



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Waste Disposal Capacity for Oak Ridge Reservation Landfills

Brian Henry
Y-12 Portfolio Federal Project Director

February 8, 2017

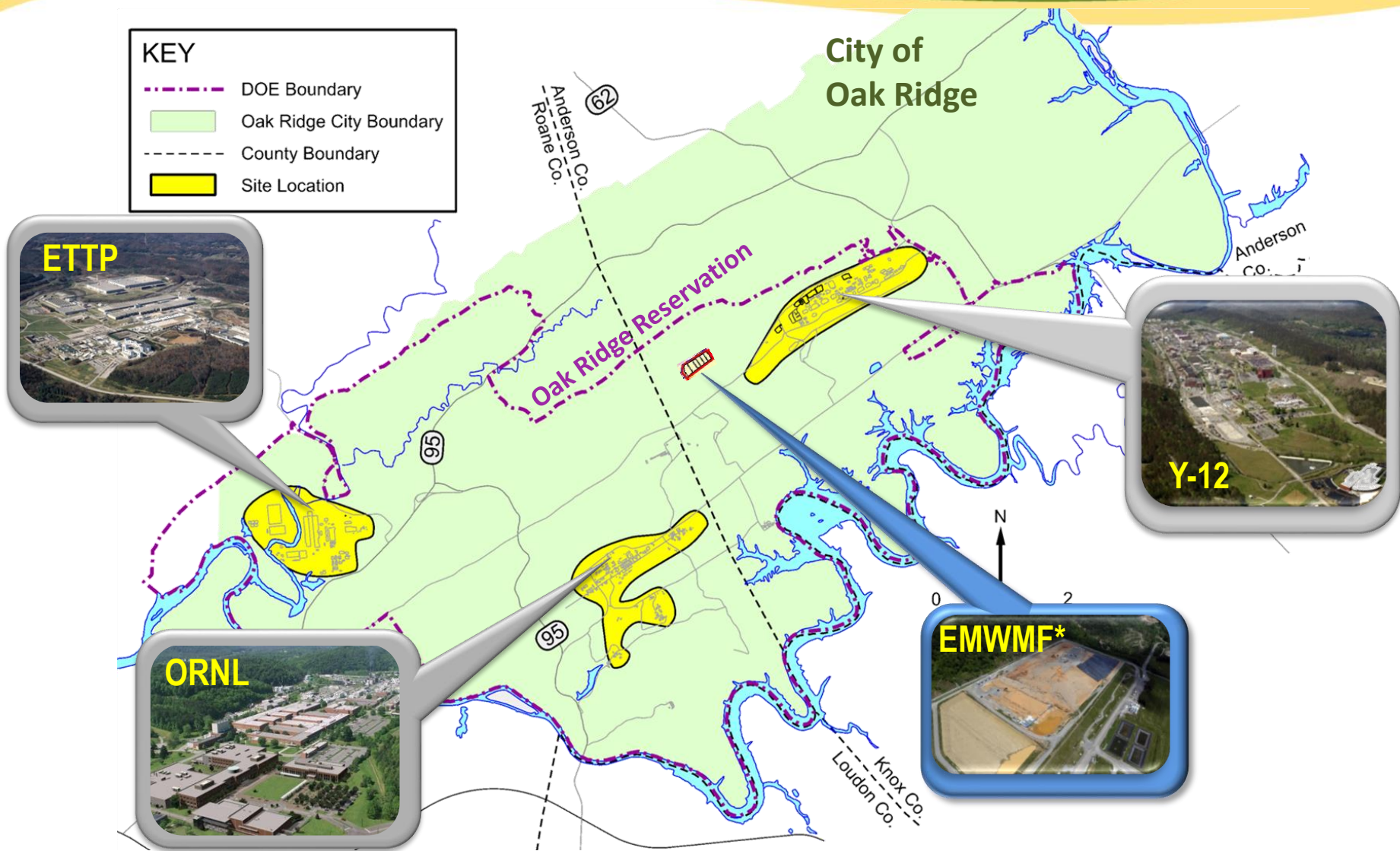
Oak Ridge Reservation (ORR) Landfills

- DOE operates several landfills for safe and compliant disposal of ORR remediation, demolition, and sanitary waste
- Operating landfills are permitted by Tennessee Solid Waste Division (SWD) or fall under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Each landfill has established criteria to determine whether waste is acceptable for disposal

