EPA Administrator's Decision on DOE Oak Ridge Reservation

Federal Facility Forum Presentation
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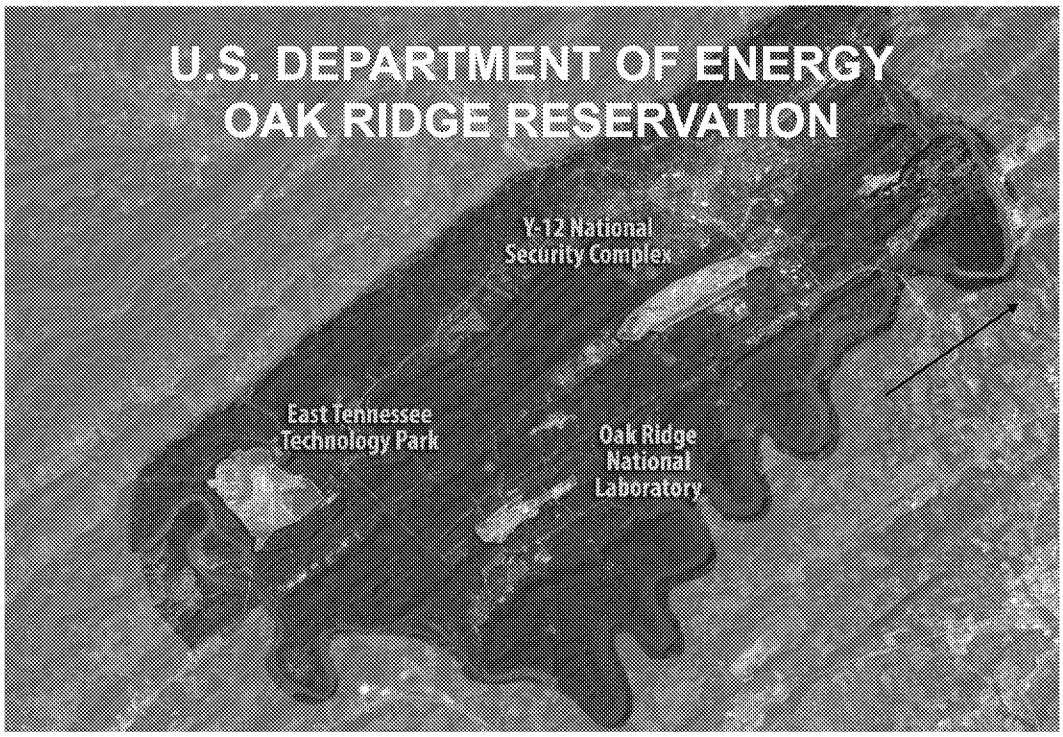
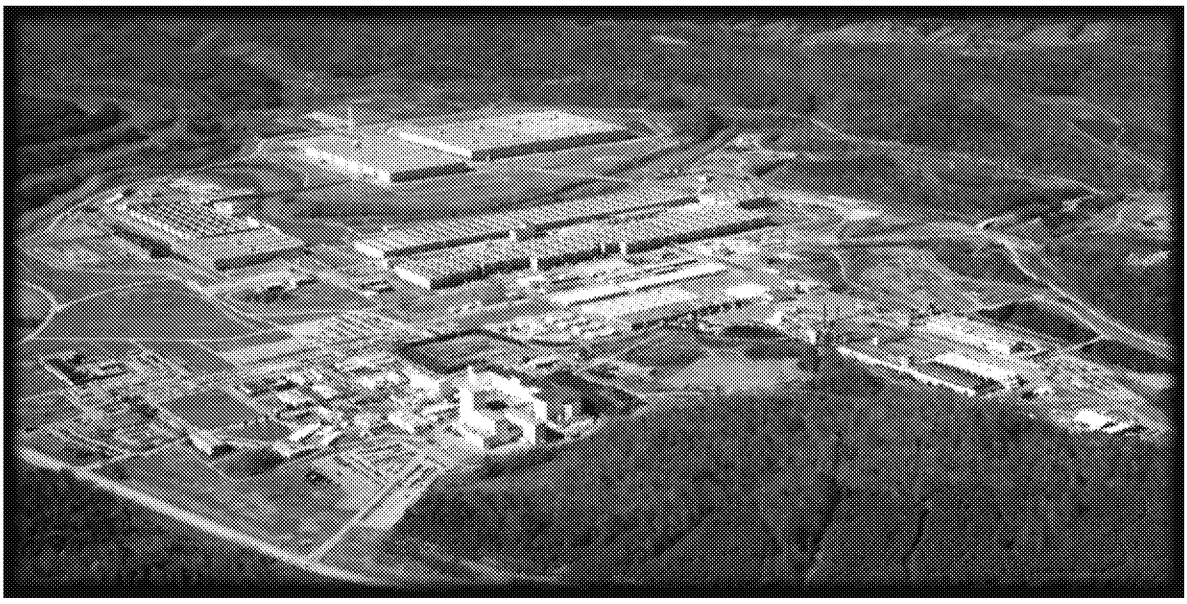
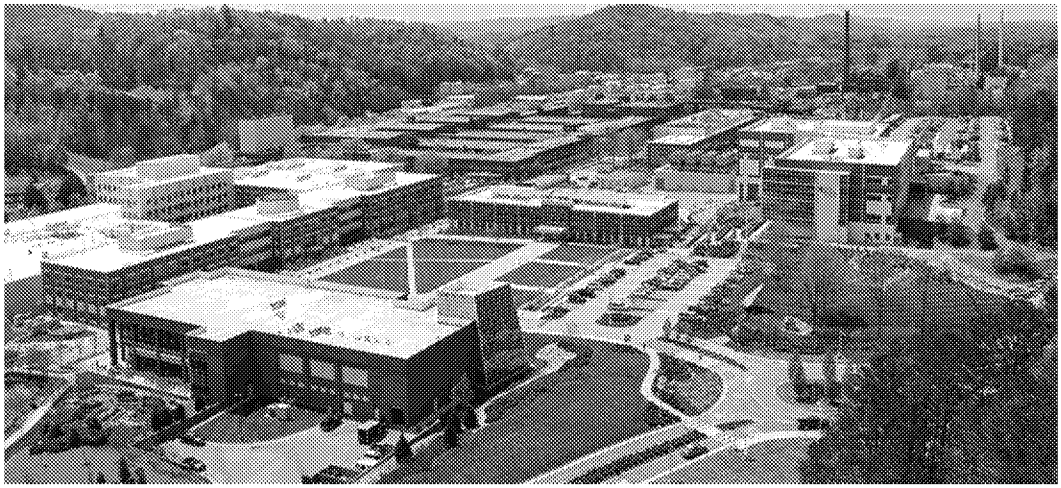
February 11, 2021

