



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**



# DOE Environmental Management Activities at the Los Alamos National Laboratory Waste Management Symposia 2017

Douglas Hintze  
Manager

Environmental Management Los Alamos Field Office



ENVIRONMENTAL MANAGEMENT  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE

March 6, 2017



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# Los Alamos National Laboratory at a Glance



❑ Los Alamos National Laboratory (LANL) is the oldest, most complex, and second largest National Nuclear Security Administration site

- ~ 40 square miles
- 11,171 federal employees and contractors
- 1,169 buildings
- 9 million gross square feet
- 268 miles of roads (100 paved)
- 128 radiological facilities



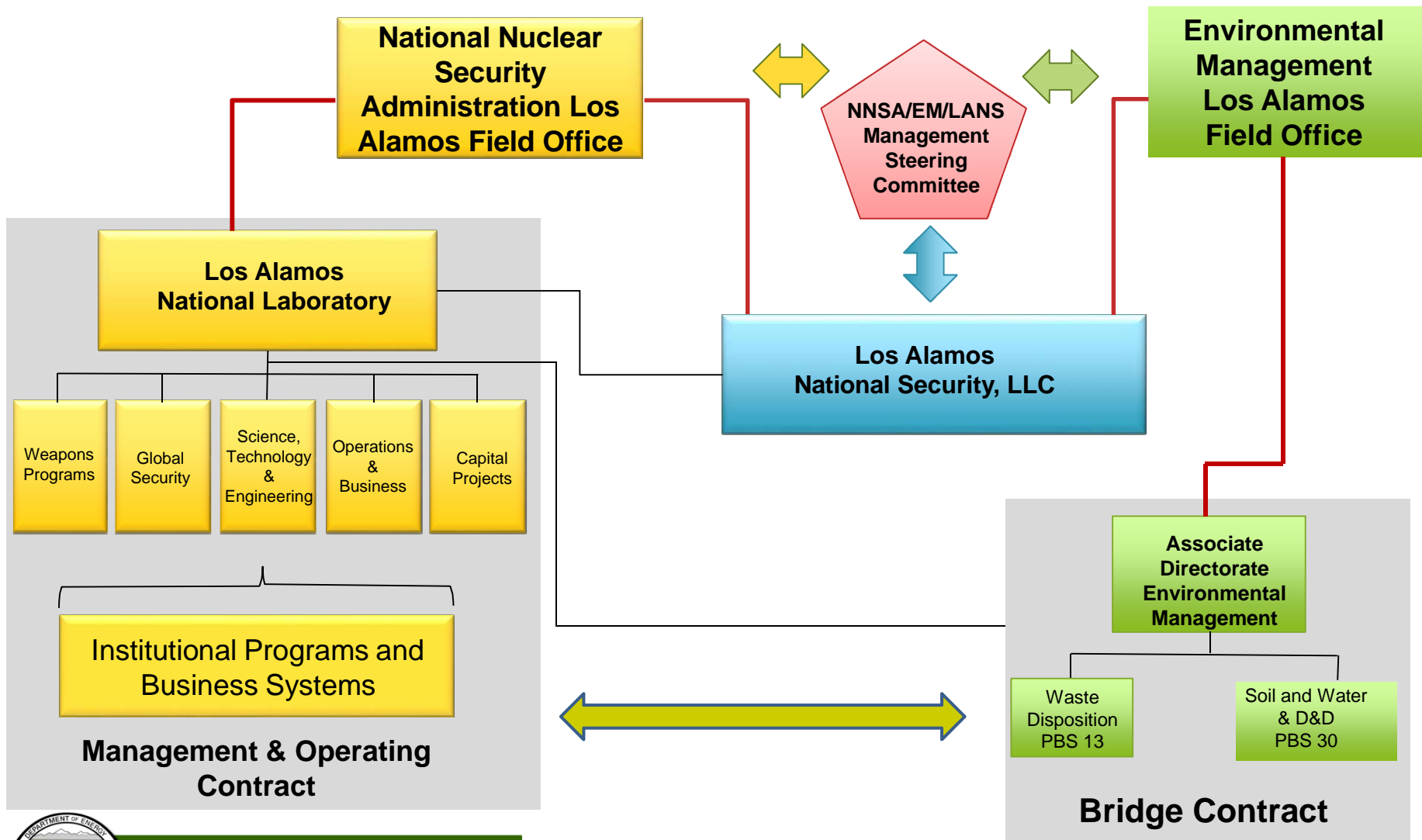
**ENVIRONMENTAL MANAGEMENT**  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE



