

S&M and Life Extension: Making the Tough Decisions



William McMillan
Portfolio Federal Project Director for ORNL
Oak Ridge Office of Environmental Management

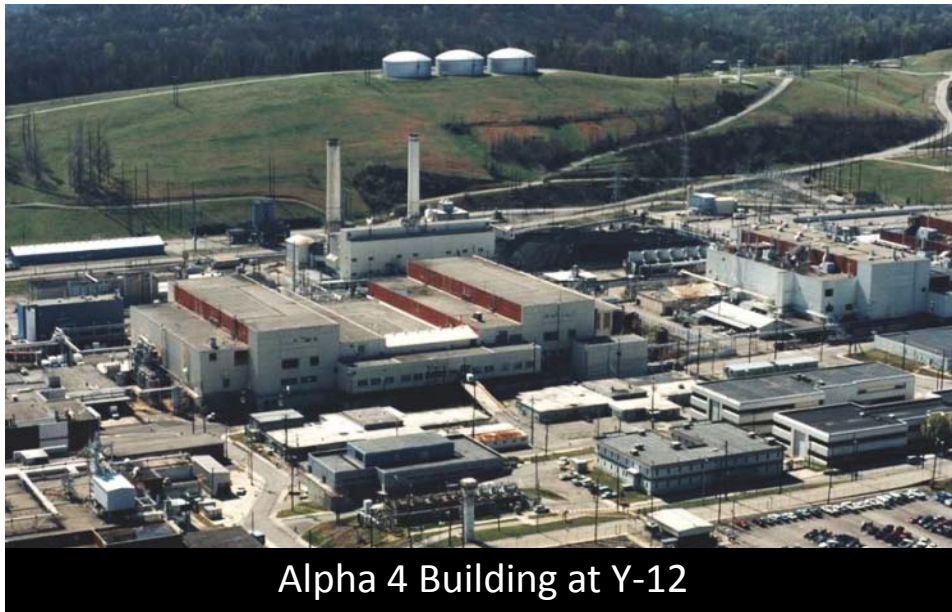
Ron Slotke
Project Services and Support Manager
URS | CH2M Oak Ridge LLC

A Little History...



- Oak Ridge Office of Environmental Management (OREM) responsible for
 - 300+ operating and excess facilities at ORNL and Y-12
 - Many facilities have maintenance issues and present risk

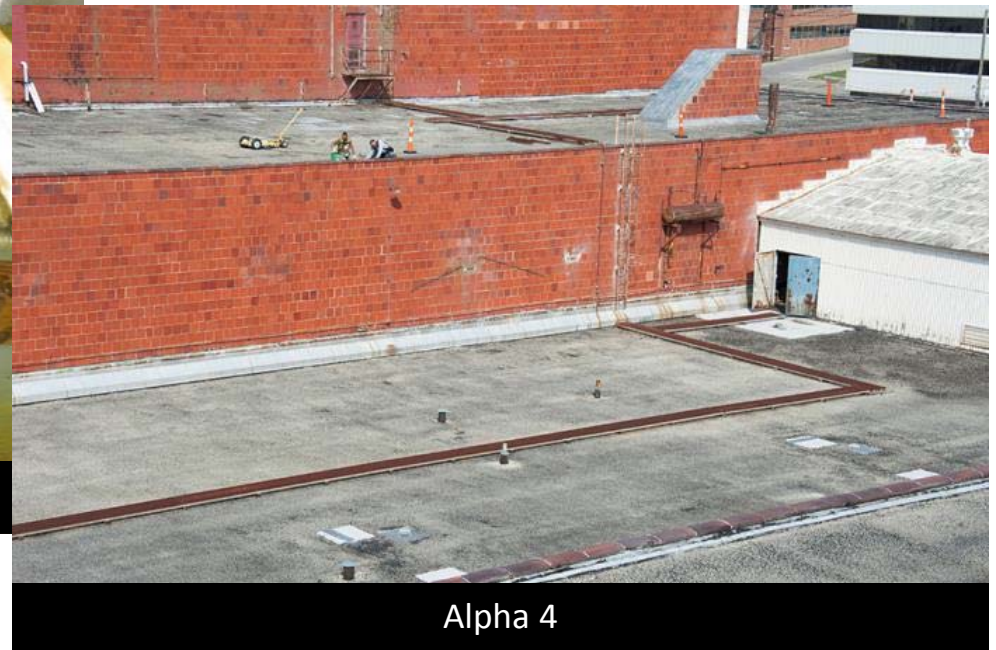
Examples of high-risk facilities at ORNL and Y-12



