

**Operations and
Maintenance Plan
for the
U.S. Department of Energy
Mound, Ohio, Site**

January 2015



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

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Significant Changes Summary – January 2015 update

Section	Description of Modification	Driver/Technical Information
2.3.2	Added important activities in 2014	Start of OU-1 enhanced attenuation field demonstration. Ceased operation of the OU-1 P&T system. Placed in standby mode.
3.4.1	Added text and updated figure	Added text and updated Figure 5 to reflect current parcel ownership.
3.4.4	Added text referencing Appendix F	Appendix F that shows latest property ownership and includes DOE-owned parcel configurations.
3.7.1.3	Added text	Added text to discuss the Mound Site Landowners – IC Compliance form.
3.12	Updated text	Updated the new USEPA point of contact's information and the OEPA point of contact email.
4.1.3	Separated text into subsections and added text	Updated to reflect status during the Enhanced Attenuation Field Demonstration.
4.1.3.1	Added subsection	Current status—new section to clarify that P&T system not currently in operation.
4.1.3.2	Separated text into a subsection	Background—existing text that describes the P&T system and related sampling (when it operates).
4.1.3.3	Added subsection	2014 Enhanced Attenuation Field Demonstration—new section that describes the demonstration.
4.4.3	Added paragraphs	<p>Advises that P&T system was put into safe standby mode. Describes OU-1 enhanced attenuation field demonstration. Advises that the OU-1 performance monitoring is being conducted under the <i>OU-1 Enhanced Attenuation Field Demonstration Sampling and Analysis Plan Mound, Ohio, Site</i> (DOE 2014).</p> <p>Advises that if P&T system is restarted, the monitoring in Sections 4.4.3.1 through 4.4.3.5 will be reinstated.</p> <p>Advises that if P&T system is not restarted, the remedy change would most likely require a ROD amendment.</p>
6.1.1	Updated text	Revised the text to reflect that the ER monthly OU-1 P&T information has been replaced by the OU-1 field demonstration project information.
8.0	Added reference	<i>Field Demonstration Work Plan for Using Edible Oils to Achieve Enhanced Attenuation of cVOCs and a Groundwater Exit Strategy for the OU-1 Area, Mound, Ohio, June 2013.</i>
8.0	Added reference	<i>OU-1 Enhanced Attenuation Field Demonstration Sampling and Analysis Plan Mound, Ohio, Site, June 2014.</i>
Appendix A	Added form	<i>Mound Site Landowners – Institutional Controls Compliance Form.</i>
Appendix D	Added deeds; updated figure	Added deeds for property transfer from City to MDC and property sale from MDC to Dyrdek Group.
Appendix F	Updated table	Updated parcel ownership information from Montgomery County website.

Comment/Response Table – January 2015 update

Section	Organization and Comment	DOE Response
4.4.3	Ohio Department of Health Pump and treat is the remedy specified in the ROD. IF P&T is not restarted, the ROD should be amended. This fact should probably be mentioned somewhere in this section.	Agree with comment. Added the following sentence to this section: If it is determined that MNA is a viable remedy for OU-1 groundwater and the P&T system remains off, then DOE will request to transition from P&T to MNA, likely through an amendment to the ROD.”
3.7.1.3	Ohio EPA 1. Please add a sentence or brief paragraph discussing the history of the Burn Unit Area to Section 3.7.1.3 Scope.	Agree that information on the RCRA Burn Area cleanup should be available in the LTSP. The most logical place is in the LTS&M Plan Section 2.4.3, “Early D&D Activities.” “ Burn Area RCRA Closure: In January 1998, DOE issued the <i>Burn Area Certification of the RCRA Closure and Final Amended Burn Area Closure Plan</i> that documented the remediation of six RCRA-regulated units (two storage and four treatment) within the Burn Area that were used to manage and dispose of, through treatment, energetic materials including weapons components and powders. These units included Magazine 53, Pyroshed, Open burn unit, Retort unit, Energetic materials pretreatment unit, and Thermal treatment unit.” DOE has cross-referenced that section in the O&M Plan Section 2.3.1, “History.” The Mound Site ICs apply to the Burn Area as they do for the entire site. The Phase I ROD has no separate inspecting or reporting requirements for this area. DOE will accommodate Ohio EPA RCRA inspections as part of the annual IC assessment walkdown and will continue to document it on the IC inspection checklist.
6.2.1	Ohio EPA 2. Ohio EPA will be providing DOE a compliance report each year concerning the inspection of the Burn Unit Area. This should be mentioned in Section 6.2.1 of the O&M Plan.	Although not specifically written in the Ohio Administrative Code or the Ohio Revised Code, it is the policy of the Ohio EPA to inspect RCRA closure sites with associated use restrictions to ensure compliance with the closure plan. Correspondence regarding these inspections should be sent to the property owner, the City of Miamisburg.

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Appendixes

- Appendix A Sample Inspection Checklist Questions and *Mound Site Landowners – Institutional Controls Compliance Form*
- Appendix B T Building Special IC Areas—Core Team Agreement, Position Paper, and Floor Plan Figure
- Appendix C ICs Guidance by Core Team (Including Soil Handling Protocol) and *Site Use Request Form*
- Appendix D Legal Enforcement Instruments: Deeds, Property Descriptions, and Environmental Covenant
- Appendix E November 30, 2012, Amendment to 2008 Sales Contract, General Purpose Lease Amendment #24, and General Purpose Lease Appendix #1
- Appendix F Mound Site Parcel IDs from Montgomery County Property Records (January 2015)
- Appendix G Mound Site Sample Collection Procedures

Abbreviations

aRc	Accelerated Remediation Company
BVA	Buried Valley Aquifer
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	<i>Code of Federal Regulations</i>
cVOC	chlorinated volatile organic compound
DCE	dichloroethene
DO	dissolved oxygen
DOE	U.S. Department of Energy
EM	Office of Environmental Management
EMCBC	EM Consolidated Business Center
EPA	U.S. Environmental Protection Agency
ES	Environmental Summary, <i>CERCLA 120(h) Summary Notice of Hazardous Substances</i>
FFA	Federal Facility Agreement
ft/ft	foot per foot
IC	institutional control
LM	Office of Legacy Management
LTS&M Plan	Long-Term Surveillance and Maintenance Plan
MCL	maximum contaminant level
MDC	Mound Development Corporation (formerly MMCIC)
mL/min	milliliters per minute
MMCIC	Miamisburg Mound Community Improvement Corporation
MNA	monitored natural attenuation
NPL	National Priorities List
NTU	nephelometric turbidity units
O&M	Operations and Maintenance
ODH	Ohio Department of Health
Ohio EPA	Ohio Environmental Protection Agency
ORP	oxidation-reduction potential
OU	operable unit
P&T	pump-and-treatment
PCE	tetrachloroethene (perchloroethene)
PRS	potential release site

QAPP	Quality Assurance Program Plan
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
TCE	trichloroethene
VC	vinyl chloride
VOC	volatile organic compound

1.0 Purpose and Introduction

1.1 Purpose

This *Operations and Maintenance Plan for the U.S. Department of Energy Mound, Ohio, Site* (O&M Plan) is Volume 2 of a three-volume Long-Term Surveillance Plan. The multivolume plan explains how the U.S. Department of Energy (DOE) Office of Legacy Management (LM) will fulfill its surveillance and maintenance obligations at the DOE Mound, Ohio, Site¹ (CERCLIS ID 04935) (referred to in this document as the Mound site) to ensure that the selected remedies remain functional and effective so that conditions at the site remain protective of human health and the environment.

Volume 1 is the *Long-Term Surveillance & Maintenance Plan for the U.S. Department of Energy Mound, Ohio, Site* (LTS&M Plan) (DOE 2015b), which provides background and summarizes the plans for long-term surveillance, maintenance, and monitoring of the site. It describes the activities, roles and responsibilities, and process for changing the plan or the activities it specifies. Volume 1 replaced the 2005 *Long-Term Surveillance and Maintenance Plan for the U.S. Department of Energy Miamisburg Closure Project, Mound Site, Miamisburg, Ohio*. Updates will be reviewed by regulators but will not require regulatory approval.

Volume 2 is the O&M Plan, which contains the O&M and institutional control (IC) requirements developed by the DOE Office of Environmental Management (EM) and approved by the regulators with input from the stakeholders. The activities described are required to maintain the remedies and controls for the site under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Volume 2 replaced four previous documents: the *Operations and Maintenance (O&M) Plan for Implementation of Institutional Controls at the 1998 Mound Plant Property* (DOE 2004a); the *OU-1 Pump and Treatment Operation and Maintenance Plan* (DOE 2000); the *Phase I Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan, Final* (DOE 2004c); and the *Parcel 6, 7, and 8 Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan, Final* (DOE 2006b). Except for the CERCLA overview section, updates will require regulatory approval.

