# A Strategic Vision for America's nuclear cleanup mission

Steve Clutter, Director of External Affairs June 28, 2023



### **EM Mission**

To complete the safe cleanup of the environmental legacy brought about from decades of nuclear weapons development and government-sponsored nuclear energy research.

EM's priority is to ensure the safety and health of the public and EM's workforce while continuing to protect the environment.



## **Key Mission Elements**

#### Tank Waste

Special Nuclear Material and Spent Nuclear Fuel

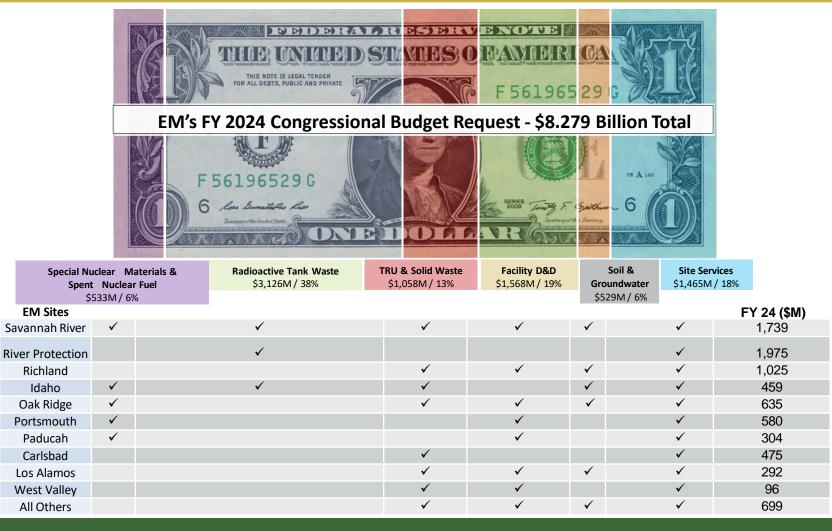
Radioactive Waste Disposal

Soil and Groundwater Remediation

Facility Deactivation and Decommissioning



### The Budget



### **ORG CHART**

Senior Advisor EM-1
William "Ike" White

Principal Deputy
Assistant Secretary
EM-2
Jeffrey Avery

Chief of Staff EM-2.1 Cathy Tullis

Field Site Managers

Regulatory Intergovernmental & Stakeholder Engagement EM-2.2 Kristen Ellis

Communications EM-2.3 Erik Olds

Office of Field Operations EM-3 N. Nicole Nelson-Jean

Office of Regulatory and Policy
Affairs EM-4
Kristen Ellis

Office of Corporate Services EM-5

Dae Chung

Field Sites
John Jones Senior Site Liaison
Coordinator

Safety, Security, and Quality
Assurance
EM-3.1
Greg Sosson

Infrastructure Management & Disposition Policy EM-4.1 Robert Seifert

Resource Management EM-5.1 Steve Trischman Technology Development EM-3.2 Rod Rimando Chief Engineer EM-3.3 Robert Crosby

Waste & Materials Management Acting EM-4.2 Doug Tonkay

Acquisition and Project Management EM-5.2
Angela Watmore



### 107 Original EM Cleanup Sites



### A Proven Record of Cleanup Results



Since 1989, DOE has completed its cleanup mission at 92 of the 107 major nuclear weapons and nuclear research sites.

### Success Through Engagement

EM's cleanup activities are governed by approximately 40 various federal and state regulatory agreements

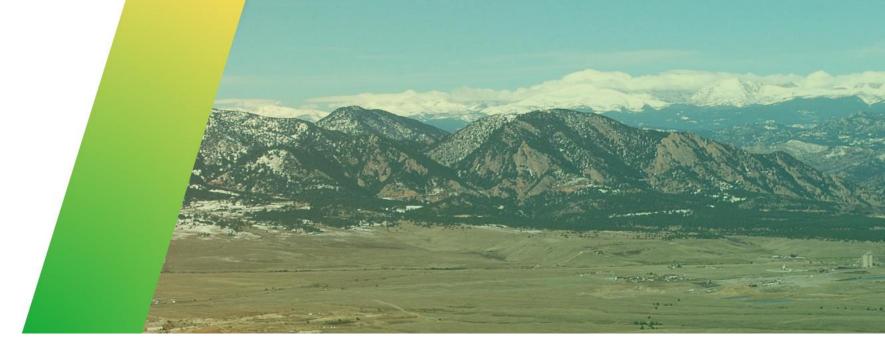
EM has formalized interactions with national intergovernmental groups, Tribal nations, international organizations, local stakeholders such as the Site-Specific Advisory Boards, and regulators. These engagements:

- Serve our communities, stakeholders, and Tribal Nations while protecting natural, cultural and historical resources
- Enhance alignment and involvement in cleanup
- Enable information sharing and lessons learned that help EM make more informed decisions that are cost-effective, community specific, and environmentally sound.