Oak Ridge Reservation

KEY

- DOE Boundary
- Oak Ridge City Boundary
- County Boundary
- Site Location



* Environmental Management Waste Management Facility

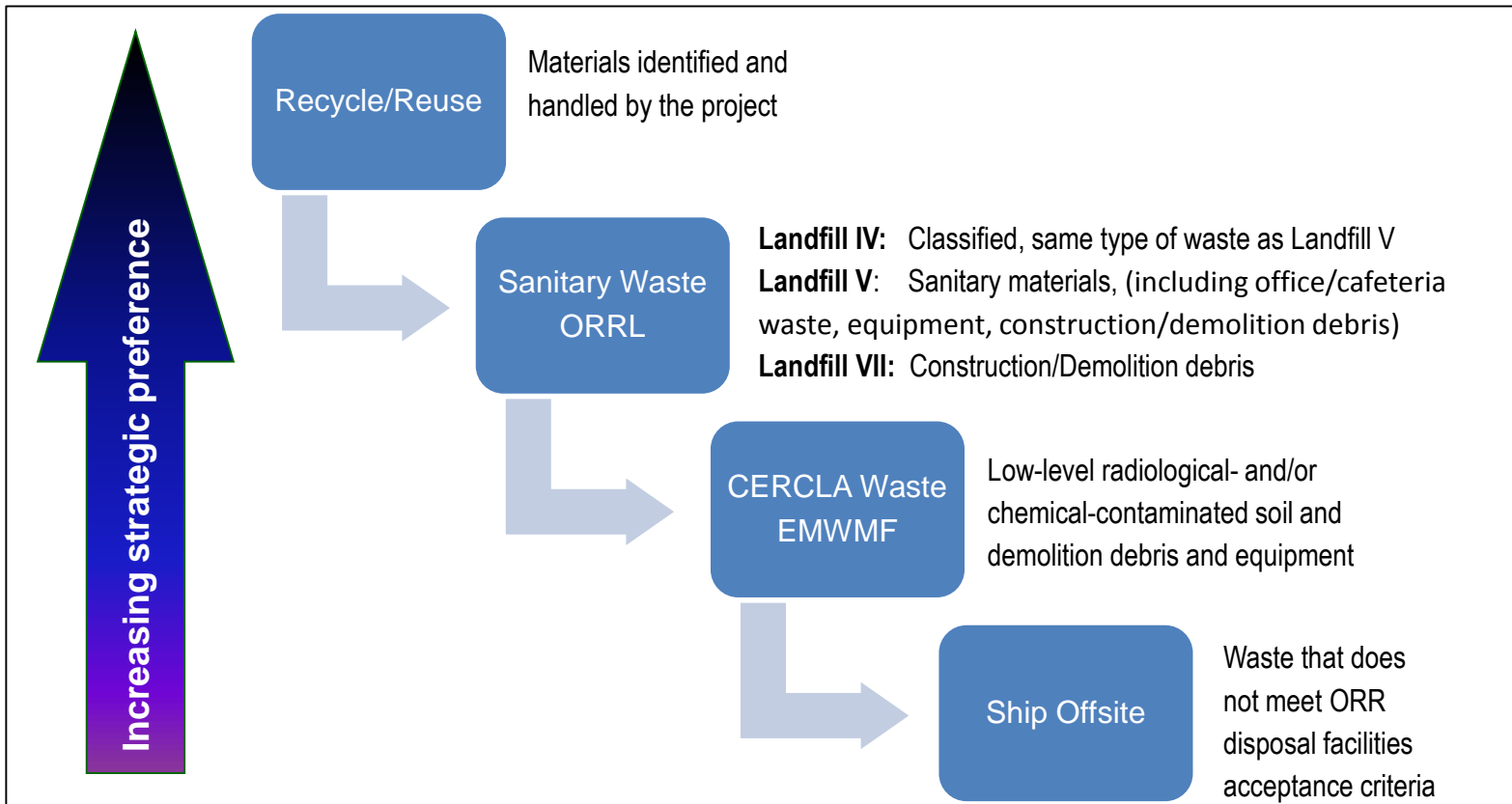
Landfills are located near the Y-12 National Security Complex



Different landfills available for different waste streams

Waste Disposal Facility	Type	Waste Received
Construction/Demolition Landfill VII	TDEC Permit	Construction/Demolition debris
Industrial Landfill IV	TDEC Permit	Classified, sanitary industrial waste (including office waste, equipment, construction/demolition debris)
Industrial Landfill V	TDEC Permit	Sanitary industrial waste (including office/cafeteria waste, equipment, construction/demolition debris)
EMWMF	CERCLA	Low-level radiological and/or chemical soil and demolition debris, equipment, cleanup waste
EMDF	CERCLA	In planning process

Waste disposal decisions follow waste hierarchy



Landfill IV (Classified Sanitary/Industrial)

- 4.2-acre landfill, opened in 1989
- Receives classified sanitary industrial waste from ORR sites
- Permitted total capacity of 89,000 cubic yards
- Currently about 50% full
- Constructed airspace approximately 71,000 cubic yards



Landfill V (Sanitary/Industrial)

- 25.9-acre landfill, opened in 1994
- Lined disposal areas receive office trash, cafeteria waste, and other sanitary waste from the ORR sites
- Approximate total capacity of 2.1 million cubic yards
- Currently about 40% full
- Constructed airspace approximately 1.3 million cubic yards



Landfill VII (Construction/Demolition Debris)

- 30.4-acre site, opened in 2001
- Unlined disposal areas receive building construction and demolition debris
- Approximate total capacity of 2.08 million cubic yards
- Currently about XX% full
- Constructed airspace approximately 1.1 million cubic yards



EMWMF (Low-level CERCLA Cleanup Waste)

- 28-acre landfill, opened in 2002
- Lined disposal cells receive low-level radiological and chemical waste from CERCLA cleanup of ORR and associated sites
- Approximate total capacity of 2.18 million cubic yards
- Planned final cap redesign will increase capacity to approximately 2.3 million cubic yards
- Currently about 75% full



Environmental Management Disposal Facility



- Currently in the CERCLA investigation/planning phase
- On-site alternatives – new Bear Creek Valley CERCLA disposal facility – Various sites under consideration
- Potential disposal site capacities range from 2.2M to 2.8M yd³

Current and planned waste disposal capacity supports cleanup of the ORR

- ORR has sufficient permitted capacity for sanitary/industrial landfills
- EMWMF has sufficient capacity for the completion of ETTP Cleanup
- Additional capacity (EMDF) is necessary to support the future cleanup of Y-12 and ORNL

QUESTIONS?