



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

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2018 Long-Term Stewardship Conference

Transition of the Former Mound, Ohio, Site to a Commercial Business Park

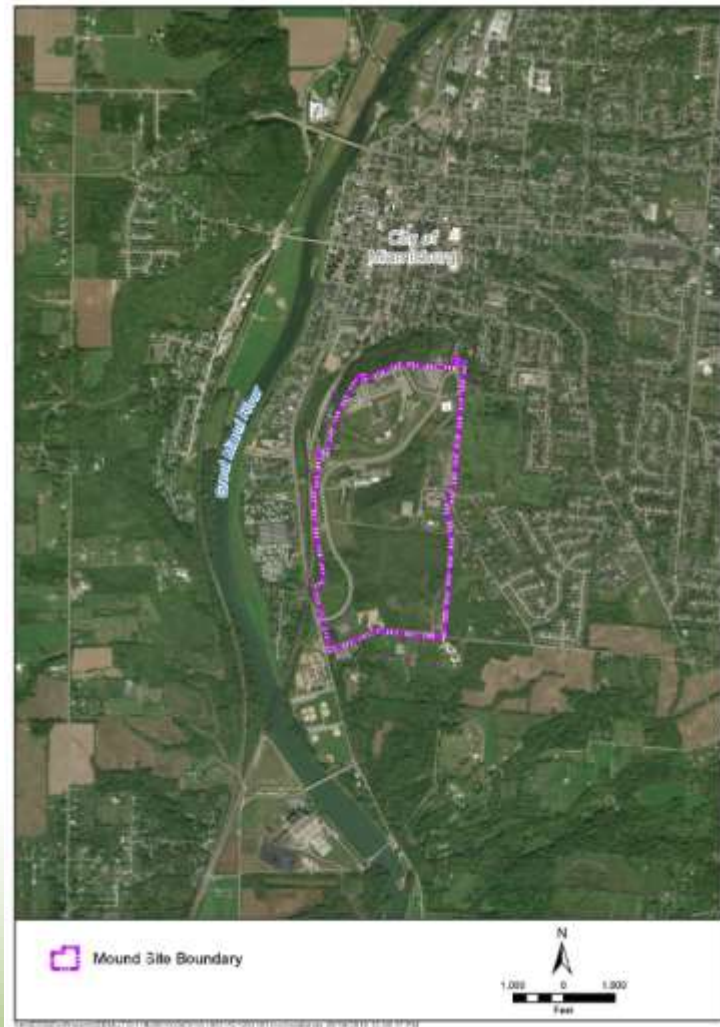
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Office of Legacy Management (LM)

Other Contributors

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Navarro Research and Engineering, Inc.

Located in City of Miamisburg in southwest Ohio



Mound Site Through the Years



Operations and Site Closure

- Facility opened in 1948
- Research, development, and production for U.S. Atomic Energy Commission and DOE
- End of Cold War led to reduced U.S. nuclear weapons program
 - 1992 U.S. DOE Reconfiguration Study recommended closing sites and consolidating work
 - Mound site scheduled to close and work moved to other sites
 - Site employees and City of Miamisburg attempted to stop site closure



Bonebrake Seminary



Mound Site in 1988 During Peak Employment



Main Entrance - A Building

Collaboration: DOE, Regulators, and Stakeholders

- DOE, U.S. Environmental Protection Agency (EPA), and Ohio EPA (“Core Team”) have tripartite Federal Facility Agreement
- Core Team agreed on unique “Mound 2000” approach in 1995, streamlining the typical Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) process
- Stakeholders were important part of decision process
- DOE, regulators, city of Miamisburg, and stakeholders agreed to remediate the site to industrial/commercial use standard



Collaboration: DOE and City of Miamisburg

- General purpose lease agreement signed September 1994 between DOE and Miamisburg Mound Community Improvement Corporation (MMCIC)
- Site sales agreement signed January 1998 between DOE and MMCIC
- DOE sold entire site to MMCIC for \$10 in April 1999
- MMCIC (later named Mound Development Corp. [MDC]) oversees transition of site to privately owned industrial park
- Mound Reuse Committee (MRC)
 - Independent advisory organization (1994 to 2010)
 - Public input on cleanup and reuse