News on the world's largest environmental cleanup



- Published on a weekly basis. Distributed to 92,000+ subscribers.
- Features a mix of news about the world's largest environmental cleanup from EM HQ and cleanup sites across the DOE complex.
- Highlights progress on the cleanup mission, events with stakeholders, STEM news, employee profiles and more.
- Subscribe on the <u>EM website</u>



- EM recently released the third iteration of it's Strategic Vision for America's nuclear cleanup mission.
- The 2023-2033 Strategic Vision provides a clear and concise roadmap to guide our planning and priorities.
- As we prepare to update it, we are seeking input from stakeholders.



- Why do we need a Strategic Vision? If you don't know where you are going, any road will take you there.
- The vision is the What, Where, or Who we want EM to become.
- The mission is the Why EM exists it is our purpose, passion or cause.
- The Strategic Vision is intended to help us gaze further out to a place we want to be as an organization in the future.



- It sets EM on a course that will span a decade and inspire us all to achieve EM's vital nuclear cleanup mission.
- Lots of benefits to having a compelling vision.
- For EM, the purpose of setting a vison is twofold: it is there to create a long-term strategy for where the organization is going; secondly, it helps align everyone around EM's direction.

- It sets EM on a course that will span a decade and inspire us all to achieve EM's vital nuclear cleanup mission.
- Through a variety of strategic initiatives, EM is further strengthening its ability to tackle the scope and magnitude of the remaining cleanup work over the next decade.
- But we can't predict the future from DC. We need help from state capitols across our complex and beyond.

To comment on the Strategic Vision for 2023-2033 go to our website see the comment section at the bottom of the page:

https://www.energy.gov/em/articles/em-strategic-vision

#### **EM CY23 Mission Priorities**

#### PRIORITY #1: ACHIEVE SIGNIFICANT CONSTRUCTION MILESTONES

- Begin commissioning of Waste Isolation Pilot Plant (WIPP) Safety Significant Confinement Ventilation System
- Complete sinking Utility Shaft at WIPP to 2150-foot level
- Initiate melter 2 heat up at the Waste Treatment Plant at Hanford
- Complete construction of Savannah River Site (SRS) Saltstone Disposal Unit 8
- Complete steel structure for the Advanced Manufacturing Collaborative at SRS

#### PRIORITY #2: EXECUTE KEY CLEANUP PROJECTS

- Complete 400 transuranic waste shipments at WIPP while ensuring there is no backlog of shipments from Los Alamos
- Initiate retrieval of Los Alamos drums from Waste Control Specialists
- Issue Final Environmental Assessment for disposal of contaminated process equipment at SRS
- Pretreat at least 800,000 gallons cumulatively of tank waste at Hanford
- Treat 2 billion gallons of groundwater at Hanford
- Complete processing of 100 sodium-bearing waste containers at IWTU at Idaho
- Complete all spent nuclear fuel transfers from wet to dry storage at Idaho
- Complete removal of a cumulative 14M tons of material from the Moab Site
- Begin early site preparation construction-start for the Oak Ridge On-site Waste Disposal Facility
- Complete removal of 1M pounds of hazardous refrigerant at Paducah
- Dispose of 9,000 tons of Main Plant Process Building demolition waste at West Valley



#### **EM CY23 Mission Priorities**

#### PRIORITY #3: REDUCE THE EM FOOTPRINT

- Complete demolition of four buildings at Test Cell C at the Nevada National Security Site
- Complete Old Town Demolition Phase VI Project at Lawrence Berkeley National Laboratory
- Initiate demolition of Building B251 at Lawrence Livermore National Laboratory
- Complete above-ground demolition of the Q-Complex buildings at Knolls Atomic Power Laboratory
- Complete demolition of the Low Intensity Test Reactor at Oak Ridge