Volume 3 contains the *Community Involvement Plan for the U.S. Department of Energy Mound, Ohio, Site* (DOE 2015a), which documents how LM will ensure public involvement in post-closure activities at the Mound site. DOE will review the Community Involvement Plan annually and will update it as necessary. Updates will be reviewed by regulators but will not require regulatory approval.

¹ The Mound site has also been called the Mound Laboratory, Mound Laboratories, the Mound Plant (EPA ID OH6890008984), the USDOE Mound Plant, the Mound Facility, the USDOE Mound Facility, the Miamisburg Environmental Management Project (MEMP), and Miamisburg Closure Project (MCP). Currently, LM uses “Mound, Ohio, Site” as the formal name of the site.

1.2 Introduction

This O&M Plan summarizes the history of the Mound site and dictates how LM will manage the remedies, including ICs and long-term monitoring requirements. The site has completed all of the CERCLA 120(h) requirements for property transfer as an industrial-use site.

The requirements in this O&M Plan apply to the “1998 Mound Plant Property,” which is the specific geographic area that encompasses all properties originally owned by DOE when the Mound site was an active production facility. Details of the site are included in Section 2.0.

This O&M Plan can be revised as necessary with the approval of DOE, the U.S. Environmental Protection Agency (EPA), and the Ohio Environmental Protection Agency (Ohio EPA), or their successor agencies. DOE is responsible for updating and implementing this O&M Plan and may initiate revisions as needed. DOE and the regulators must agree on any significant changes to this plan.

This O&M Plan, which replaced the previous O&M and groundwater monitoring plans for the Mound site referenced in Section 1.1, is divided into sections and appendixes that contain background and supporting information.

Section 1.0, “Purpose and Introduction,” describes the three-volume long-term surveillance and maintenance (LTS&M) documents and summarizes the O&M Plan contents.

Section 2.0, “CERCLA Overview,” summarizes the site history and organization of the environmental cleanup under CERCLA. This section is not required under CERCLA.

Section 3.0, “CERCLA Remedies and Institutional Controls,” documents the CERCLA remedies and defines roles and responsibilities for implementing, maintaining, and enforcing the ICs.

Section 4.0, “Remedy Monitoring,” consists of the groundwater monitoring plans for the site. The final goal for the site is to reach groundwater cleanup standards through monitored natural attenuation (MNA).

Section 5.0, “Site Monitoring and Quality Assurance Requirements,” describes the formal quality assurance procedures.

Section 6.0, “Reporting,” describes the reporting requirements.

Section 7.0, “Plan Review and Revisions,” describes how the O&M Plan will be reviewed and modified.

Section 8.0, “References,” lists the documents that are referred to in this O&M Plan.

2.0 CERCLA Overview

2.1 Purpose

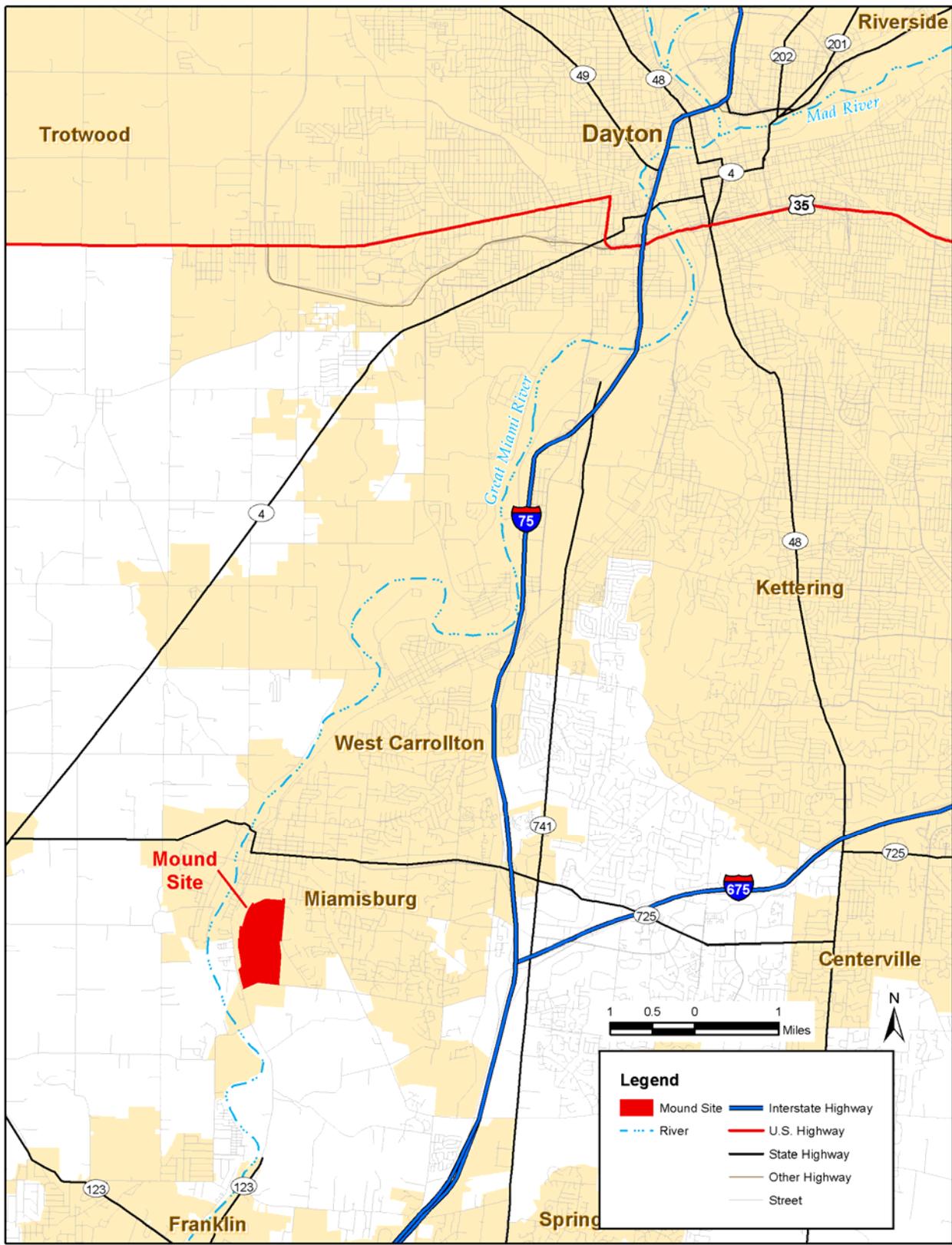
This section, which is not required under CERCLA, provides an overview of the Mound site's location, history, environmental remediation organization, and current site conditions. This section can be updated without regulatory approval. The LTS&M Plan Sections 2 and 3 contain more details on this topic.

2.2 Description and Location

The DOE Mound site (CERCLIS ID-04935) lies within the city limits of Miamisburg, in southern Montgomery County, Ohio, approximately 10 miles southwest of Dayton and 45 miles north of Cincinnati (Figure 1 and Figure 2). Miamisburg is predominantly a residential community with supporting commercial facilities and industrial development. The adjacent upland areas are used primarily for residences and agriculture or are unused open spaces.



Figure 1. Regional Context for the Mound Site



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Figure 2. Mound Site, Miamisburg, Ohio, Location Map

The requirements outlined in the O&M Plan apply to the entire Mound site. The term “Mound site” used in this plan is synonymous with the term “1998 Mound Plant Property” used in other documents. Lockwood, Jones & Beal generated a legal description of the DOE property in May 1982 and described it as an area of 305.16 acres “more or less” (see Appendix D). Using the 1982 legal description as a basis, Beals Surveying Corporation resurveyed this outer boundary in July 2005 and described it as an area of 305.063 acres more or less (Figure 3).

The Mound Golf Course and the Miamisburg Mound State Memorial Park, both directly east of the Mound site across Mound Road, are frequented during favorable weather. The park contains a 68-foot-high ancient Indian mound, located 380 feet east of the site boundary. Other recreational areas within 5 miles of the Mound site include the Miamisburg Community Park, Harmon Athletic Field, Library Park, Miamisburg Aquatic Center, Rice Field, and Bell Park. These areas are used extensively during the summer.

There are no large lakes within a 5-mile radius of the Mound site. Some vestiges of the old Miami-Erie Canal lie between the Norfolk Southern Railroad and Dayton-Cincinnati Pike west of the Mound site. This remnant of the old Miami-Erie Canal was designated as Operable Unit (OU) 4. The only major water body in the vicinity of the Mound site is the Great Miami River located approximately 2,000 feet to the west. The river is approximately 150 to 200 feet wide in this area.