Site sale ceremony



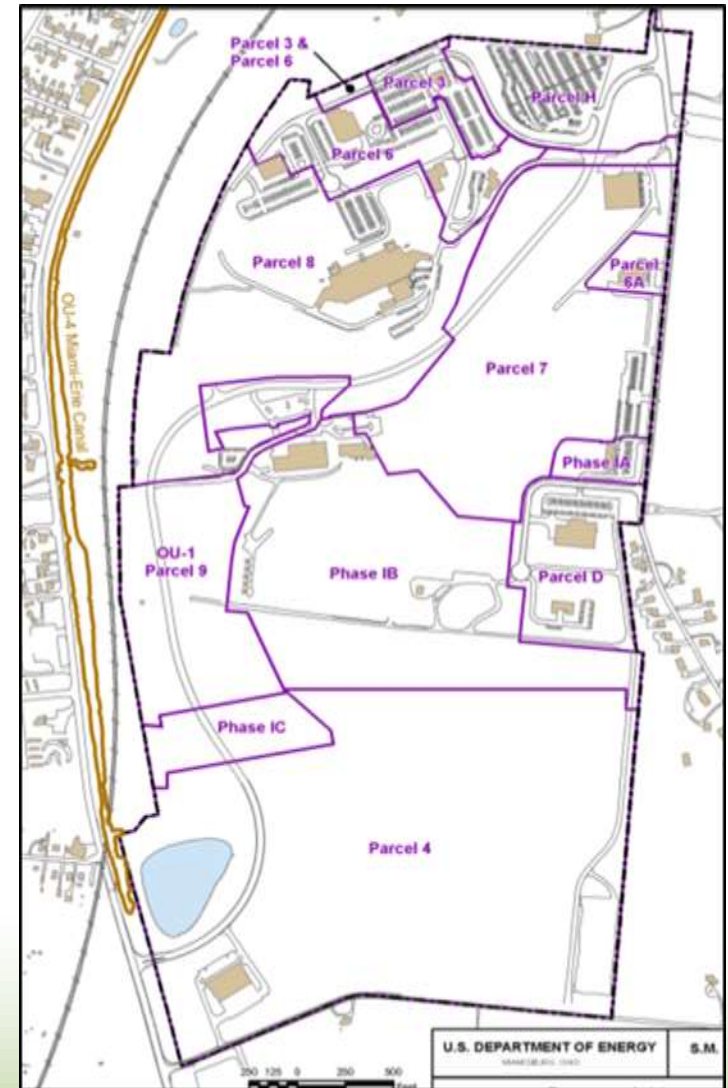
\$10 bill paid at transfer of title to MMCIC for first land parcel



MRC meeting

Remedies

- Remedies defined in CERCLA Records of Decision (RODs)
- Site divided into Operable Units, Parcels, or Phases
- CERCLA remedies include:
 - Pump and treatment system in OU-1 Area
 - Groundwater monitoring in OU-1 Area
 - Groundwater monitoring (Monitored Natural Attenuation) for Parcels 6/7/8 and Phase I
 - Sitewide institutional controls (ICs) and T-Building-specific ICs



