



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# Managing Excess Facilities and Infrastructure Needs on the Oak Ridge Reservation

---

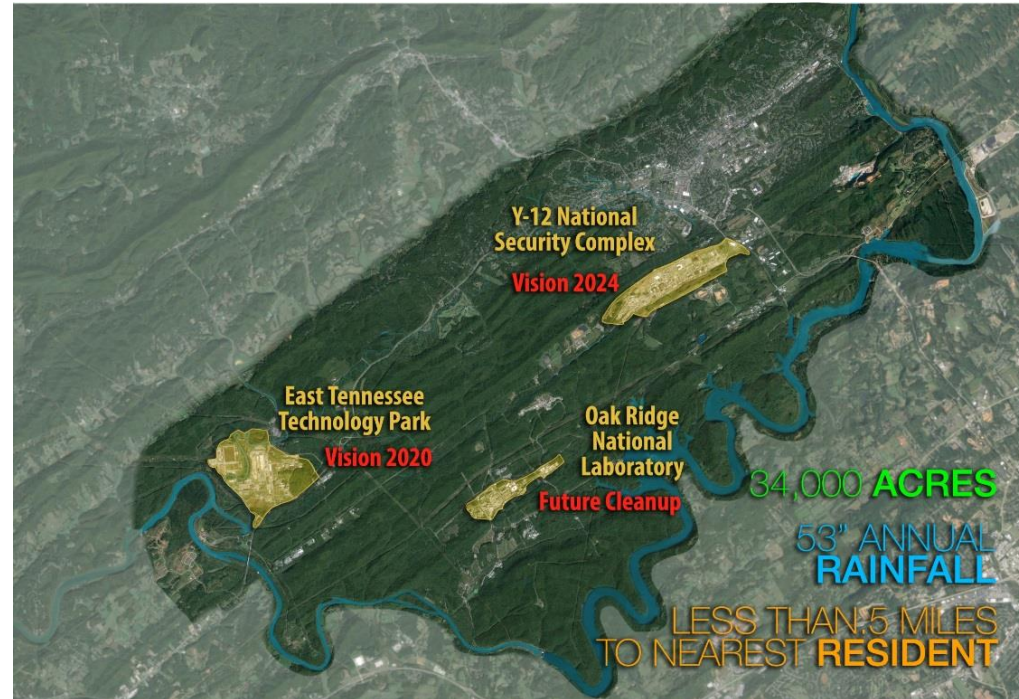
Jay Mullis, Acting Manager  
Oak Ridge Office of Environmental Management

DOE National Cleanup Workshop, Washington, D.C.  
September 14, 2017

# The Oak Ridge Reservation includes three distinct sites with a variety of cleanup challenges

## Mission: Complete the cleanup of the Oak Ridge Reservation to:

- Protect the region's health and environment
- Make clean land available for future use
- Ensure Department of Energy's ongoing vital missions



***Our Vision is that the Oak Ridge Reservation is Remediated, Modernized and Reindustrialized***

# East Tennessee Technology Park cleanup nearing completion



= Completed



= Deactivation under way



= To be demolished

# Oak Ridge has a majority of DOE's High Risk Excess Contaminated Facilities

## Excess Facilities: The Oak Ridge Challenge

- **91** excess process facilities at Y-12 National Security Complex
- **255** excess process facilities at Oak Ridge National Laboratory
- **41** facilities are classified as high risk
- Most facilities owned by NNSA/SC and exist in the midst of ongoing critical missions