Agricultural land within a 5-mile radius of the Mound site is primarily used for corn and soybean production and for livestock grazing. The 2010 U.S. Census shows that 336,956 residents live within a 10-mile radius of the Mound site, and 3,183,953 residents live within a 50-mile radius of the site.

2.3 Site Background

2.3.1 History

The U.S. Atomic Energy Commission began operations at the Mound site in 1948 as an integrated research, development, and production facility that supported the nation’s weapons and energy programs.

Early Mound programs investigated the chemical and metallurgical properties of polonium-210 and its applications—particularly, the fabrication of neutron and alpha sources for weapon and non-weapon use. Investigations involving uranium, protactinium-231, and plutonium-239 were performed from 1950 to 1963 as part of the national civilian power reactor program. In 1954, Mound began the separation of stable isotopes.

In the mid-1950s, Mound workers initiated efforts to develop a large-scale process for the recovery of thorium from a variety of thorium-bearing ores. Even though this project was canceled prior to full-scale operation, approximately 1,650 tons of thorium-containing sludge was received at Mound. Due to its corrosivity, the thorium sludge was continually repackaged and relocated. This resulted in a number of thorium-contaminated areas around the site.

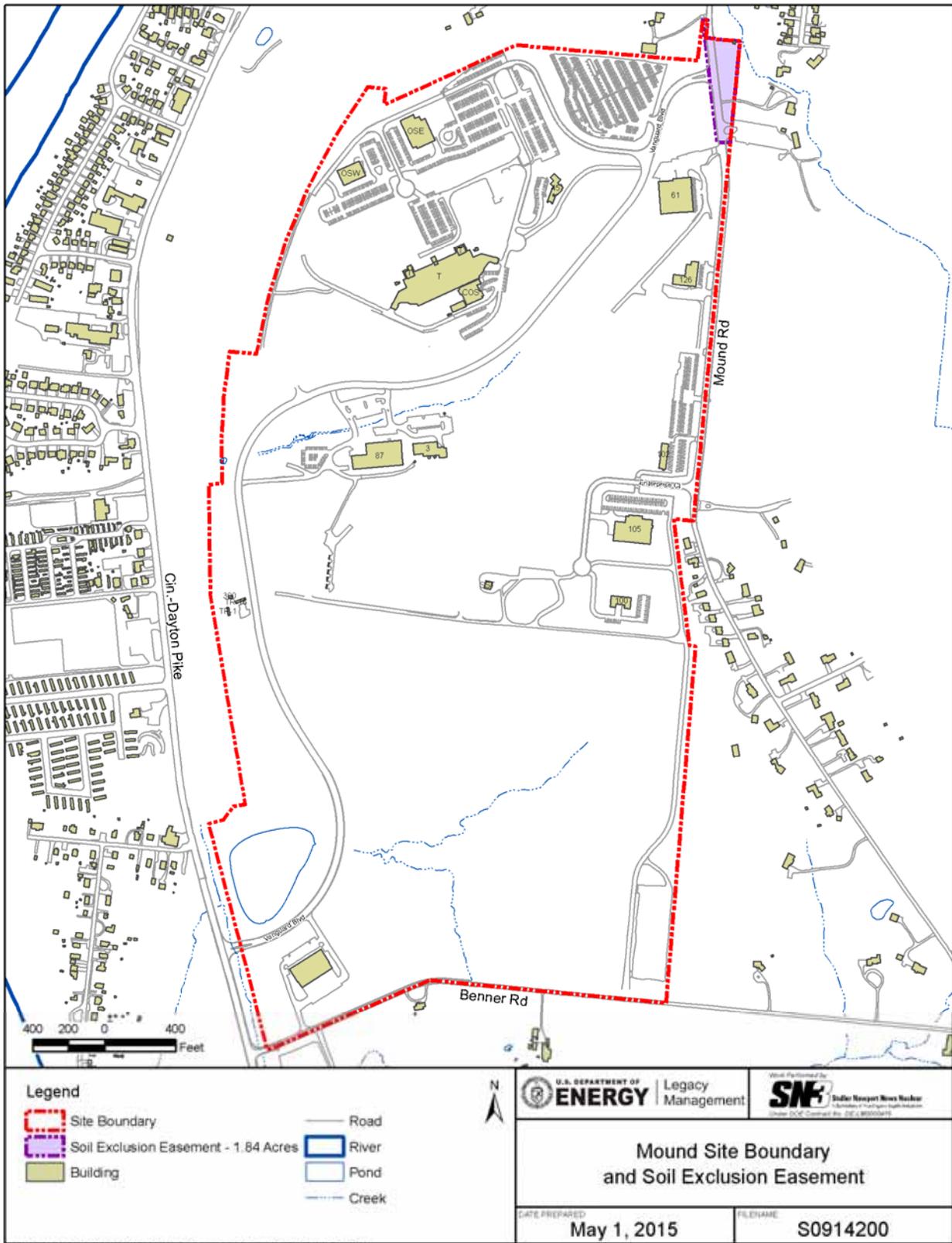


Figure 3. Mound Site Boundary and Soil Exclusion Easement

Plutonium-238 research and development activity began at Mound in the mid-1950s. From the early 1960s to the late 1970s, Mound workers processed plutonium-238 for use in heat sources within radioisotopic thermoelectric generators. The fabrication of heat sources from plutonium metal was terminated in the mid-1960s. Plutonium oxide processes continued into the late 1970s. After early 1979, Mound workers did not handle un-encapsulated plutonium-238.

Mound had an extensive history of manufacturing and working with non-nuclear energetic materials, such as explosives, pyrotechnics, and thermites. Other processes included precision machining and the manufacture of plastics and ceramics, weapons components, flexible circuits, and rare gases.

Because volatile organic compounds (VOCs) were discovered in groundwater that underlies the site, and because of the site's proximity to a sole-source aquifer, the Mound site was placed on the National Priorities List (NPL) on November 21, 1989. DOE signed a CERCLA Section 120 Federal Facility Agreement (FFA) with EPA, effective October 1990 (EPA 1990). In 1993, this agreement was modified and expanded to include Ohio EPA (EPA 1993).

See the LTS&M Plan, Section 2.4.3, for a history of the site remediations including pre-CERCLA, Resource Conservation and Recovery Act (RCRA), and CERCLA activities.

2.3.2 Site Chronology

1946:

- Construction of the Mound facility was started to support the early atomic weapons programs. The original footprint of the facility was 182 acres.

1948:

- Work began at Mound, with Monsanto as the prime contractor for the U.S. Atomic Energy Commission.

1948–1995:

- The plant grew into an integrated research, development, and production facility that performed work in support of the nation's weapons and energy programs, with emphasis on explosives and nuclear technology.

1981:

- DOE purchased an additional 124 acres of land south of the original property. The property remained undeveloped. This was called the New Property or South Property. Most of this area became Parcel 4. Portions of the northwest corner are included in Parcel 9 and Phase I.

1984:

- DOE established the Environmental Restoration Program at the Mound site to collect and assess environmental data in order to:
 - Evaluate the nature and extent of contamination.
 - Identify potential exposure pathways.
 - Identify potential human and environmental receptors.
 - Develop a site conceptual model.

1988:

- EG&G Mound took over as prime contractor in October.

1989:

- EPA placed the Mound site on the NPL on November 21.

1990:

- In October, DOE and EPA signed an FFA (EPA 1990) that established the legal agreements for conducting and approving CERCLA activities at the site.

1991:

- The Nuclear Weapons Complex Reconfiguration Study recommended closure of many DOE sites and consolidation of workload.

1993:

- Ohio EPA was added to the FFA, making it a tripartite agreement. (EPA 1993).
- City of Miamisburg concurred with industrial use end state in a December 13 letter to Ohio EPA.

1995:

- Regulators approved the OU-1 Record of Decision (ROD) (DOE 1995). The selected remedy of controlling contamination from the soils and groundwater is (1) the collection, treatment, and disposal of groundwater and (2) ICs.
- DOE and its regulators started to develop an approach, later known as the Mound 2000 Process (DOE 1999b) (see Section 2.4.2), for making decisions about the environmental restoration of the site and its facilities.
- DOE officially announced plans to close and remediate the Mound site.

1997:

- DOE began operation of the OU-1 pump-and-treatment (P&T) system.
- BWXTO Inc. took over as prime contractor in October.

1998:

- The Miami-Erie Canal included in OU-4 underwent a soil cleanup, primarily for plutonium. The canal, lying outside the Mound property boundary, was included on the NPL because of impacts of facility operations.
- DOE and the Miamisburg Mound Community Improvement Corporation (MMCIC) signed a sales contract (DOE 1998) establishing how DOE would convey the entire Mound site by discrete parcels, subject to CERCLA Section 120(h), "Property Transferred by Federal Agencies." DOE sold the site to MMCIC for \$10.

1999:

- Regulators approved the ROD for Release Block D, also called Parcel D, (DOE 1999e). The selected remedy for Release Block D is ICs.
- Regulators approved the ROD for Release Block H, also called Parcel H (DOE 1999d). The selected remedy for Release Block H is ICs. One small area in the

upper eastern boundary called the H wedge was exempted from soil removal restrictions (see Figure 3).

- The deed for Release Block H was filed with Montgomery County on August 8.
- The deed for Release Block D was filed with Montgomery County on November 19.

2001:

- Regulators approved the ROD for Parcel 4 (DOE 2001a). The selected remedy for Parcel 4 is ICs.
- EPA deleted Release Blocks D and H from the NPL on April 16.
- The deed for Parcel 4 was filed with Montgomery County on April 19.
- Regulators approved the ROD for Parcel 3 (DOE 2001d). The selected remedy for Parcel 3 is ICs.

2002:

- The deed for Parcel 3 was filed with Montgomery County on August 2.
- EPA deleted Parcel 4 from the NPL on December 2.

2003:

- CH2M HILL Mound Inc. took over as prime contractor in January.
- Regulators approved the Phase I Parcel ROD (DOE 2003a). The selected remedy for trichloroethene (TCE) contamination in Phase I Parcel is MNA with ICs.

2004:

- Regulators approved the no-action ROD for OU-4 (DOE 2004b) regarding the soil and sediment in the Miami-Erie Canal.
- DOE Office of Nuclear Energy moved the General Purpose Heat Source Program from Mound to Idaho National Engineering and Environmental Laboratory.

2005:

- LM established a Mound site office for working with EM in preparation for the transition of the site from EM to LM.

2006:

- In July, the prime contractor for EM completed the CERCLA remediation, except for potential release site (PRS) 7, which was the underground line to the Great Miami River, and PRS 441, which was the rail spur area in Parcel 9. The scope and funding for PRSs 7 and 441 were removed from the CH2M HILL contract and added to the OU-1 excavation contract.
- Congressional funding was obtained to remove additional areas of OU-1 under a non-CERCLA action. While protective under the selected remedy, this non-CERCLA action was taken to address remaining Mound Development Corporation (MDC) concerns over the potential impact of the OU-1 landfill area on future development plans.

- Accelerated Remediation Company (aRc) became prime contractor for the non-CERCLA OU-1 excavation and CERCLA removals of PRSs 7 and 441. This contract was managed by the EM Consolidated Business Center (EMCBC).

2008:

- DOE and MMCIC updated the site sales contract, *Sales Contract by and Between the United States Department of Energy and the Miamisburg Mound Community Improvement Corporation*, on August 28 (DOE 2008).

2009:

- aRc completed CERCLA remediation of PRS 7 and PRS 441.
- aRc completed first phase of the non-CERCLA excavation of OU-1.

2010:

- Regulators approved the ROD for Parcels 6, 7, and 8 (DOE 2009). The selected remedy for TCE contamination in Parcels 6, 7, and 8 is MNA with ICs.
- aRc completed second phase of the non-CERCLA excavation of OU-1.

2011:

- MMCIC was renamed the MDC.
- Regulators approved the amended OU-1 ROD (DOE 2011a), which expanded the OU-1 area into Parcel 9 and applied all site ICs.
- DOE, EPA, and Ohio EPA entered into an environmental covenant for Parcel 9 (DOE 2011d).
- EM transferred responsibility for the site's LTS&M to LM.
- MDC demolished Buildings 2, 63, and 63W and added parking areas. This work was funded by a state grant and overseen by MDC.

2012:

- DOE and MDC signed the Amendment to the Sales Contract dated August 28, 2008, (DOE 2012b) that extended the contract for 5 years.
- EMCBC signed a 5-year lease amendment with MDC on December 14, *U.S. Department of Energy Amendment Number 24 to the General Purpose Lease* (DOE 2012c). The lease stated that EMCBC retains ownership of Parcels 6–9, and MDC is responsible for maintenance and management of all buildings and facilities within Parcels 6–9.

MDC sold 5.621 acres surrounding Building 126 at 955 Mound Road to BOI Solutions. This was done in accordance with the *U.S. Department of Energy Amendment Number 24 to the General Purpose Lease* (DOE 2012c) under the Interim Sales section. This section states in the event MDC arranges the sale of property within Parcels 6–9 during the lease period, DOE shall make it available for transfer to MDC after MDC has identified and surveyed the property it seeks to acquire and after the completion of any required government notifications.

2013:

- MDC and City of Miamisburg signed an agreement to transfer MDC-owned parcels to the City of Miamisburg to hold until they are sold. The City does not pay property taxes.
- MDC completed construction of Vanguard Boulevard and demolished Building 28 and Guard House. This work was funded by state and local grants.
- MDC subdivided their parcels and transferred ownership of Lots 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8002, 8003, 8005, and 8006 to the City with a quitclaim deed dated November 13. Details are included in Appendix F.
- EMCBC and MDC signed Appendix #1 to General Purpose Lease Agreement that formalized IC compliance during the lease period for property leased to MDC.

2014:

- DOE initiated the OU-1 Enhanced Attenuation Field Demonstration (DOE 2013b; DOE 2014).
- DOE temporarily ceased operation of the OU-1 P&T system and placed it into standby mode during the field demonstration.
- MDC sold the former Building 100 at 790 Enterprise Court and 5.5191 surrounding acres to Dyrdek Group, Inc.

2015:

- MDC and the City of Miamisburg resurveyed and replatted their parcels to correct boundary issues. Details are included in Appendix F.

2.4 Agreements for CERCLA Remediations

2.4.1 Federal Facility Agreement

After the site was placed on the NPL in 1989, DOE signed a CERCLA Section 120 FFA with EPA, effective October 1990 (EPA 1990). The FFA clarified DOE and regulator roles and responsibilities for the CERCLA actions and required approvals. Ohio EPA was added to the FFA in 1993, making it a tripartite agreement (EPA 1993).

The FFA stated:

The U.S. Department of Energy (DOE) enters into portions of this Agreement that relate to the RI/FS [Remedial Investigation/Feasibility Study] pursuant to Section 120(e)(1) of CERCLA, Sections 6001, 3008(h) and 3004(u) and (v) of RCRA, Executive Order 12580, the National Environmental Policy Act, 42 U.S.C. Section 4321, and the Atomic Energy Act of 1954 (AEA), as amended, 42 U.S.C. Section 2011 et seq. "U.S. DOE enters into those portions of this Agreement that relate to interim remedial actions and final remedial actions pursuant to Section 120(e)(2) of CERCLA/SARA, Sections 6001, 3004(u) and 3008(h) of RCRA, Executive Order 12580 and the AEA."

2.4.2 Mound 2000 Process

DOE, EPA, and Ohio EPA originally planned to address the site's environmental restoration issues under a set of OUs, each of which would include a number of PRSs. The PRSs were

identified on the basis of knowledge of historical land use or an actual sampling result that showed elevated concentrations of contaminants.

DOE and its regulators determined during a strategic review in 1995 that the OU approach was inefficient for Mound. DOE and its regulators agreed on the Mound 2000 Process, which evaluated each PRS or building separately, used removal action authority to remediate the PRSs as needed, and established a goal for no additional remediation other than ICs for the final remedy. The Mound 2000 Process is explained in the *Work Plan for Environmental Restoration at the Mound Plant, The Mound 2000 Approach* (DOE 1999b). EPA and Ohio EPA reserved all rights to enforce all provisions of the FFA, and participation in the Mound 2000 Process did not constitute a waiver of EPA's and Ohio EPA's rights to enforce the FFA.

The Mound 2000 Process established a "Core Team" of representatives from EM (the Miamisburg Closure Project), EPA, and Ohio EPA. The Core Team evaluated over 400 PRSs and recommended the appropriate response based on process knowledge, site visits, and existing data. If a decision could not be made, the Core Team identified specific additional information needed (e.g., data collection, investigations). The Core Team also received input from technical experts, the general public, and public interest groups.

2.5 Organization of Cleanup

Before the site was added to the NPL and during the CERCLA remediation, the Mound site was reconfigured many times. This work spanned four prime site contractors: Monsanto Research Corporation (1948–1988), EG&G Mound (1988–1997), BWXTO (1997–2002), and CH2M HILL Mound (2003–2006). Each prime contractor organized its activities using different nomenclatures (areas, OUs, release blocks, phases, and parcels). Accelerated Remediation Company was the prime contractor from 2006 to 2010 for the non-CERCLA OU-1 excavation and two CERCLA PRS removals. The LTS&M Plan (DOE 2014b) Section 2.4 contains more detail on the early remediation work.