Mound Institutional Controls

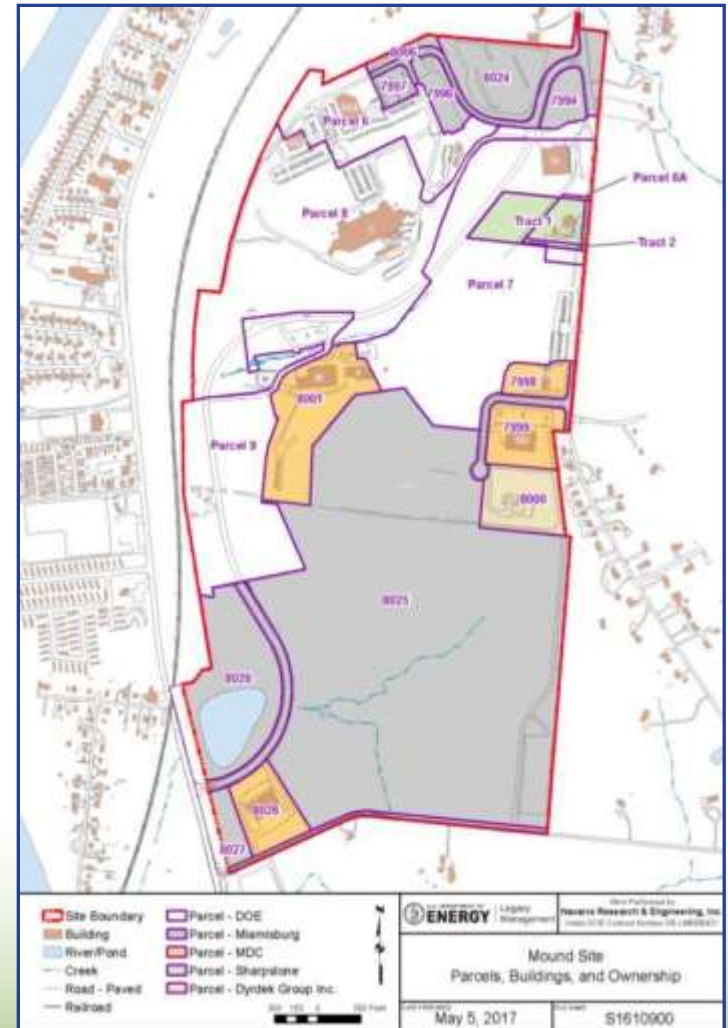
- Limit land use to industrial or commercial use only
- Prohibit removal of soil from ~306 acre footprint of original Mound site property*
- Prohibit extraction, consumption, exposure, or use in any manner of groundwater underlying the premises*
- Prohibit penetration or removal of concrete flooring in certain areas on the first floor of the Technical Building*

*Unless prior written approval is received from Ohio EPA and Ohio Department of Health (ODH)



Site Ownership (June 2017)

- DOE Lead Program Secretarial Office responsibility transferred from Environmental Management to LM in June 2017
- MDC/City of Miamisburg owned 60% of the site (in grey)
- LM owned Parcels 6–9 and leased to MDC (in white)
- MDC had all landlord responsibility for Mound Business Park



Site Ownership (June 2018)

- In October 2017, the site sales contract expired; the general purpose lease was extended on a month-to-month basis
- In January 2018, MDC accepted quitclaim deeds for three of four remaining DOE-owned parcels
 - Deeds have yet to be recorded with Montgomery County
- MDC continues to lease remaining parcel (Parcel 9, which includes OU-1 [VOC-contaminated groundwater])