U.S. DEPARTMENT OF ENERGY

OFFICE OF ENVIRONMENTAL MANAGEMENT

# Los Alamos National Laboratory Organizational Structure



ENVIRONMENTAL MANAGEMENT  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE

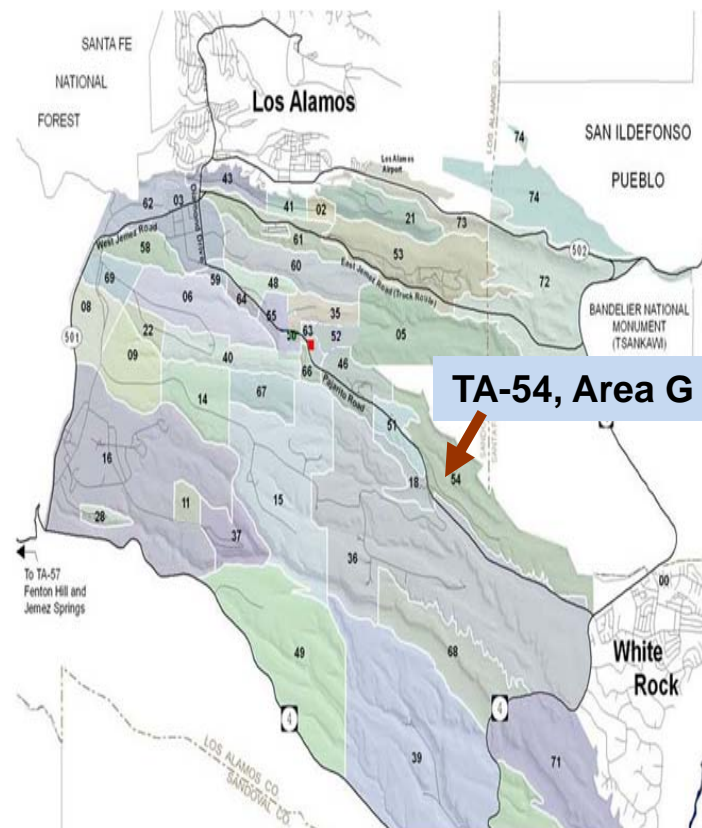


U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

## Environmental Management Mission at LANL

- The EM-LA mission is to safely, efficiently, and with full transparency complete the cleanup of legacy contamination and waste (pre-1999) resulting from nuclear weapons development and government-sponsored nuclear research at the Los Alamos National Laboratory.
  - Environmental cleanup conducted in accordance with 2016 Consent Order
  - Legacy waste is primarily located in Area G at Technical Area 54 (TA-54)



Los Alamos National Laboratory



ENVIRONMENTAL MANAGEMENT  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# Environmental Management Scope at LANL

## ☐ Legacy Waste Disposition



*Legacy waste is stored at Area G at Technical Area 54*



**ENVIRONMENTAL MANAGEMENT**  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
ENVIRONMENTAL  
MANAGEMENT

# Environmental Management Scope at LANL

## ☐ Soil & Groundwater Remediation



*An angled drill was used to install the injection well CrIN-4 for the Chromium Project*



*Workers prepare contaminated soil for shipment*



*Restoration work at TA-32*



ENVIRONMENTAL MANAGEMENT  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# Environmental Management Scope at LANL

## □ Demolition & Decommissioning



*TA-21-286 was one of the last buildings at TA-21 to be demolished*



*Building TA-21-286 was disused for several years*



*The footprint of TA-21-286 after demolition*



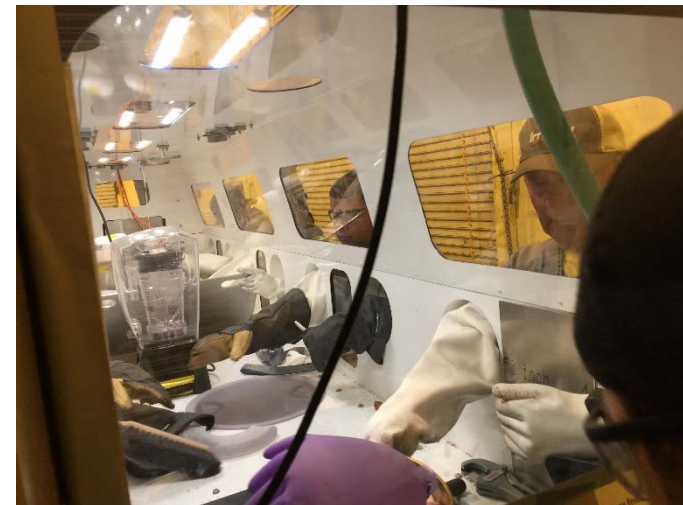
**ENVIRONMENTAL MANAGEMENT**  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE



- ❑ No significant injuries/Accidents or contamination events
- ❑ Remediated Nitrate Salt drums safely stored, testing completed and treatment process defined, initiated readiness activities
- ❑ Completed EM-LA WIPP Accident Investigation Board Corrective Actions
- ❑ Signed and implemented new Consent Order with State of New Mexico for environmental cleanup
- ❑ Implemented first phase of Chromium Plume Interim Measures (pump and treat)
- ❑ Successfully completed first year of Legacy Bridge Cleanup Contract
- ❑ Initiated EM follow on LANL Legacy Cleanup Contract acquisition activities
- ❑ Achieved significant progress to establish EM-LA (personnel, procedures)
- ❑ Released updated programmatic Lifecycle Cost Estimate



*Workers installed PRDs on the RNS drums in the spring of 2016.*



*The treatment process for the RNS is practiced and refined.*







U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

## Critical Success Factor

- Partnering (“What’s in It for Me!”)
  - Mutual Respect
  - Strategic alignment: 1) Safety 2) Efficiency
  - Clear expectations – federal, contractor, regulators, stakeholders
  - Communications – frequent and transparent
    - Physical co-location of federal and contractor personnel
  - Critical self-assessment, willingness to improve
  - Relationships count!
    - Internal and interagency - federal (field and headquarters), contractor, Pueblo, State regulators, local governments, other stakeholders



**ENVIRONMENTAL MANAGEMENT**  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
ENVIRONMENTAL  
MANAGEMENT

# Moving Forward

- The EM Los Alamos Field office will complete its missions in a safe and efficient manner, with full transparency



*Debris being cleared at the Los Alamos County Airport landfill*



*Workers used heavy equipment to remove contaminated soil from Upper Los Alamos Canyon*



ENVIRONMENTAL MANAGEMENT  
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE