



REDEVELOPMENT USDOE MOUND FACILITY MIAMISBURG, OHIO

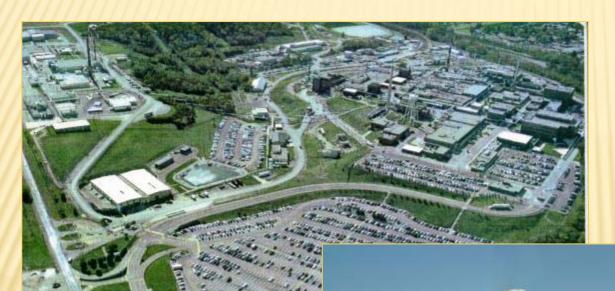
MIKE GRAUWELMAN
MOUND DEVELOPMENT CORPORATION
(RETIRED)

AGENDA

- Mound Background
 - DOE History
 - Community Organizational Structure
 - Redevelopment Plan

Economic Development

MOUND SITE



Site Information:

- Founded 1948
- Manhattan Project
- 306 Acres
- 1.3M Sq. Ft. Buildings
- Topo Variance 180'
- Buried Valley Aquifer

Workforce Information:

Peak Employment: 2,400

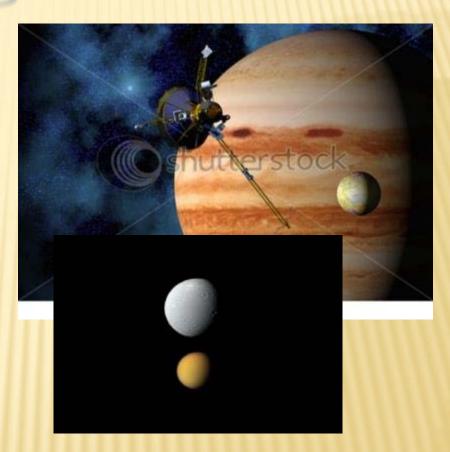
• 25% PhD's

MOUND MISSIONS

Former DOE Missions

- Department of DefenseNuclear Detonators
- NASA





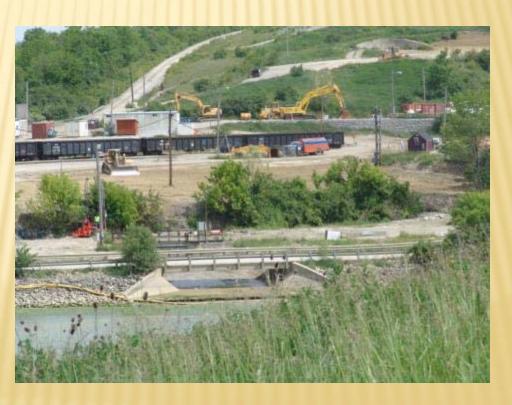
Recent Missions

- Environmental Remediation (2010)
- Economic Development

ENVIRONMENTAL REMEDIATION

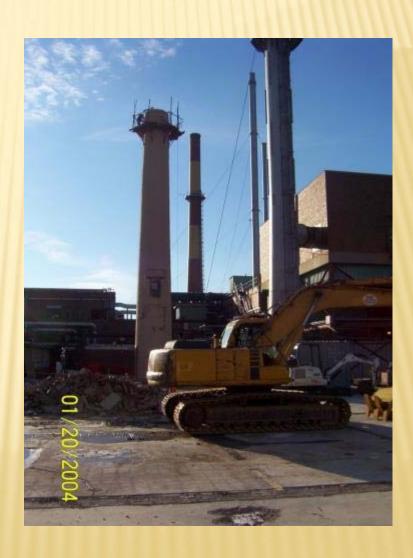
- **x** Groundwater
- × Soils
- Buildings
- * Landfill
- × Off Site

- × VOC's
- × Low Level Rad
- Hazardous Wastes



ENVIRONMENTAL RESPONSE

- **x** Groundwater
 - + Pump & Treat
- × Soils
 - + Dig, Sort & Ship
- Buildings
 - + Demo Sort & Ship, Landfill, Reuse



Structuring Community Involvement – CRO

Basic Goals

- Prevent Waste Abandonment
- Mitigate Job Loss
- Reuse Assets

PROJECT INTEGRATION: CONCEPT



Cleanup & Reuse

Organizational Roles & Responsibilities



Redevelopment Structure

City of Miamisburg - Political Voice

- MRC Community Involvement
 - 17 Members
 - Environmental & Land Use Focus

PROJECT INTEGRATION: COMMITTEE



Respectful Healthy Tension

Chartered Formal Roles



Redevelopment Structure

- MDC Community Agent
 - Cleanup Oversight
 - Economic Development
- Structure
 - 501 (C) (4) Not-for-profit
 - Board of Directors

MDC Mission Statement

To achieve the community's environmental and redevelopment vision for the Mound Advanced Technology Center.