Deferred maintenance is about making tough decisions



3544 Facility



Alpha 4

DOE took actions to address maintenance risks



- DOE-HQ directed evaluations of excess facilities
- DOE-OREM established a Surveillance & Maintenance Integrated Project Team to address maintenance issues
- Team developed a risk-based ranking process; incorporated into Oak Ridge budget request

Integrated Priorities List summarizes risk and maintenance needs



- Integrates facility conditions, required maintenance, future upgrades, and excess facilities
- Uses weighted factors to determine priority score
- Used by DOE and UCOR as a basis for funding requests

Examples of what can happen when maintenance is deferred



West End Tunnel

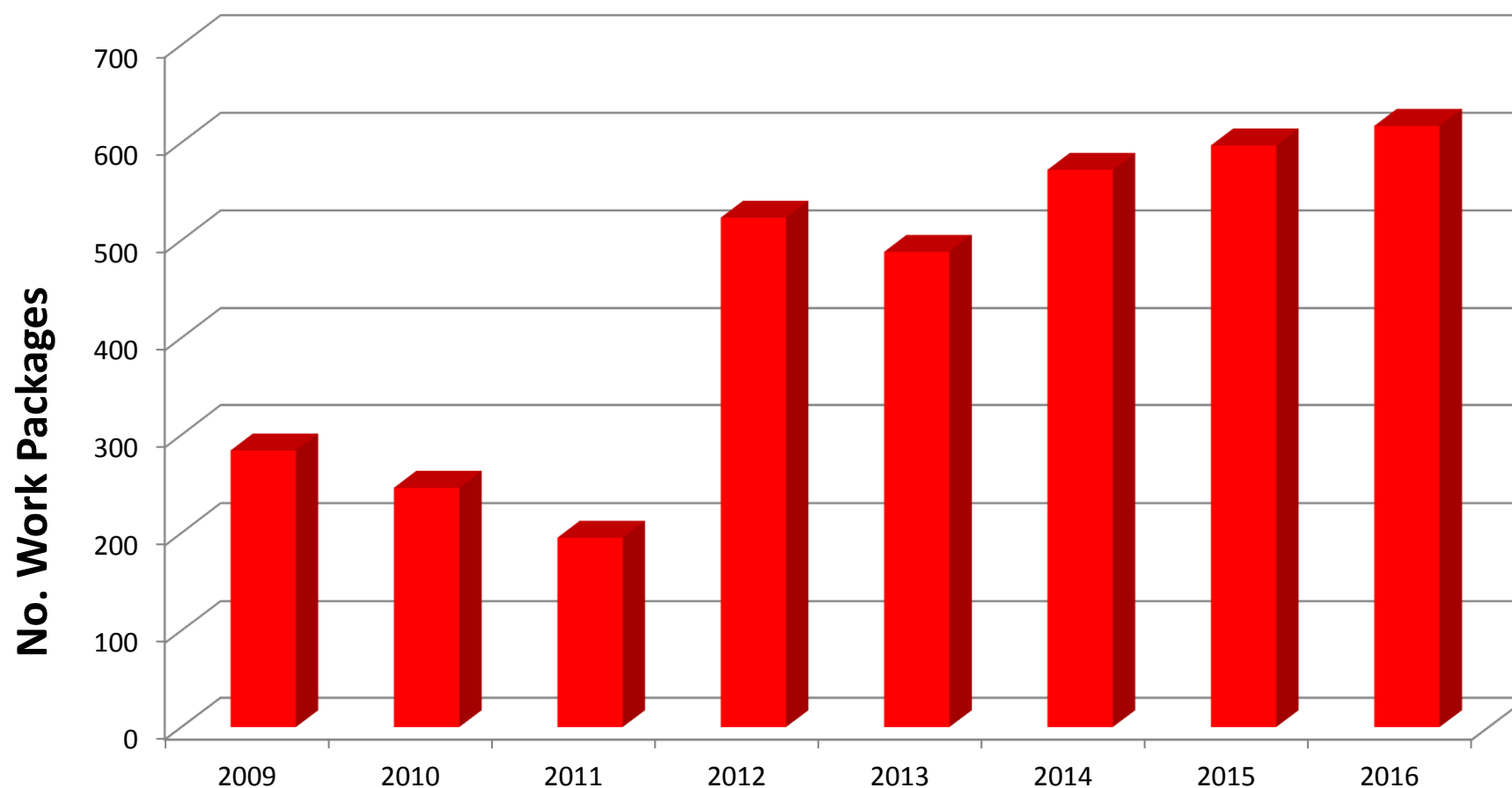


7500 Reactor Building

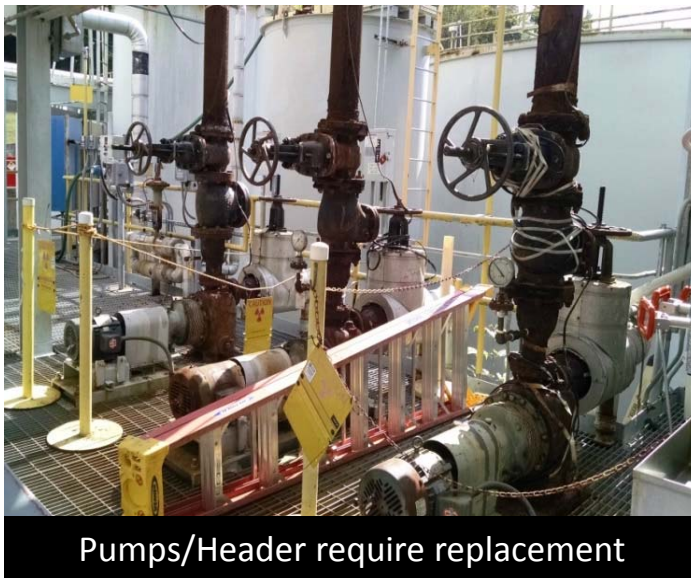


Building 3005 Roof

Increased maintenance activities for ORNL aging facilities



Addressing maintenance needs



Pumps/Header require replacement



Steam Stations Valve Repair/Replace



Solid Waste Storage Area Well Pump



Discharge Line Leak

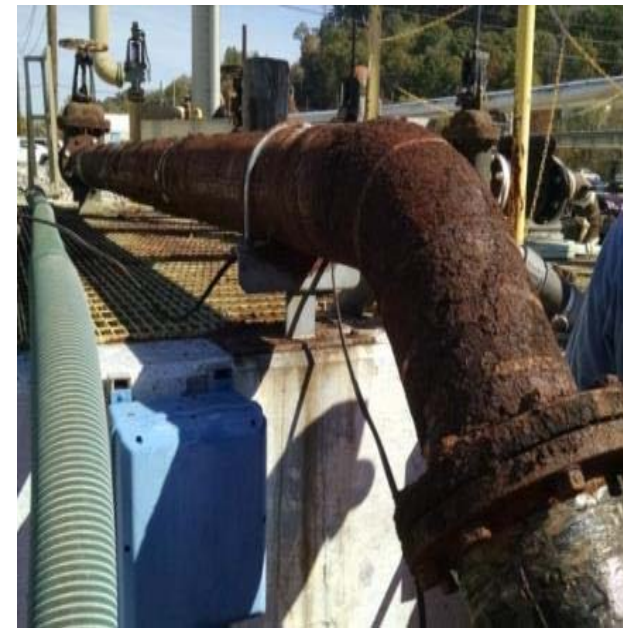
Addressing maintenance needs (Cont.)