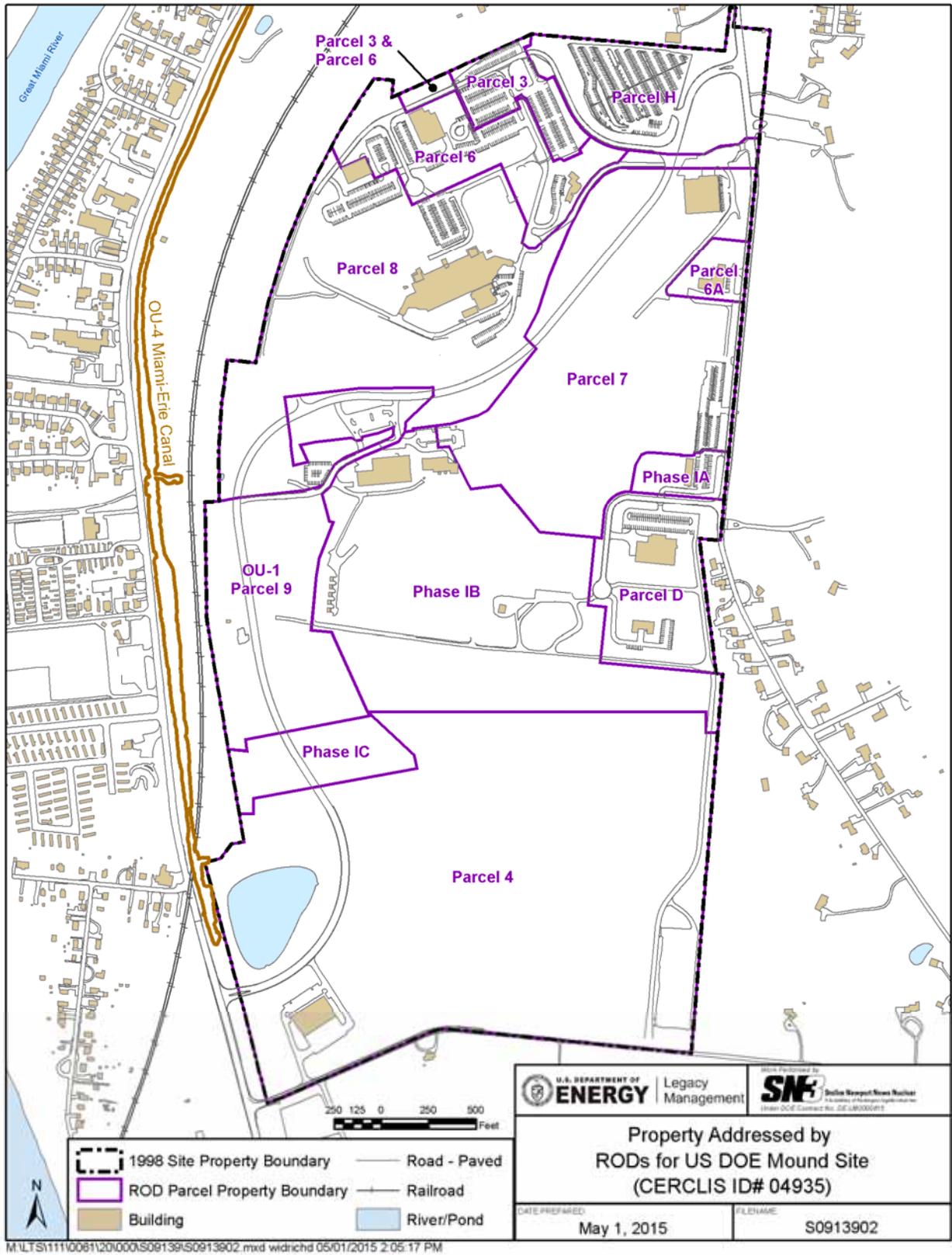
2.6 Records of Decision and Environmental Summaries

After completing remediation in a specific release block, phase, or parcel, DOE completed a ROD and an Environmental Summary (ES) (also known as the CERCLA 120(h) Summary Notice of Hazardous Substances) for that parcel. Each ROD summarized the problems within that parcel, analyzed alternative approaches to addressing those problems, evaluated the alternative approaches against the NPL nine criteria, and provided the technical aspects of the selected remedy. Each ROD also specified the monitoring requirements, ICs, and the requirement for CERCLA Five-Year Reviews. Each ES described the final environmental, building, and land conditions.

Table 1 lists the eight Mound site RODs with the ROD and ES titles and their approval dates. Figure 4 shows those parcels as described in the RODs outlined in purple within the 1998 Mound Plant property boundary. The OU-4 former canal area located west of the site is outlined in gold. Parcel 6A CERCLA analysis was included in the Parcels 6, 7, and 8 CERCLA documents. Section 3.3 provides more details about the RODs.

Table 1. Mound Site ROD and ES Information

ROD Parcel ID	Document	Approval Date
D	<i>Record of Decision for Release Block D, Final (DOE 1999c)</i>	February 1999
	<i>CERCLA 120(h) Summary Notice of Hazardous Substances, Release Block D, Mound Plant, Miamisburg, Ohio, Final (DOE 1999a)</i>	
H	<i>Record of Decision for Release Block H, Mound Plant, Miamisburg, Ohio, Final (DOE 1999d)</i>	June 1999
	<i>CERCLA 120(h) Summary Notice of Hazardous Substances, Release Block H, Mound Plant, Miamisburg, Ohio, Final (DOE 1999e)</i>	July 1999
3	<i>Parcel 3 Record of Decision, Mound Plant, Miamisburg, Ohio, Final (DOE 2001d)</i>	September 2001
	<i>Parcel 3 Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances, Mound Plant, Miamisburg, Ohio, Final (DOE 2001c)</i>	
4	<i>Parcel 4 Record of Decision, Mound Plant, Miamisburg, Ohio, Final (DOE 2001a)</i>	February 2001
	<i>Parcel 4 Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances, Mound Plant, Miamisburg, Ohio, Final (DOE 2001b)</i>	March 2001
6, 7, 8 (included former Parcel 6A)	<i>Parcels 6, 7, and 8 Record of Decision, Miamisburg Closure Project, Miamisburg, Ohio, Final (DOE 2009)</i>	August 2009
	<i>Parcels 6, 7, and 8 Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances, Final (DOE 2010)</i>	August 2010
9 (OU-1 and expanded area)	<i>Operable Unit 1 Record of Decision, Final (DOE 1995)</i>	June 1995
	<i>Parcel 9 Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances, Final (DOE 2011b)</i>	July 2011
	<i>Amendment of the Operable Unit 1 Record of Decision, U.S. Department of Energy, Mound Closure Project, Final (DOE 2011a)</i>	August 2011
Phase I (A, B, C)	<i>Phase I Record of Decision, Miamisburg Closure Project, Final (DOE 2003a)</i>	July 2003
	<i>Phase I Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances, Miamisburg Closure Project, Final (DOE 2003b)</i>	December 2003
OU-4	<i>Miami-Erie Canal Record of Decision, Miamisburg Closure Project, Final, Revision 0 (2004b)</i>	September 2004
	OU-4 was on City of Miamisburg property, so no ES was required or issued	



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Figure 4. Property Addressed by RODs for US DOE Mound Site

3.0 CERCLA Remedies and Institutional Controls

3.1 Introduction

This section of the O&M Plan (1) documents how LM will implement and maintain the Mound site CERCLA remedies identified in each individual ROD for the Mound site and (2) summarizes the required post-closure activities. The CERCLA remedies, which are described in the Mound site RODs, ensure protection of human health and the environment.

This section contains information similar to an Institutional Control Implementation and Assurance Plan, as described in the EPA guidance, *Institutional Controls: A Guide to Preparing Institutional Control Implementation and Assurance Plans at Contaminated Sites* (EPA 2012).

3.2 Purpose

This section summarizes the activities required to maintain the CERCLA remedies for the entire Mound site. This section is required because the site was remediated to an industrial-use standard that allowed some residual contamination to remain onsite. The remedies must be maintained to ensure that exposure to the residual contamination does not exceed the exposure criteria of the industrial worker scenario. The activities necessary to maintain the remedies include:

- Maintaining all ICs designed to prevent exposures exceeding industrial use to residual contamination.
- Monitoring groundwater as required by the remedy or as deemed necessary to ensure the continued protection of the public and environment.
- Conducting periodic inspections to ensure that remedies and institutional systems continue to function as designed.

This section summarizes the regulatory and institutional framework for managing ICs and controlling land use at the Mound site. It discusses all of the site's IC-management and land-use-control activities that are necessary to ensure that the remedies in place continue to remain protective of human health and the environment.