<u>Note</u>: Both the Vision and Mission statements are currently in the process of being revised. The MDC Board will be reviewing the proposed changes in July.

MDC Cleanup Roles

- Remedy Technical Oversight
- Proposed Plan & ROD Review
- Funding Acquisition
- Community Technical Support
- Integrated Effort with DOE & EPA Lead

MDC Redevelopment Roles

- Product Positioning
 - Strategic Planning
 - Reuse Plan (CRP)
 - Reuse Plan Implementation
 - Land Development / Redevelopment
 - Facility Development / Renovation

MDC Redevelopment Roles

- Business & Economic Development
 - Site Owner / Landlord / Leasing
 - Site Marketing
 - Incubator, Equipment, Lending
 - Business Marketing

Setting a Direction Comprehensive Reuse Plan

Preparation for Redevelopment

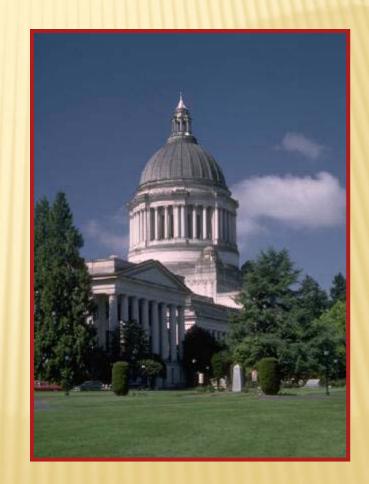
- Legislation
- Comprehensive Reuse Plan
- Agreements
- Marketing

New logo, business park name, and website to be launched on May 20, 2014.

Legislation

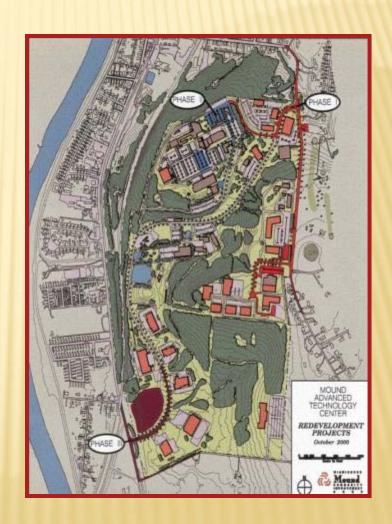
Leasing Authority

Indemnification



Comprehensive Reuse Plan

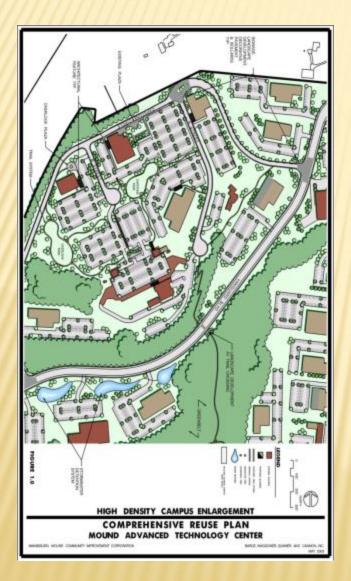
- 9-month community involvement process
 - Public Hearing Process
- Conclusions viability hinges on...
 - Environmental Restoration
 - \$55M Improvement Plan
 - Successful Marketing



Foundation Agreements

- Sales Contract
- Memorandum of Agreement
 - MDC to seek \$18 M
 - DOE to provide \$15 M
 - Partners to seek \$15 M in cost efficiencies
 - Cleanup Efficiencies (MOAs)
 - Partnership Council
- Interim Utility Agreement
 - Transition facilities/ utilities to alt providers

Marketing – Total Solutions in Site & Technology





ENVIRONMENTAL ISSUES

- Alignment Objectives
 - + Landfill
 - + Sewer Lines
 - + Property End State



LANDFILL - REMOVAL

- Final Cleanup **Funding Landfill**
 - 2007 \$30M Earmark
 - 2008 \$5M Earmark
 - 2009 \$20M ARRA

Total Cleanup Cost \$1B

2010 Completion

Event Monday kicks off new chapter for Mound

Dayton Daily News

Print this page - Close

Event Monday kicks off new chapter for Mound

Only a handful of the 116 buildings remain from the former nuclear site after 15-year, \$1 billion environmental cleanup

By Tom Beverlein . Staff Writer

MIAMISBURG - Operating virtually in the shadow of the mysterious Adena Indian mound that gave it its name, the Mound Laboratory was the secret site of both scientific marvels and environmental devastation over

During the Cold War, the plant's main mission was developing explosive components for nuclear weapons. Mound's highly educated workers also invented a polonium-powered generator used in the space program.