# Oak Ridge has a comprehensive plan for completing environmental cleanup

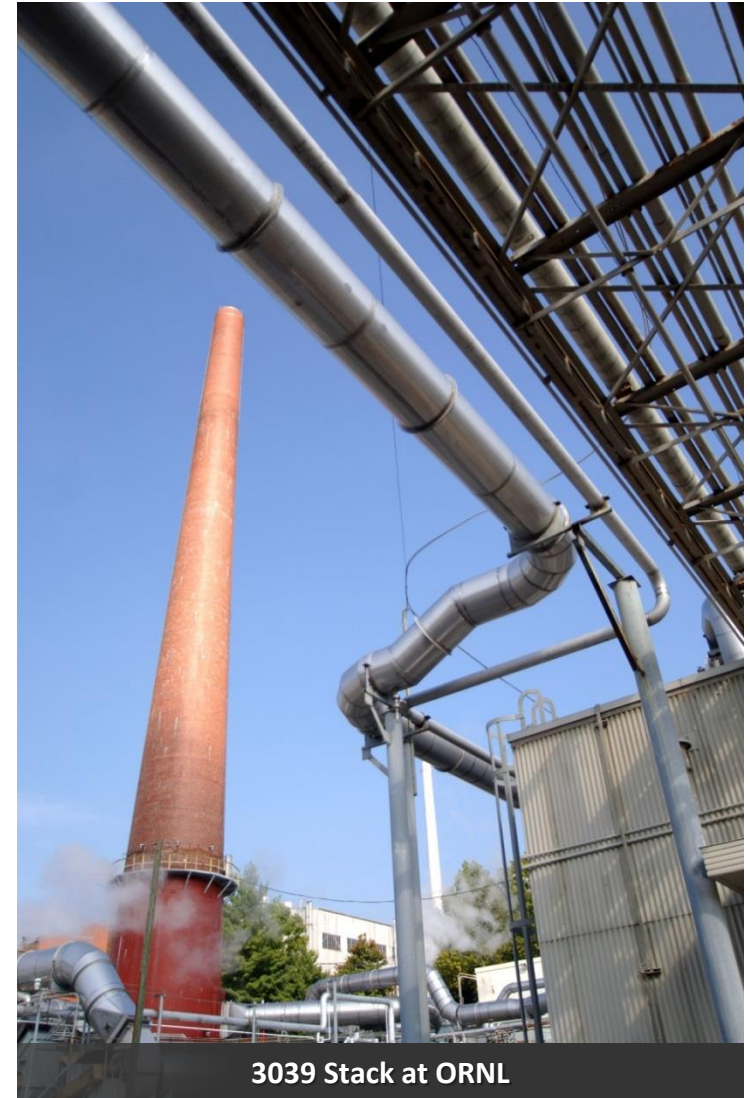
- Integrated Facilities Disposition Program (IFDP) provides a clear path to eliminating all unneeded facilities from the Oak Ridge Reservation
- Using IFDP, Oak Ridge developed a comprehensive plan with input from EM, SC, and NNSA to begin addressing excess facilities as soon as possible
- Oak Ridge is well positioned with “shovel ready” projects to begin cleanup



Rusted Air Ducts



Decaying Support Infrastructure

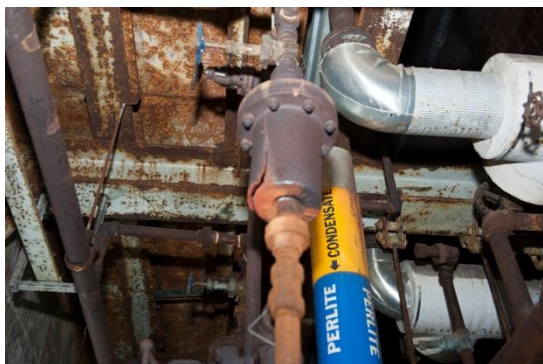


3039 Stack at ORNL

# Biology Complex is the highest priority at Y-12



# Roof repair at Alpha 4 will help slow down degradation of the facility



# Recovered nearly a ton of liquid mercury from COLEX equipment at Y-12





# 3026 Hot Cells work reduces risk and stabilizes the facility

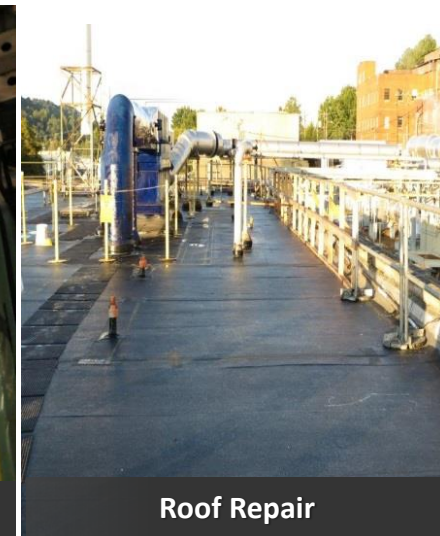


# Removed combustibles and characterized ORNL's Building 7500



# Risk Reduction Actions Taken to Minimize Maintenance Costs

- Lessons learned from K-25 Project, and others, prove that spending a little now will save a lot later
- Activities completed to keep aging facilities and infrastructure safe and “cheap to keep”
  - Electrical and utility isolation
  - Water intrusion management
  - Roof evaluation and repair
  - RCRA closure



# Oak Ridge Understands its Maintenance Needs and has a Plan to Address Challenges

Conducted a comprehensive review of preventive maintenance activities to identify potential vulnerabilities

- Corrective maintenance needs are growing rapidly
- No alarming back-log of overdue preventive maintenance
- Some critical systems require upgrades
- Developing requirements to address necessary life extension improvements



# Oak Ridge will make strategic decisions to continue minimizing risk on the Reservation

- Lessons Learned on Decommissioning and Long-term S&M
  - Condition Assessment Program
  - Facility Risk Reviews
  - Structural Inspection Program
- Decision Making Regarding Strategic Investments
  - Integrated Priority List process
  - Funding requirements process
- Long-term S&M Cost Projections
  - Estimating S&M needs for facilities awaiting D&D
  - Planning for major maintenance



LGWO System Repairs



LLLW Solidification Facility