3.3 RODs—Summary Table, Parcel Drawing, Discrepancies

3.3.1 ROD Summary

CERCLA information for any area of the Mound site can be traced to a specific ROD and ES (Table 1), which describe the remedy and details of that ROD parcel.

Table 2 summarizes the final ROD parcel IDs, dates, acreages, remedies, IC objectives, and legal enforcement instruments. The ICs are discussed in detail in Section 3.6. Copies of the quitclaim deeds, parcel descriptions, and the environmental covenant are included in Appendix D.

Figure 4 shows the outlines of the ROD parcels within the Mound site boundary. OU-4 is an offsite area owned by the City of Miamisburg, west of the site, that has a no-action ROD and no ICs. The Parcel 6A was a subparcel within Parcel 7 that was covered by the Parcels 6, 7, and 8 ROD.

Table 2. Summary of RODs, Remedies, ICs, and Legal Enforcement Instruments

ROD Parcel ID	Former Names	ROD Date	Acreage in ROD	Remedy	Owner	Legal Enforcement Instrument	Objectives of ICs
OU-1	Area B, landfill area	1995	See Parcel 9	See Parcel 9	See Parcel 9	See Parcel 9	Restrict land use to industrial only.
D	Portion of Release Block D 5.519 acres	1999		ICs	Dyrdek Group	Deed restrictions in Limited Warranty Deed dated December 23, 2014 (File # 2014-00069587)	Prohibit the removal of soil.
D	Release Block D	1999	12.43	ICs	MDC and City of Miamisburg	Deed restrictions in quitclaim deed dated February 11, 2009 and quitclaim deed November 13, 2013 (File # 2013-00079430)	Prohibit the use of groundwater. Prohibit the removal of concrete floor material in specified rooms of T Building.
H	Release Block H	1999	14.29	ICs			
3	None	2001	5.581	ICs			
4	New or South property ^a	2001	94.838	ICs			
Phase I	A	2003	2.542	Monitored natural attenuation	DOE leased to MDC	Appendix #1 to General Purpose Lease Agreement (December 2013)	Prohibit the penetration of concrete floor material in specified rooms of T Building.
	B		42.882				
	C		6.568	ICs			
6	6, 6A 7, and 8	2009	13.636	Monitored natural attenuation	BOI Solutions	Deed restrictions in MDC limited warranty deed dated December 14, 2012 (File # 2012-00084260)	Provide site access for federal and state agencies for taking response actions, including sampling and monitoring.
7			42.307				
8			45.247				
			2.352 or 3.320	ICs			
	5.350						
	Tract 1 Tract 2 (part of 6A and 7)		0.271				
9 (OU-1)	Includes OU-1, PRS 441, former rail spur and spoils areas	OU-1 ROD 1995 and OU-1 ROD amendment 2011	23.148	Hydraulic containment Surface water controls Long-term groundwater monitoring ICs	DOE	Environmental Covenant approved December 22, 2011 (Recorded for entire site as a Special Instrument Deed 2012-00004722 on January 24, 2012)	
OU-4	Miami-Erie Canal	2004	On City property	No action	City of Miamisburg	None required	No ICs required

^a Portions of the New or South Property are included in Phase I and Parcel 9 areas.

3.3.2 ROD Discrepancies

3.3.2.1 Parcel 6A Acreage and Legal Description

The Parcels 6, 7, and 8 ROD (DOE 2009) has a mismatch between the drawing and legal description of the subparcel Parcel 6A, which had been resurveyed and enlarged from 2.352 to 3.320 acres in 2006 to include a parking area south of Building 126. The ROD contains the legal description for the larger 3.320-acre parcel but contains the drawing for the 2.352-acre original

parcel. The enlarged parcel was not formally changed on Montgomery County property records. The 2.352-acre legal description was used for the December 2012 property transfer to MDC, so the ROD parcel figure (Figure 4) shows the smaller Parcel 6A boundary. The area within Parcel 6A was evaluated within the Parcels 6, 7, and 8 ROD, irrespective of its acreage, and therefore the ROD requirements are not altered by this discrepancy.

3.3.2.2 T Building Special IC Area Identification

The special IC areas in T Building are well documented and understood by EM, LM, MDC, EPA, Ohio EPA, and Ohio Department of Health (ODH). However, the descriptions in some documents are inconsistent because of illegible figures and changes in survey unit areas occurring after the T Building Verification Sampling and Analysis Plan (DOE 2004d) was designed.

The T Building Structure Removal Action OSC Report (DOE 2006a) and the Parcels 6, 7, and 8 ROD (DOE 2009) used the term “specified rooms in T Building” and referred to a figure that was difficult to read when printed in black and white. Room or corridor numbers in the figure were not usable because many walls were removed, creating a large bay area

LM researched the T Building final survey reports for these areas, verified the final survey unit areas, and created the drawing in Figure 5. Several survey units had been modified from the original sampling plan (DOE 2004d). To avoid confusion, future descriptions of special IC areas should include a crosshatched floor plan such as shown in Figure 5.

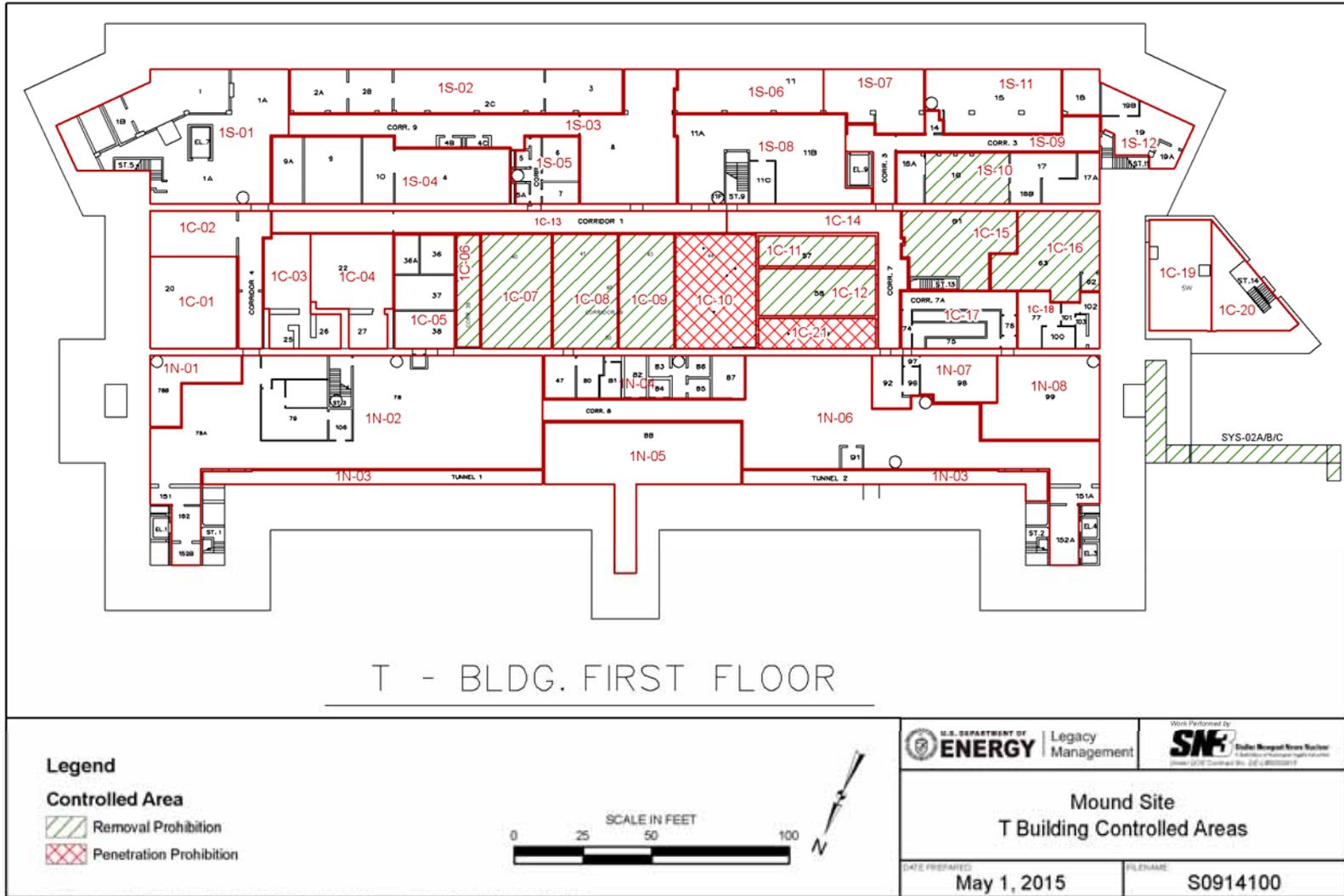
3.4 Post-ROD Property-Related Information

3.4.1 Current Parcel Ownership

MDC subdivided their property and transferred ownership of most of the parcels to the City of Miamisburg on November 13, 2013. MDC retained ownership of two parcels that are leased. On December 23, 2014, the City transferred one parcel containing Building 100 at 790 Enterprise Court back to MDC, who then sold that property to Dyrdek Group, Inc. Figure 6 shows the EM; BOI Solutions Inc.; Dyrdek Group, Inc.; MDC; and City of Miamisburg parcels and ownership as of January 2015.