Over the years, the plant released radioactive and chemical hazards into the environment that, according to

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SEWER LINE - REUSE

× Compromise Agreement

- + MDC
 - Develops and Conducts Survey
 - Conducts Remediation and Reports
- + USDOE
 - × Grants MDC Funds
 - × Reviews Data
- + EPA
 - × Conducts Oversight

PROPERTY END STATE

- **×** Final Disconnect
 - + Remaining Architectural Elements
 - × Parking Lots
 - Value > Utility Vaults
 - × Staircases
 - × Buildings
 - × Etc.

MANY GOOD THINGS HAPPENING...



Economic Development



Site Investments

- Federal
- State
- Local
- Private



• Total: \$40M

2012-13 Investments:

- Vanguard Blvd. \$4.5M
- > Energy Efficiency \$1.2M
- > Excelitas I & II \$1.2M







Utilities and Sidewalks



Parking Lots



Road and Utilities



Building Demolition



RESULT

- Economically Viable Site
 - + Infrastructure Fully Functional
 - × Public Sewer, Water, Roads
 - + Buildings Serviced
 - × Utilities
 - × Parking
 - × Public Roads
 - + Building Lots Available

ECONOMIC DEVELOPMENT

- Mound Technology Competencies
 - + Human Assets
 - + Equipment Available
 - + Supporting Facilities

ECONOMIC DEVELOPMENT

Technology Markets

- Advanced Manufacturing
- Emerging EnergyTechnologies
- Material Processing
- Information Systems
- Environmental Safety & Health



INNOVATION

- Energy
 - Hydrogen Fuel Cells
 - Nuclear Detectors
 - Wind Turban -Sensors
 - Battery Carbon Nano-Fiber
- Advanced Manufacturing
 - Laser Welding Explosives
 - Material Joining
 - Nano-Scale

- DoD Small Business Innovative Research (SBIR) fund a billion dollars each year in early-stage R&D projects at small technology companies -- projects that serve a DoD need and have commercial applications.
- DoE Advanced Research Projects
 Agency Energy (ARPA-E) the
 development and deployment of
 transformational and disruptive energy
 technologies and systems.
- Ohio Third Frontier, a technology-based economic development initiative that is successfully changing the trajectory of Ohio's economy by supporting industries that are transforming themselves with new globally competitive products and fostering the formation and attraction of new companies in emerging industry sectors

Business Incubation

Mound Workforce

Business Services

- Leverage Mound Assets
 - Real and Personal Property
- > Promotion
- > E.D. Networks
- Grant and Project Management

Education

- B2B Energy Conferences
- STEM
- Executive MBA



Inorganic Specialists

......Carbon Nano Fiber Materials



- Incubated Business
- Founded By Mound Emp.
- From 1 to 3 Employees
- Financial Support:
 - > \$1M OTFP
 - > \$2M DOE-ARPA-E
 - > \$1M OTFP
- Tech Support:
 - Paper Co.
 - Applications Co.
- Market Support
 - Battery Co.

Mound Laser & Photonics

.....Military R&D to Medical Applications



Mound Laser to hire at least 10 and expand locally **Dayton Daily News** Mound Laser to hire at least 10 and expand locally The company uses lasers to make tools and equipment, such as small medical devices. By Thomas Gnau Staff Writer Mound Laser & Photonics Center will add at least 10 employees and more than 3,000 square feet of space to its lab facilities by the end of the year, the company said Monday Due to its work in the medical devices market, the company doubled its sales in 2010 and plans to do the same in 2011, the firm said in a statement from the Mound Advanced Technology Center, the former U.S. Department of Energy campus in Miamisburg where Mound Laser operates. The company uses lasers to cut and shape tools and devices, including small medical devices. Hiring another to employees would bring its total employment to 40. In July 2010, Larry Dosser, Mound Laser owner, told the Dayton Daily News believes his company will need a new facility to conduct its growing busine Mound has about 140 customers who are spread across 10 states, but its top five commercial customers are in California, mostly the Silicon Valley, Dosser has said. Mound's No. 1 government customer is the U.S. Air Force Research Laboratory, based at Wright-Patterson Air Force Base. Of the company's \$1 million in government Dosser could not be reached for comment Monday Contact this reporter at (037) 225-2300 or tenau@DaytonDailyNews.com