Picture to show DOE ORR location with respect the state boundary


U.S. DEPARTMENT OF ENERGY
OAK RIDGE RESERVATION
Y-12 National
Security Complex
East Tennessee
Technology Park
Oak Ridge
National
Laboratory

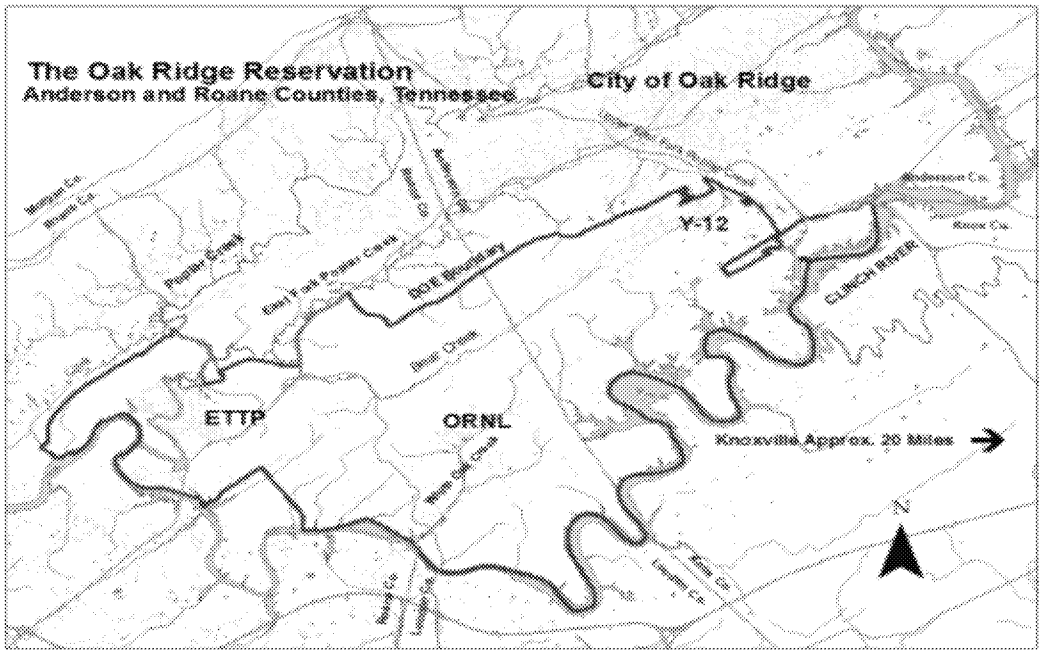


ETTP - Before Demolition

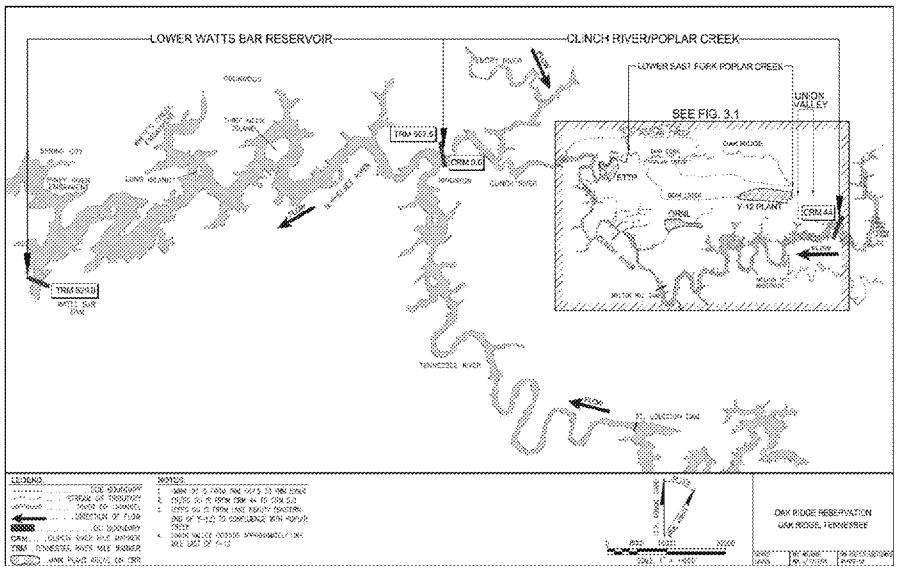


Oak Ridge National Laboratory

Y-12/National Security Agency


The Oak Ridge Reservation
Anderson and Roane Counties, Tennessee
City of Oak Ridge
Y-12
ETTP
ORNL
Knoxville Approx. 20 Miles

Areas Surrounding the Oak Ridge Reservation on the ORR NPL Site



- Area averages 55 inches of rain/year
- Karst geology
- Groundwater becomes surface water

Areas Surrounding the Oak Ridge Reservation on the ORR NPL Site

FFS Dispute

EPA R4 initiates informal dispute on the FFS (April 2016); R4 initiates formal dispute August 24, 2018. The Regional Administrator issued her position in March 21, 2019.

EPA Administrator's Decision:

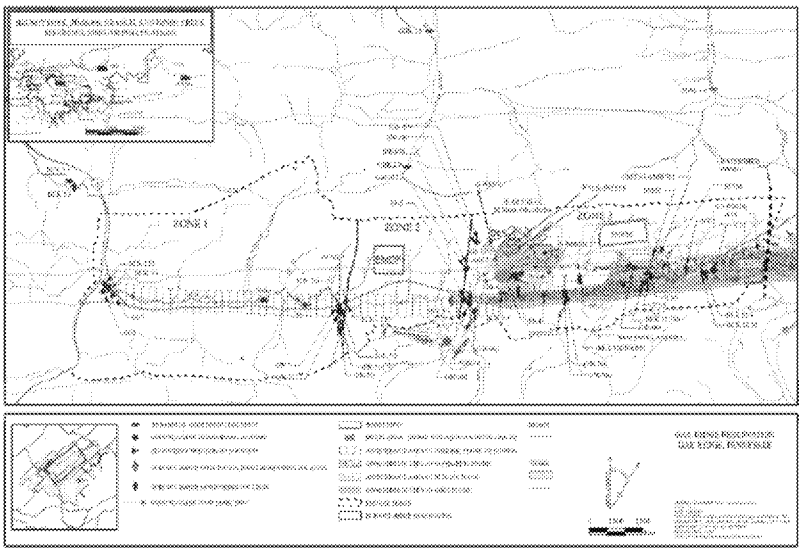
- Supported CERCLA/NCP as the controlling authority (not the AEA).
- Supported EPA's role in selecting the remedy and deciding on ARARs.
- Supported certain CWA requirements as RAR to the discharge of radionuclides; others are not.
- The RA erred in determining that certain CWA requirements (technology-based effluent limits and limits under the state's antidegradation statement) are RAR and found that they are not.

FFS Dispute (con't)

Administrator's Decision:

- Concern: The rationale for the Administrator's ARAR determination is somewhat problematic:
  - Used the overall purpose of the CWA and CERCLA instead of the purpose of a requirement,
  - Stated that CERCLA doesn't require the elimination of exposure and risk whereas CWA does

- The decision states that the "defaults" for exposure assumptions from CWA guidance (e.g., those for fish consumption) should not be used to develop discharge PRGs.
  - Concern: There are no studies to show that default assumption parameters are not appropriate for fish ingestion in Bear Creek.
  - Concern: Confuses PRGs based on ARARs versus using risk methodology (a "hybrid" method ARAR/risk method that does not exist).



Administrator's Decision - Challenges:

- R4 will work with DOE/TDEC to implement the decision as written. DOE has 35 days to submit revised FFS unless an extension is requested.

- Will implement approach as agreed by the three parties to ensure compliance with CERCLA and the NCP
  - Monitor compliance?
  - Enforcement?
  - EMWMF challenges due to current discharges to Bear Creek
  - Decision is applicable to only the landfill(s); other DOE ORR sites implemented temporary wastewater treatment systems
  - Future groundwater cleanup decisions will need to be evaluated separately

Q&A