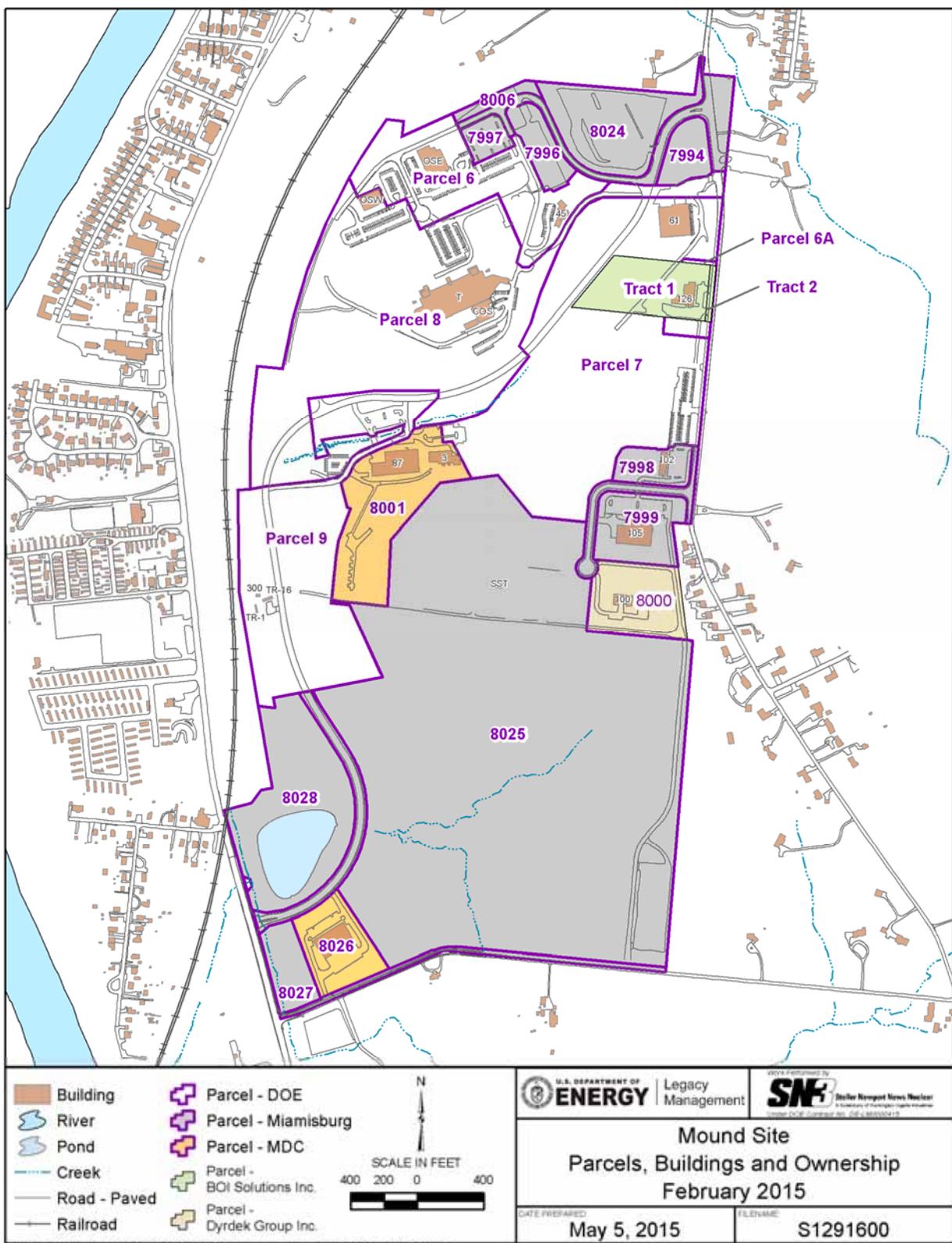
Appendix D includes the property descriptions and deeds showing property transfers.

Appendix F summarizes the current Montgomery County property record information for the Mound Site. It includes drawings and a figure showing recent MDC resurveys and parcel revisions that were registered with the county on February 20, 2015. The county record information has not been updated on the county website.



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Figure 5. T Building Controlled Areas with Special ICs (crosshatched)



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Figure 6. Mound Site Parcels, Buildings, and Ownership

3.4.2 Parcel 3 ROD Boundary Differs from Parcel 3 Transferred to MDC

The Parcel 3 ROD (DOE 2001d) parcel boundary included a 0.7325-acre section that was not transferred to MDC as Parcel 3. This area was included in the Parcels 6, 7, and 8 ROD within Parcel 6. The Montgomery County records show this as a separate 0.7325-acre parcel.

3.4.3 Parcel 7 Legal Description Was Not Updated After Sale of Tracts 1 and 2

The existing legal description for Parcel 7 does not reflect boundary changes from the sale of tracts 1 and 2. This will be corrected at the time of property transfer from DOE to MDC.

3.4.4 Parcel Legal Descriptions and Boundaries Do Not Match Montgomery County Records

The configurations of DOE-owned property (parcels 6, 7, 8, and 9) do not match the parcel configurations on the Montgomery County website property ownership records. These issues will be resolved when the remaining DOE-owned property transfers to MDC and the parcels are replatted. The existing DOE-owned parcels as they are recorded at the county property records are shown in Appendix F.

3.4.5 Montgomery County Property Records

The Montgomery County property records for the Mound site show the property divided as separate parcels with different identifiers. Those parcels and boundaries will change as site ownership changes. Appendix F contains a table, "Mound Site Parcel IDs from Montgomery County, January 2015," with the current lot numbers and associated information. This table will be updated as site ownership changes and will be included in the annual IC assessments and Five-Year Reviews described in Section 3.6.

3.5 Final Physical Site Conditions

DOE documented the final physical site condition of each onsite parcel in the ROD and ES (Table 1) for that parcel. These documents provide the baseline information for determining whether changes to the site are impacting the effectiveness of ICs.

The locations of monitoring wells and seeps are documented in Section 4.1 of this O&M Plan.

The LTS&M Plan (DOE 2015b) provides additional details on the remediation of the site.

3.6 Institutional Controls

ICs are an important component of the remedies selected for the Mound site. ICs are non-engineered instruments, such as administrative and legal controls, that help to minimize the potential for exposure to contamination and/or protect the integrity of a response action. Detailed information on the remedies and development of the ICs is contained in parcel-specific CERCLA documents, primarily the RODs and ESs listed in Table 1.

The following Mound site ICs run with the land in the form of restrictions and covenants in quitclaim deeds or activity and use limitations in the environmental covenant:

- Maintenance of industrial or commercial land use and prohibition against residential land use.
- Prohibition against the use of groundwater without prior written approval from EPA and Ohio EPA.
- Prohibition against the removal of soil from within the site boundary (as of 1998) to offsite locations without prior written approval from EPA, Ohio EPA, and ODH.
- Prohibition against the removal of concrete floor material in specified rooms of T Building to offsite locations without prior written approval from EPA, Ohio EPA, and ODH.
- Prohibition against the penetration of concrete floors in specified rooms of T Building locations without prior written approval from EPA, Ohio EPA, and ODH.
- Allowing site access for federal and state agencies for the purpose of sampling and monitoring.

The IC restrictions, which apply to the entire site property, are described in detail below.

3.6.1 Maintain Industrial Land Use and Prohibit Residential Land Use

The RODs state that land use will be industrial only. The RODs detail specific land uses that will not be permitted onsite, but the list in the RODs is not all-inclusive. Land parcels may not be used for any residential or farming activities, or for any other activities that could result in the chronic exposure of children less than 18 years of age to soil or groundwater from the premises. Prohibited land uses listed in the RODs include, but are not limited to, single or multifamily dwellings or rental units, schools, and childcare facilities.

3.6.2 Prohibit Use of Groundwater from Within the Site Boundary

The RODs prohibit the extraction, consumption, exposure, or use in any way of the groundwater underlying the Mound site, without prior written approval of EPA and Ohio EPA. Until the site transfers to MDC, the protocol for obtaining approval to install a groundwater well is to contact the LM office, which will coordinate EPA's and Ohio EPA's review of the proposal. After the land transfers to MDC, the new landowner will need to obtain written approval from EPA and Ohio EPA to install a new well.