- Incubated Business
- Founded By Mound Emp.
- > From 1 to 45 Employees
- Built new facility and relocated in 2013

Mound Technical Solutions

..Hydrogen Technology



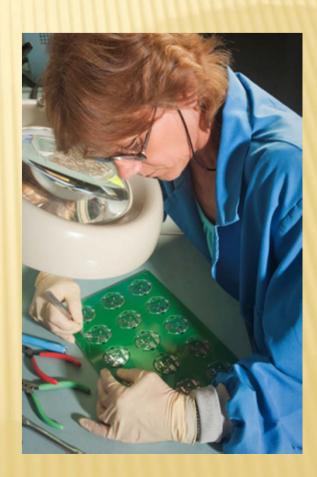
Mound Employee Startup

- Markets
 - > Fuel Cells
 - Nuclear Energy
 - Weapons Production

Excelitas.

.....energetic safety systems, opto-electronics

- Mound Employee Startup
- From 4 to 108 Employees
- Core Mound Competency



boi solutions

- ...virtual marketing product research /simulation
 - First Mound Land Sale



- Jobs Facilitated: 916
- Current Business: 11
- 2 Dayton Chamber Soin Awards

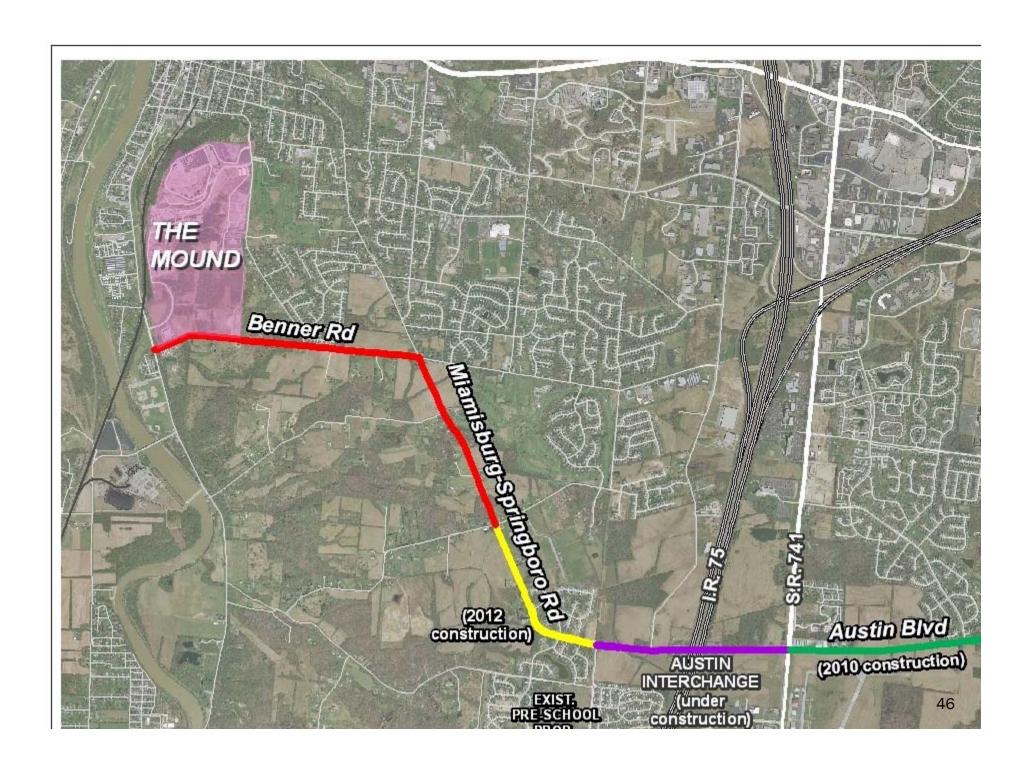


MOUND'S NEXT PHASE

* Regional Access

AUSTIN CENTER PROJECT





MOUND CHALLENGES

- * Location
- Highly Unique Product
- Soft Regional Market





Additional information: www.mound.com ecluxton@mound.com
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