Office of Regulatory and Policy Affairs

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Regulatory Updates

National Environmental Policy Act (NEPA)

- Completed major NEPA actions, including:
  - EA and FONSI for Defense Waste Processing Facility Wastewater (first action associated with the HLW interpretation),
  - EA and FONSI for Paducah Gaseous Diffusion Plant Environmental Assessment for Disposition of Waste and Materials, and
  - SEIS and ROD for Supplemental EIS for Disposition of Depleted Uranium Oxide Conversion Product Generated from DOE's Inventory of Depleted Uranium Hexafluoride (Kentucky, Ohio, Tennessee)

- Began implementation of Council on Environmental Quality Final Rule
  - Updates government-wide NEPA regulations; integrates enhanced flexibilities, provides opportunities for earlier stakeholder engagement throughout the NEPA process

Update on HLW Interpretation

- In **June 2019,** EM issued its interpretation of the statutory term HLW. The interpretation allows waste to be classified and disposed according to its radiological characteristics (risk-based), not its origin (source-based), consistent with international standards.
- In **August 2020,** EM issued the Final Environmental Assessment and Finding of No Significant Impact for Savannah River Site (SRS) Defense Waste Processing Facility (DWPF) recycle wastewater disposal at a LLW commercial facility outside of South Carolina.
- In **September 2020,** EM completed shipments of 8 gallons of SRS DWPF recycle wastewater to Waste Control Specialists LLC (WCS) in Texas.
  - WCS will stabilize (grout) and dispose of the waste at its Federal Waste Facility in the next month or so.
- For additional information please visit: https://www.energy.gov/em/program-scope/high-level-radioactive-waste-hlw-interpretation

Photo: A truck transporting a portion of the 8 gallons of DWPF recycle wastewater.

Waste Management Updates

- WIPP received **173 shipments** in fiscal year (FY) 2020 and **12,777 shipments** since its initial opening.
- Shipments continue at limited capacity depending on the COVID-19 pandemic; Currently, waste shipments limited to **5-6 shipments per week** to WIPP.
- **Shipping rates will increase** when the Safety Significant Confinement Ventilation System is in place to support emplacements capability in a new panel (Panel 8).

Packaging and Transportation Highlights

- In FY 2020, **more than 1,290 first responders** trained in 70+ courses through the Transportation Emergency Preparedness Program (TEPP) .
- **58** Packaging Certification Program dockets completed; **5 DOE carriers** evaluated through the Motor Carrier Evaluation Program.

Regulatory Compliance Updates

Low-Level Waste Disposal Facility Federal Review Group (LFRG)

- Revised the ODAS for Savannah River Site Saltstone Disposal Facility
- Completed review and authorized Hanford to distribute the preliminary Performance Assessment for A/AX Tank Farm Closure to Washington State regulatory staff in support of a regulatory milestone.

Waste Incidental to Reprocessing (WIR)

- Completed consultation with NRC and review of the Final Waste Incidental to Reprocessing Evaluation for Closure of Waste Management Area C at the Hanford Site.
  - A potential WMA C WIR determination will include Yakama consultation
- Initiated NRC consultation for the Hanford DFLAW WIR, that supports startup of DFLAW and disposal of vitrified low activity waste at Integrated Disposal Facility.

Regulatory Compliance Updates (cont.)

National Academies of Science, Engineering, and Medicine (NAS)

- NAS Radiation Studies Board recently completed two congressionally-mandated studies: *Treatment Options for Supplemental Low-Activity Waste at the Hanford Site* (February 2020) & *Evaluation of EM Technology Development Program Investments* (2019)
- The Radiation Studies Board is a Committee of volunteer scientific experts, to advise EM on a range of topics including, low-dose radiation effects, risk assessment and communication, research investments, nuclear alternative fuel cycles, waste treatment and disposal, etc.

EPA / Cleanup Dialogue

- The Cleanup Dialogue, a collaborative partnership among DOE, EPA, and the States, has **3 active workgroups**:
  - Sharing information and developing policies/tools on dispute resolution, Waste disposition, and Environmental indicators.