#### PRIORITY #4: AWARD CONTRACTS THAT ENABLE ACCELERATED PROGRESS

- Award Hanford Integrated Tank Disposition Contract
- Award Portsmouth D&D Contract
- Award Portsmouth Paducah Project Office Operations & Site Mission Support Contract
- Award Small Business Nationwide Deactivation Decommissioning & Removal Contract

#### PRIORITY #5:

DRIVE INNOVATION AND SUSTAINABILITY AND IMPROVE PERFORMANCE

- Meet 5% small business goal
- Award \$20M in competitive grants to Minority Serving Institutions
- Implement life-cycle alternatives analyses for two sites
- Complete 11 of 12 sites DHS Continuous Diagnostics and Mitigation software asset management projects
- Order at least 150 electric vehicles to support EM-wide fleet goals



#### **EM CY22 Mission Priorities**

#### PRIORITY #1: ACHIEVE SIGNIFICANT CONSTRUCTION MILESTONES

- Complete cold commissioning of the first WTP melter at Hanford
- ☑ Begin construction of K-East Reactor Cocooning Enclosure at Hanford
- Begin construction of the AMC Facility at Savannah River
- ✓ Complete all concrete placements for SDU-9 at Savannah River
- Complete construction of New Filter Building for SSCVS at WIPP

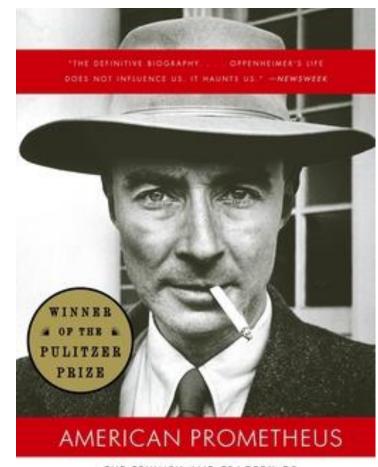
#### PRIORITY #2: EXECUTE KEY CLEANUP PROJECTS

- ☑ Begin tank waste pre-treatment at Hanford through TSCR operations
- Complete processing of 100 sodium-bearing waste containers at the IWTU at Idaho
- ☑ Complete all Subsurface Disposal Area buried waste remediation at Idaho
- Treat 4 million gallons of tank waste at Savannah River
- ✓ Complete demolition of the X-326 process building at Portsmouth
- ☑ Begin hot cell processing of the high-activity uranium-233 inventory at Oak Ridge
- Install equipment to support Los Alamos transuranic waste removal from WCS
- ✓ Complete 30 shipments of transuranic waste from Los Alamos to WIPP
- ✓ Complete 50 Percent of West Access Drift Mining at WIPP
- ✓ Begin demolition of Main Plant Process Building at West Valley
- ☑ Complete demolition of remaining ancillary support facilities at West Valley
- ☑ Complete removal of a cumulative 13M tons of material from the Moab site
- ✓ Disposition 1 million pounds of hazardous refrigerant from Paducah
- ☑ Begin demolition of the TCC and EMAD facilities at Nevada
- ☑ Begin demolition of Building B251 at Lawrence Livermore National Laboratory
- ☑ Complete remediation of the D1G Ditch Area at Naval Reactors' Kesselring Site



### **Oppenheimer Film**

- Oppenheimer is an upcoming biographical thriller film on the American theoretical physicist who led the Manhattan Project; written and directed by Christopher Nolan.
- It's based on the 2005 book *American Prometheus, the Triumph and Tragedy of J. Robert Oppenheimer* by Kai Bird and Martin J. Sherwin. The book won the Pulitzer Prize in 2006.
- It's set to be released by Universal Pictures in the UK and the United States on July 21.
- It's expected to inspire public interest in DOE's history and current nuclear deterrence and security work including EM's nuclear cleanup mission.



I. ROBERT OPPENHEIMER

by KAI BIRD and MARTIN J. SHERWIN



### **Oppenheimer Film: EM Comms Posture**

- Guidance from DOE Public Affairs is that we can reference the film in communication products related to our history and mission but can not appear to be endorsing the film.
- DOE was not asked for and did not provide official support of the film.
- Leveraging films release for op-ed about EM's nuclear cleanup mission – the Manhattan Project and the Cold War nuclear arms race that resulted is essentially EM's origin story.
- EM Update newsletter stories about EM sites connected to the Manhattan Project.



### **Oppenheimer Film**



## QUESTIONS?