

# **A Short History of Fernald**

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# Site Background

- 17 miles from Cincinnati
- Uranium metals production 1951-1989
- 1050 acres
- Agricultural/residential area
- Widespread soil and groundwater contamination

# Environmental Cleanup Volumes

- **Silos 1 and 2** – 8,900 cubic yards of low-level radioactive, radium bearing waste
- **Silo 3** – 5,100 cubic yards of low-level radioactive waste
- **Waste Pits** – 790,000 tons of low-level radioactive waste
- **Soil and Disposal Facility** – 2.2 million cubic yards of contaminated soil
- **Building Decontamination and Demolition** – 223 buildings and structures
- **Aquifer Restoration** – 170 acres of the Great Miami Aquifer
- **Waste Management** – 2.5 billion pounds of waste
- **Nuclear Material Disposition Project** – 31 million net pounds of uranium product

# Cleanup Levels & Waste Disposition

- Use is undeveloped park at  $1 \times 10^{-4}$  risk level
- Cleanup levels protect drinking water aquifer
- 75% of waste volume in on-site disposal facility
- Waste pit materials to Envirocare by train
- Silos 1 and 2 waste to WCS Texas by truck
- Silo 3 waste to Envirocare by truck
- Waste management materials to NTS by truck
- Nuclear materials to Portsmouth by truck

# Fernald During Operation



# Fernald Today



# Fernald Future



# Public Involvement at Fernald

- Contaminated drinking water discovered early 1980s
- FRESH formed in 1984
- Three lawsuits filed against DOE in 1980s
- FCAB formed in 1993
- Comprehensive cleanup recommendations in 1995
- FCAB workshops and public information since 1994
- Regular public briefings since early 1990s
- Envoy program helped keep community informed

# Key Phases of the FCAB

- 1993-1995: cleanup levels, waste disposition, land use
- 1995-1999: remediation and budget issues
- 1999-2002: visioning and long-term stewardship planning
- 2003-2006: getting stewardship needs implemented

# Key Lessons from the Fernald Experience

- Develop a working relationship with DOE and the regulators
- Maintain a stable board with new members being added to provide needed expertise or perspective. Institutional knowledge is essential.
- Good facilitation is necessary to keep things moving smoothly, on task, and to help with the deciphering of documents.
- A detailed vision for the future of the site early on helps focus efforts.
- Making recommendations by consensus allows all points of view without bogging down the recommendation process.

# Lessons Learned from Closure

- Start planning early
- Get LM involved early
- Create direct communication to LM
- LM needs to accept recommendations from SSABs
- Get agreements to be legally enforceable, build stewardship into RODs
- Push for long-term education and public participation as institutional controls

# LSO at Fernald

- Community decided LSO did not meet obvious needs at this time, but reserved right to revisit issue later
- FCAB expressed reservations about LSO because:
  - Not advisory
  - Limited range of issues
  - Not fully representative of community
  - Too focused on local government
  - Limited continuity from SSAB