Challenges

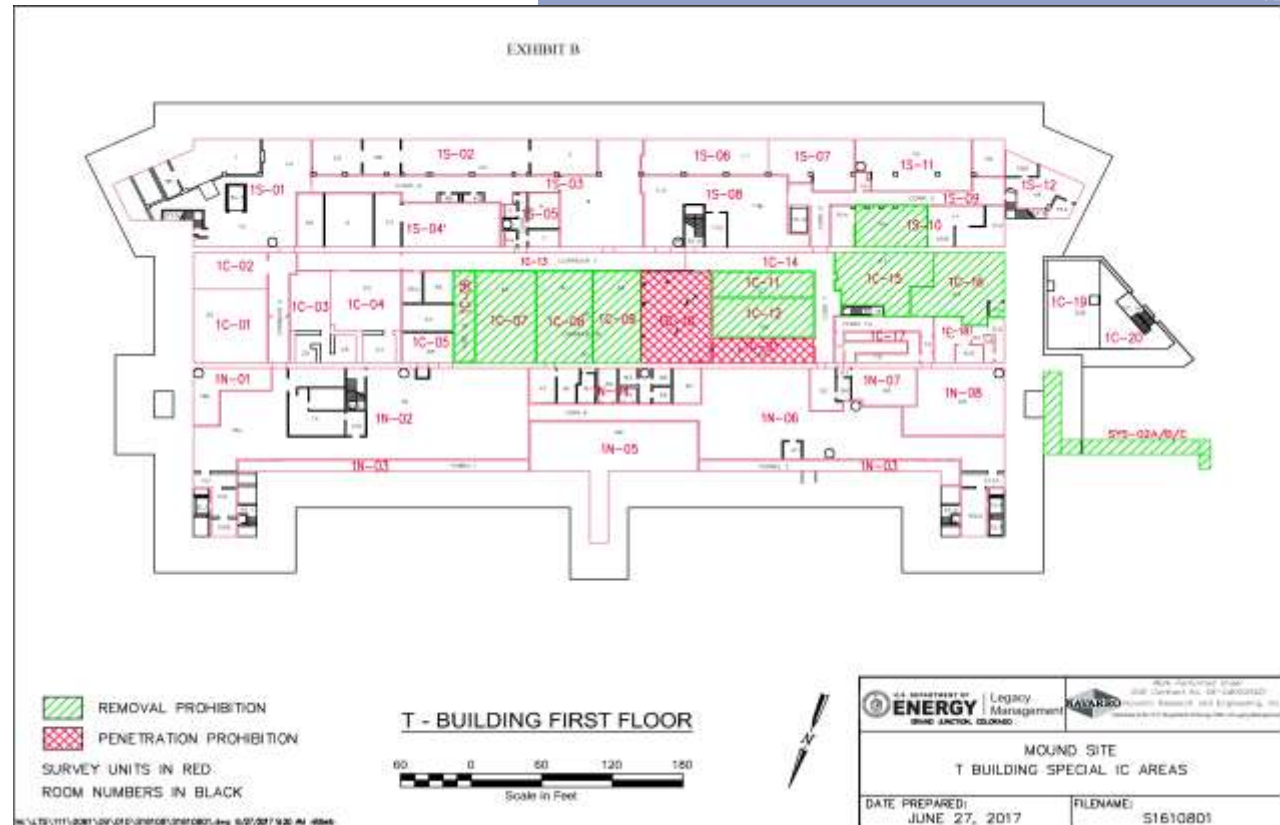
- No permanent federal or contractor presence on-site
 - Hampers LM's ability to monitor and enforce CERCLA institutional controls
- Changing property owners
 - Loss of institutional knowledge over time
- ROD parcel boundaries (DOE-defined) versus property lots (MDC-defined)
 - Harder for property owners to trace back to appropriate ROD(s)



Challenges (continued)

- Ongoing groundwater remedies (monitoring wells, pump and treat system components)
- Maintaining community knowledge of institutional controls in the future
 - DOE Annual Assessment of Effectiveness of Mound Site Institutional Controls includes participants from MDC and City of Miamisburg
- Implementation of soil removal IC
 - MDC operates soil staging/borrow area for use by Mound Business Park occupants
- Occasional fishing in retention pond
 - MDC signage improvements over the years

T-building





Successes

- No institutional control violations to date
- Improved communication between DOE, MDC and the City
- Consistent participation in annual ICs site walk-down, not only by regulators, but also MDC and the City
- Annual DOE face-to-face meetings with property owners to review ICs



Next Steps

- Future MDC and City of Miamisburg actions will enhance LM's ability to monitor and enforce Mound ICs
 - Planned City of Miamisburg Special Zoning District for Mound Business Park
 - Planned revision to the City's Construction and Roadway Work Permit applications to include question on whether work will be performed in Mound Business Park
 - If answer is Yes, information on ICs and DOE point of contact provided to applicant
 - MDC's planned development of a Mound Business Park Property Owners' Association