Ventilation Stack



Hot Cell Pad Degraded Coating



Corroded Waste Water Transfer Line

Electrical issues at aging facilities



Degraded Power Supply For Exhaust Fan

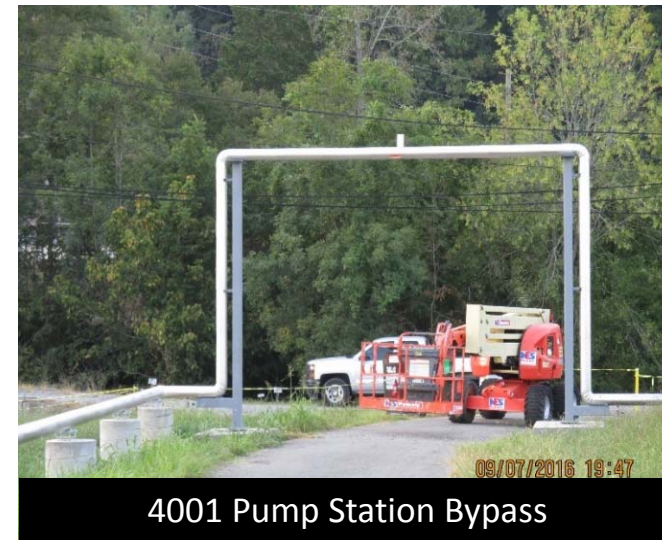


Exposed Live Wires In Cable Tray

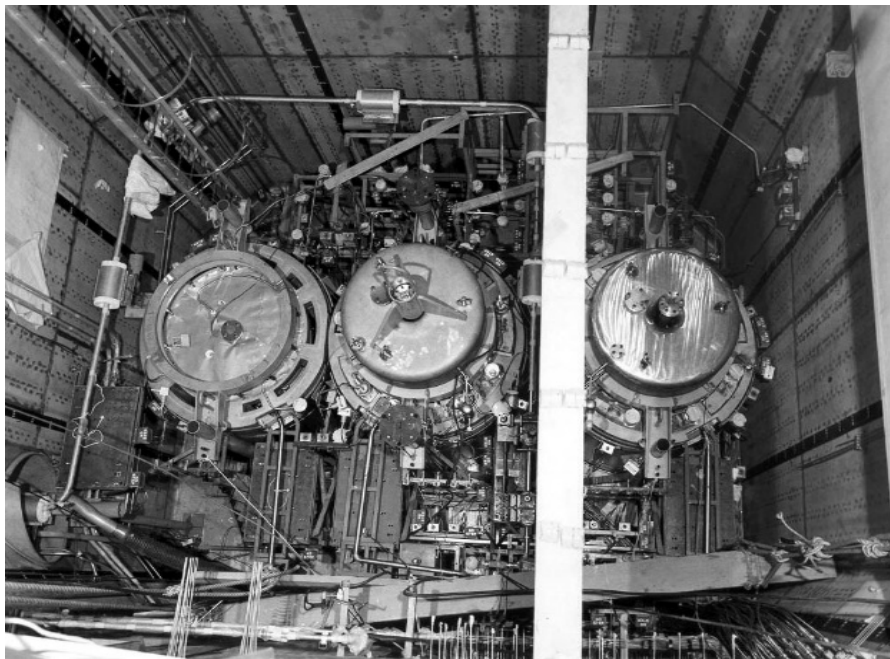


Obsolete Motor Control Center

Managing challenges – LGWO lifecycle initiatives



Managing Challenges – Molten Salt Reactor Experiment



Salt Fuel Drain & Flush Tanks



MSRE Stack

Challenges are ongoing



- Volume of work continues to grow
- Funding to address priorities is limited – competition for funds
- Priorities are constantly changing
- Continued efforts to address common challenges
 - Pump/Motor Improvement Team
 - Overcurrent Protection/Electrical Excellence Team
 - Pipe/Pressure Boundary leaks – pipe repair/replacement