East Tennessee Technology Park



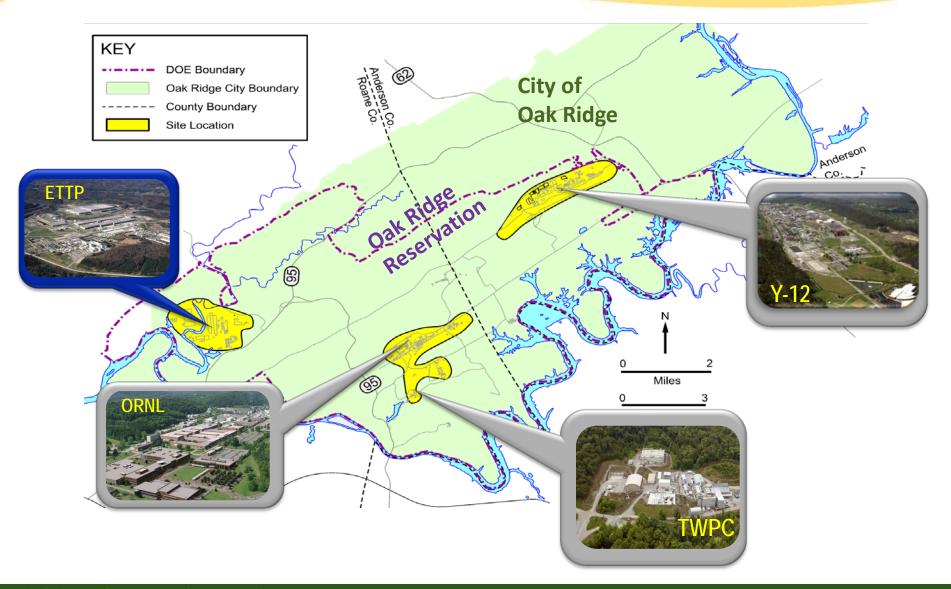
Wendy Cain Portfolio Federal Project Director

SSAB Meeting October 14, 2015

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Oak Ridge Reservation Sites



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ETTP Site End State Achieving reuse as a Commercial Industrial Park



- Complete building demolition and waste disposal
- Complete land & groundwater remedial actions
- Make land available for industrial reuse
- Preserve the K-25 Building footprint and construct an Equipment Building, Viewing Tower and History Center

Vision 2016: Completion of GDP building demolition at ETTP

Vision 2020: Remaining portion of ETTP cleaned up and reindustrialized

Vision 2024: Expand cleanup work to Y-12 to address mercury contamination



ETTP Current Cleanup Status



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Vision 2016: GDP Completion

K-29 Building demolition complete August 2006

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- K-33 Building demolition complete September 2011
- K-25 Building demolition complete December 2013
- K-31 Building demolition complete June 2015
- K-27 Building demolition ready in Winter 2015-2016



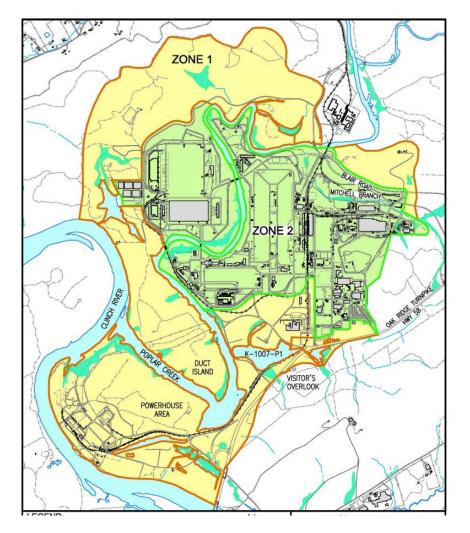
Vision 2016 enabled by:

- Completing K-25 ahead of schedule
- Avoiding K-25 costs associated with later completion
- Having trained, efficient work crews available





Remedial Actions



- ETTP was split into two areas to address soil remediation to protect humans
 - Zone 1 1,400 acres surrounding the industrial portion of the site.
 - Zone 2 800 acres in the main plant industrial areas.
- Zone 1 Interim Actions ROD (2002)
- Zone 2 ROD for Soils, Buried Waste and Subsurface Structures (2005)
- Zone 1 Final Soils ROD in process

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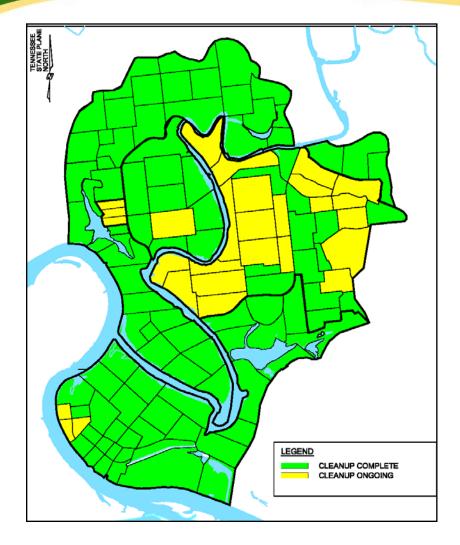
• ETTP Sitewide ROD in future