Intergovernmental, Tribal, and Stakeholder Engagement

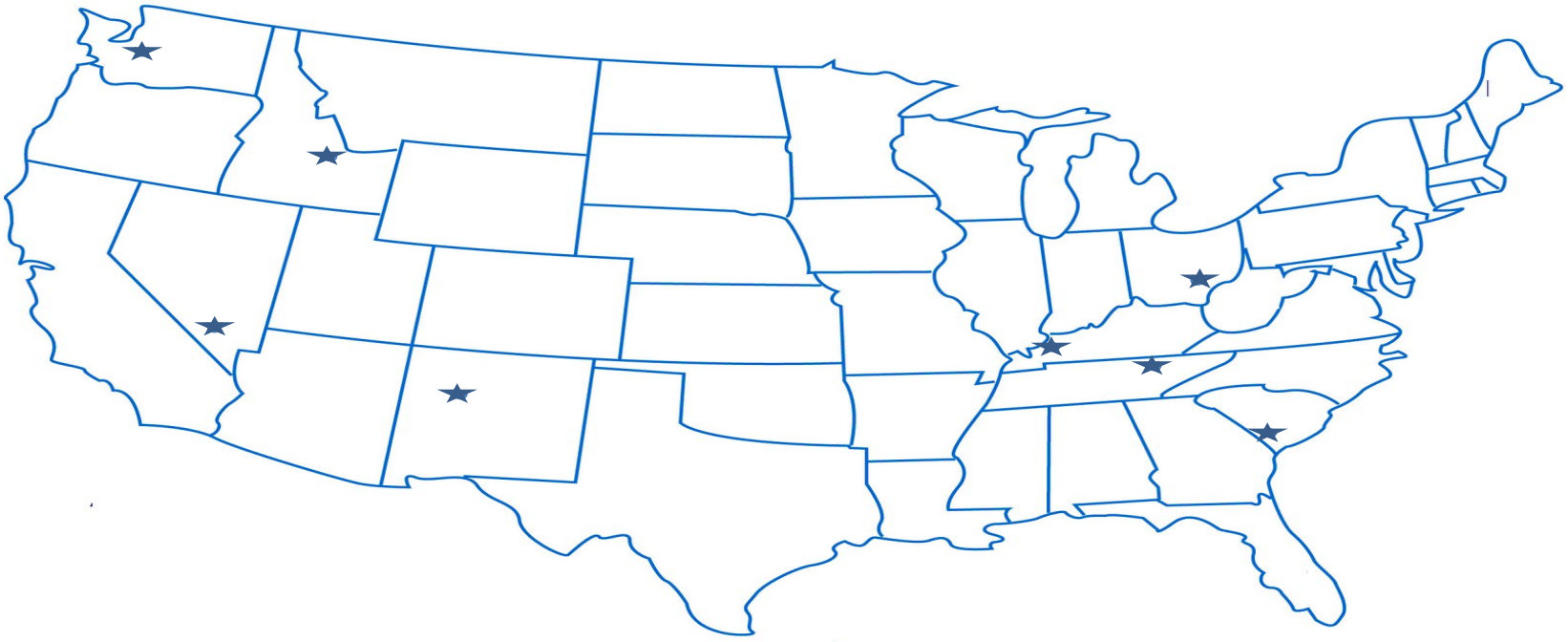
- Active engagement with STGWG, NGA, NAAG, NCSL, ECA, ECOS, regarding **EM Vision 2020-2030**.
- Planning underway for the annual combined intergovernmental meeting in November to be held virtually
- In the last year, the Environmental Management Advisory Committee has finalized **two recommendations** to EM, *Assessment of Human Resources to Implement End State Contracting* and *Accelerate Cleanup Completion and Closure Across the EM Complex by Facilitating Workforce Community Engagement and Transition*. EMAB is currently working on finalizing a new report on **regulatory reform topics**.
- This year, a **DOE LTS Working Group** (comprised of EM, LM, and NNSA). Working Group established in direct response to STGWG recommendations (as part of its 2017 *Closure for the Seventh Generation* Report to the Secretary).

International Engagement

- In March 2020, a **Trilateral Agreement** was signed between the United States (DOE EM), the United Kingdom Nuclear Decommissioning Authority (UK NDA) and Atomic Energy Canada Limited (AECL) to extend international collaboration in the areas of startup and Commissioning, In Situ Decommissioning (ISD), Near Surface Disposal Facilities, Aging Infrastructure Management, and Stakeholder Engagement

- DOE/EM held virtual workshops in May and July 2020 with Japan's Ministry of Economy, Trade and Industry (METI) and with U.S. and Japanese industry to exchange information on U.S. companies' experience with decommissioning and discuss potential opportunities for collaboration on decommissioning projects in Japan.

Questions?



Back Up

Waste & Materials Management

Surplus Plutonium (Pu) Disposition

- EM continues to downblend **oxidized, surplus non-pit Pu** with an adulterant using facilities in the K-Area Complex at SRS
- Shipments of waste are expected to begin in **2023.**
- This past July, employees in K Area resumed downblending operations after an outage for extensive upgrades. Along with the restart of downblend operations, SRS is also working to increase staffing from two- to four-shift operations.
- NNSA published an AROD this past August, announcing its decision to use the **dilute and dispose method** to disposition up to 7.1 MT of non-pit plutonium as TRU waste at WIPP. This AROD changes the disposition pathway for a portion of the 34 MT of surplus plutonium DOE/NNSA previously announced and decided in 2003 to fabricate into MOX fuel.
- The **diluted plutonium TRU waste** would be verified to meet the WIPP waste acceptance criteria.

Update on Depleted Uranium

Depleted Uranium

- In **April 2020**, EM issued the *Final Supplemental Environmental Impact Statement for Disposition of Depleted Uranium Oxide Conversion Product Generated from DOE's Inventory of Depleted Uranium Hexafluoride* (Final DU Oxide SEIS).
  - Preferred Alternative: Disposal at DU oxide at one or more of the following disposal sites:
    - Energy*Solutions* low-level radioactive waste (LLW) disposal facility near Clive, Utah;
    - Waste Control Specialists LLC (WCS) LLW disposal facility near Andrews, Texas; and/or
    - Nevada National Security Site (NNSS) LLW disposal facility in Nye County, Nevada.
- In **June 2020**, EM issued a Record of Decision: Disposition DU oxide at one or more of the disposal sites evaluated in the Final DU Oxide SEIS: Energy*Solutions*, WCS and/or NNSS.
  - EM will only ship to the selected commercial site(s) if the facility is authorized to receive DU oxide.
  - EM's near-term plan is a pilot project in the next year to ship several railcars containing cylinders of depleted uranium oxide to a commercial disposal facility.

Photo: DU Hexafluoride Cylinder Storage Yard