Background and Current Status of Cleanup on the Oak Ridge Reservation

Ron Murphree, Chair
Oak Ridge Site Specific Advisory Board
October 21, 2009
Key Dates

• 1989 – Oak Ridge Reservation placed on the National Priorities List
• 1992 – Federal Facility Agreement among DOE, EPA, and TDEC established
• 1995 – The Oak Ridge Site Specific Advisory Board established

ORSSAB has submitted 180 recommendations on Oak Ridge cleanup projects and related issues.
Building 3019 is one of the nation’s few repositories for uranium-233 (U-233) and other special nuclear materials. Building 3019 is the oldest operating Hazard Category 2 facility in the United States.

Once the uranium is downblended it will be put in safe storage, and the building will be prepared for eventual demolition.

Down-blending is expected to begin in 2012 once facility modifications and new processing equipment is in place.
East Tennessee Technology Park

Demolition of K-25
East Tennessee Technology Park

Demolition of K-25
Oak Ridge National Lab
Transuranic Waste Processing Center
American Recovery and Reinvestment Act of 2009 (ARRA)

- **$755 M** for 24 Environmental Cleanup projects across the Oak Ridge Reservation (ETTP, ORNL, Y-12)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Y-12</td>
<td>$327M</td>
</tr>
<tr>
<td>ORNL</td>
<td>$230M</td>
</tr>
<tr>
<td>ETTP</td>
<td>$118M</td>
</tr>
<tr>
<td>TRU</td>
<td>$80M</td>
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<td>$755M</td>
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American Recovery and Reinvestment Act of 2009 (ARRA)

• 1,270 new jobs created in Oak Ridge

• 277 jobs have been saved

• more than $652 million have been obligated to contracts and

• more than $50 million have been spent on projects underway
American Recovery and Reinvestment Act of 2009 (ARRA)
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Building 9206

Biology Complex

Building 9735
American Recovery and Reinvestment Act of 2009 (ARRA)
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Tank W-1A Location Photo:
American Recovery and Reinvestment Act of 2009 (ARRA)

Bethel Valley Groundwater Plume Areas:

Installation of monitoring wells in this area.
Integrated Facility Disposition Program

**Scope not under contract**
- Remaining EM baseline
  - D&D & Remedial Actions
  - O&M / closure EMWMF
- New EM cleanup scope
  - Excess contaminated facility D&D and subsurface soil remediation within Y-12 and ORNL
  - Allows modernization and revitalization

**EM baseline scope under existing contracts**
- ETTP closure
- Melton Valley completion
- Selected high priority sites
- O&M / expansion of EMWMF
- TRU waste processing
- U-233 disposition
- O&M of waste treatment facilities

**IFDP**
- Resequenced EM baseline
  - D&D of 439 buildings 5.4M gsf
  - Remediate 247 sites
  - O&M / expansion and closure of EMWMF
  - Reconfiguration / construction of waste treatment and disposal facilities
  - O&M of waste treatment & disposal facilities
  - S&M of facilities transferred to EM

*IFDP is the integration of programs, scope, risk and funding for common objectives.*
American Recovery and Reinvestment Act of 2009 (ARRA)

K-27

K-29 demolished in 2006

K-25
### IFDP Facilities by Site and Program Office

<table>
<thead>
<tr>
<th>Site</th>
<th>EM</th>
<th>NE</th>
<th>NNSA</th>
<th>SC</th>
<th>Total</th>
<th>Excess Space (ft²)</th>
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<tbody>
<tr>
<td>ORNL</td>
<td>202</td>
<td>1</td>
<td>0</td>
<td>124</td>
<td>327</td>
<td>1.5 M</td>
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<tr>
<td>Y-12</td>
<td>15</td>
<td>1</td>
<td>79</td>
<td>17</td>
<td>112</td>
<td>3.9 M</td>
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<tr>
<td>IFDP Total</td>
<td>217</td>
<td>2</td>
<td>79</td>
<td>141</td>
<td>439</td>
<td>5.4 M</td>
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Note: Includes ancillary facilities that were estimated in CD-0 but not listed in the facility count

**Estimated cost range is $4 - $8 billion (unescalated) with a target completion range of 15 – 20 years**
• Decontamination & Decommissioning will produce >2,000,000 yd³ of debris
• Remedial action will generate at least 1,000,000 yd³ of soils
Integrated Facility Disposition Program
What are we doing in Oak Ridge?

- Hosted a public meeting on a major modification to the FFA
- 22 outreach presentations, news releases on ORSSAB activities, guest editorials in local newspapers
- Nine recommendations to DOE-Oak Ridge in FY 2008-09
What’s Important to Oak Ridge?

• Continue to monitor work funded by ARRA
• Prioritization of excess facilities being added to EM scope
• Identification and surveillance and maintenance of historically significant buildings
What’s Important to Oak Ridge?

• Long-term waste capacity planning
• Groundwater monitoring
• Re-establish national EM priorities
• Long-term stewardship
What are we doing in Oak Ridge?

• Updates on ARRA funded work at Y-12 and ORNL
• Sequencing of IFDP scope
• Updates on disposal capacity and expansion
• Updates on preparations to demolish K-27
What are we doing in Oak Ridge?

• Assessment of groundwater in Melton Valley
• Updates on work at Building 3019 and the TRU Waste Processing Center
• Stewardship Implementation Plan
• Hosting Spring 2010 EM SSAB Chairs’ meeting
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