- Interim ROD (IROD) signed in 2002
- Established soil cleanup goals for worker protection and protection of groundwater
- Goal was unrestricted Industrial use in upper 10 feet soil
 - Identified 80 exposure units (EUs)
 - No maximum remediation level exceedance
 - No average remediation level exceedance across EU
 - Cumulative risk <1X10⁻⁴ incremental life-time cancer risk (ICLR) and Hazard Index (HI) of 1
- Identify and remove sources of groundwater contamination

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Zone 1 IROD Remediation



Interim ROD goals met in most areas

- 1,396 soil sample locations
- 80,037 yd³ soil removed, 61,400 yd³ scrap/debris removed
- 1,269 acres released (71 EUs) for industrial use

Areas not meeting interim ROD Goals

- Contractors Spoil Area
- K-720 Fly Ash Pile
- K-770 Scrap Yard Area
- Duct Bank Corridor

Deferred to Zone 1 Final RI/FS for additional evaluation



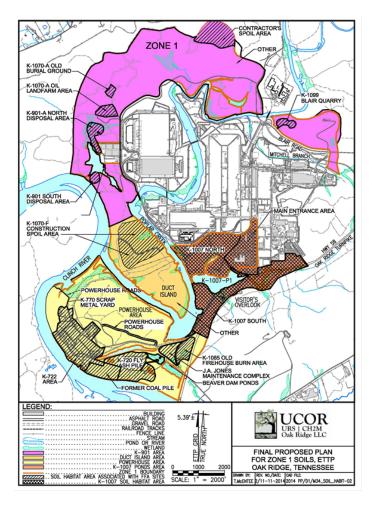
Zone 1 Final RI/FS

- Builds on Sitewide Remedial Investigation
- Incorporates Zone 1 Interim ROD remedial actions
- Evaluates results of voluntary soil remediation for ecological protection
- Performed risk assessments for industrial workers, recreational users and terrestrial wildlife
- Developed alternatives for areas not meeting Zone 1 Interim ROD goals and to protect terrestrial wildlife

RI Conclusion: Unrestricted industrial use is also protective of recreational use; therefore cleanup levels for unrestricted industrial use are also protective of recreational use. Potential risks are documented

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Preferred Alternative (2)



- Cover K-770 Area to prevent exposure to asbestos
- Remove small ecological risk areas to protect terrestrial wildlife; additional characterization
- Maintain covers at Contractors Spoil Area, K-720 Fly Ash Pile and K-770 Area
- Land Use Controls
 - Prevent residential use
 - Control use of waste management areas: Contractors Spoils Area and K-720 Fly Ash Pile
 - Control access below 10 ft (below 2 ft in Duct Bank Corridor and K-770 Area)
 - Groundwater use restrictions

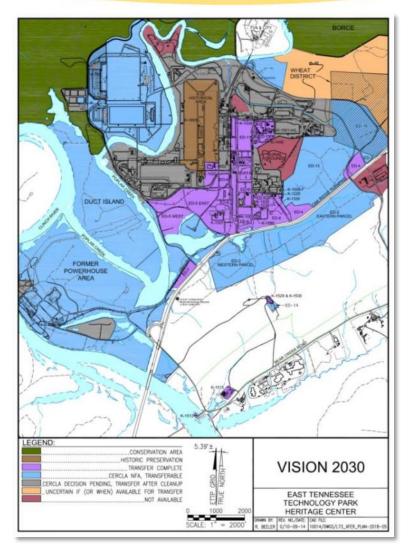
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- Address Regulator comments and revise Zone 1 Final Soils Proposed Plan (October)
- Regulator approval of the Zone 1 Final Soils Proposed Plan (December)
- Public comment period/public meeting (December-January)
- Continue working with regulators to develop and test process for lifting land use controls for incorporation into the ROD for future use to facilitate reindustrialization
- Regulator approval of the Zone 1 Final Soils ROD
- Implement selected remedial action
- Future ETTP Sitewide ROD to address all groundwater and surface water

ETTP Site Transformation

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- 721 acres of land transferred to date
- 14 buildings transferred totaling 332,000 ft²
- 20 leased facilities totaling 530 acres
- 20 private companies operating at ETTP
- Site infrastructure, roads and services transferred to City of Oak Ridge
- Future Plans
 - Over 400 acres planned for disposition by 2017
 - Transfer packages in process for K-31/K-33 and Former Powerhouse/Duct Island areas
 - Portal 4: CROET interest for potential railroad museum



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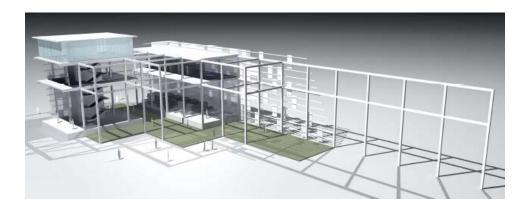
Historic Preservation

Department identified K-25 Building as a Manhattan Project Signature Facility

- National Historic Preservation Act requirement for MOAs to mitigate adverse effects to historic properties
- 10 Consulting Parties
- First MOA in 2005, current in 2012
- Commitments are independent of Manhattan Project National Historical Park

K-25 Site Elements

- History Center
- Equipment Building
- Viewing Tower
- Wayside Exhibits
- Delineation of K-25 Footprint
- Virtual Museum



Artist's Rendering of conceptual design for Equipment Building prior to Consultation Meeting







- Characterization necessary to bound uncertainty in extent and magnitude of contamination
- Safely deactivating deteriorating facilities in preparation for demolition
- Balancing budget while maintaining an efficient utilization of the trained and qualified work-force