3.6.3 Prohibit Removal of Soil from Site to Offsite Locations

The RODs prohibit the removal of soil from the Mound site without prior written approval from EPA, Ohio EPA, and ODH. The soil at the site has not been evaluated for any use other than onsite industrial use. Any offsite disposal without proper handling, sampling, and management could create an unacceptable risk to offsite receptors. Because the site boundary could change over time, the restriction applies to soil within the 1998 Mound site boundary except for one small wedge in the northeast section of the site. (See Figure 3 and the discussion of that area in the Release Block H ROD [DOE 1999d].)

The Core Team developed the soil protocol provided in Appendix C for guidance during normal construction activities onsite. Until the site transfers to MDC, the protocol for obtaining approval for removing soil from the site is to contact the LM office, which will coordinate an EPA, Ohio EPA, and ODH review of the proposal. Once the land transfers to MDC, the new landowner will need to obtain written approval from EPA and Ohio EPA to remove soil from within the site boundary to an offsite location. As Ohio EPA was structured at the time the RODs were issued, the decision authority for removing soil from the site resided within the Division of Environmental Response and Revitalization at the Southwest District Office in Dayton, Ohio. Information about the cleanup process, background levels, and toxicology data is contained in or referenced in the *MOUND 2000 Residual Risk Evaluation Methodology* (DOE 1997).

3.6.4 Prohibit Removal of Concrete from Floor in Specified Rooms of T Building

The Parcels 6, 7, and 8 ROD prohibits removal of concrete from the floor in T Building controlled areas with special ICs (as shown on Figure 5) without prior written approval from EPA, Ohio EPA, and ODH. Removing concrete from these areas could result in an unacceptable exposure. The Core Team developed the protocol provided in Appendix B.

3.6.5 Prohibit Penetration of Concrete Floors in Specified Rooms of T Building

The Parcels 6, 7, and 8 ROD prohibits penetration of the concrete floor in T Building controlled areas with special ICs (as shown on Figure 5) without prior written approval from EPA, Ohio EPA, and ODH. Drilling, sawing, or otherwise penetrating concrete from these areas could result in an unacceptable exposure to the equipment operator and other workers in the area. The Core Team developed the protocol provided in Appendix B.

3.6.6 Allow Site Access for Federal and State Agencies for Sampling and Monitoring

The RODs require continued site access by DOE, EPA, Ohio EPA, and ODH to conduct inspections and to perform the monitoring required by the ROD remedies. The deeds and environmental covenant grant the right of access for environmental investigation or remedial action.

3.7 Routine Site Inspections

DOE will periodically inspect the Mound site to ensure that the ICs are followed and the remedies remain protective. These inspections include IC assessments and CERCLA Five-Year Reviews.

3.7.1 IC Effectiveness Assessments

DOE will periodically assess the effectiveness of the Mound site's ICs. These assessments determine whether the ICs continue to function as designed, adequate oversight mechanisms are in place to identify possible violations of ICs, and adequate resources are available to correct or mitigate any problems if violations occur.

These assessments will examine changes that could indicate an IC violation, such as non-industrial use, unapproved use of groundwater, unapproved soil removal, or unapproved

penetration or removal of concrete from special T Building areas. See Section 3.7.1.3 for the scope of the inspections.

3.7.1.1 Frequency

DOE currently assesses the effectiveness of ICs applied to the Mound site annually and publishes an assessment report in June. DOE will notify EPA, Ohio EPA, ODH, the City of Miamisburg, MDC, other site landowners, and other interested stakeholders at least 30 days before this inspection.

DOE will review the ICs any time there is reason to believe a degradation of any control has occurred.

As stated in the RODs, DOE can petition the regulators to decrease the assessment frequency (e.g., to every 5 years) in the future.

3.7.1.2 Inspector Qualifications

DOE or its designated agent will perform inspections and assessments. Inspectors will be experienced engineers or scientists who have the required knowledge, skills, and abilities to evaluate site conditions and recognize potential or actual problems. Areas of expertise may include civil, geotechnical, and geological engineering; geology and hydrology; biology; and environmental science (e.g., ecology, soils, or range management). If conditions warrant, other inspectors with other skill sets may be assigned to evaluate serious or unusual problems and make appropriate recommendations.

3.7.1.3 Scope

To evaluate changes in the site that could indicate an IC violation, each IC assessment will include, but not be limited to:

- Physical inspections of the site, including photos of changed conditions relating to ICs.
- Contact with the property owners to ensure that they understand the ICs.
- Contact with City of Miamisburg personnel to review ICs.
- Reviews for IC-related requests to EPA and Ohio EPA to approve land uses, soil removal, groundwater use, penetration and/or removal of concrete in T Building. Appendix C contains an example request form that documents EPA and Ohio EPA decisions with DOE concurrence.
- Reviews of City of Miamisburg records to examine changed conditions:
 - Permits, including construction, street-opening, and occupancy.
 - Planning-commission records.
 - Zoning modifications.
 - Requests for approvals of parking lots and other changes that do not require building permits.

- Reviews of Montgomery County property records to determine if property ownership has changed and to ensure that IC restrictions were carried forward into the legal property documents.
- Reviews of the Ohio Department of Natural Resources website and the well-drilling information posted to determine if unauthorized wells were drilled onsite.

DOE will also conduct a walkdown with EPA, Ohio EPA, ODH, the City of Miamisburg, MDC, and other landowners. DOE will notify these parties at least 30 days before the walkdown.

Groundwater monitoring is currently required by CERCLA remedies for Phase I, OU-1, and Parcels 6, 7, and 8, but it is not an IC. The annual IC assessment will include inspections of monitoring wells and seeps for vandalism or other damage. Details on well and seep maintenance are included in the annual groundwater monitoring report.

If access is denied during the IC inspection, DOE will notify EPA and Ohio EPA.

IC inspectors use a checklist similar to the one shown in Appendix A to record inspection findings. Appendix A also contains an example *Mound Site Landowners – Institutional Controls Compliance Form*. LM will ask the landowners to complete and return a form each year, and will include these in the annual report and in the five-year report. The checklist questions are reviewed and revised as necessary. Aerial photographs included in the assessment reports are updated for CERCLA Five-Year Reviews.

3.7.1.4 Report

DOE will report the results of annual IC assessments and site inspections to EPA, Ohio EPA, ODH, MDC, and the City of Miamisburg no later than June 13 of the year in which the assessment was conducted. DOE will publish a public notice and post the final report on the LM website (<http://www.lm.doe.gov/mound/Sites.aspx>). The report will address surveillance and maintenance inspection results for the previous 12 months and will include descriptions of the cause and outcome of events that require notification of local, state, or federal officials. See Section 6.0, “Reporting,” for details.

Follow-up inspections are unscheduled inspections that are conducted in response to threatening or unusual site conditions. DOE may conduct follow-up inspections if either of the following situations arises:

- A condition is identified during the routine site inspection or other site visit that requires personnel with specific expertise to return to the site to evaluate the condition.
- DOE is notified by a citizen, employee, or federal, state, or local agency that conditions at the site are substantially changed.

When a condition or concern is identified at the site, DOE personnel will evaluate the information and decide whether to respond with a follow-up inspection. At any time, DOE may request the assistance of local authorities (e.g., law enforcement, fire protection, the City engineer) to provide an initial visual reconnaissance and confirm the seriousness of a reported condition at the site before scheduling a follow-up inspection. Upon identifying that a follow-up inspection is warranted, DOE will notify EPA and Ohio EPA.

Specific conditions that may necessitate a follow-up inspection include violation of ICs, vandalism, or the need to revisit the site to evaluate, define, or conduct unscheduled or emergency maintenance tasks. Conditions that may require a more immediate follow-up inspection include extreme weather, seismic events, and the disclosure of deliberate human activity that threatens the integrity of physical structures (e.g., treatment facilities, wells). DOE will evaluate risk when scheduling follow-up inspections. The follow-up inspection's urgency will be in proportion to the seriousness of the condition. Inspectors assigned to conduct follow-up inspections will be selected on the same basis as for routine site inspections.

If an incident or activity threatens or compromises ICs or poses a risk of exposure to or release of known contaminants, DOE will follow the procedures outlined in Section 3.9 of this plan.

Results of follow-up inspections will be included in the next annual inspection report. Separate reports will not be prepared unless DOE determines that it is advisable to notify EPA, Ohio EPA, or another outside agency of a situation at the site that could result in a failure of a treatment or containment system or a situation that could result in unacceptable risk to the public or the environment.

3.7.2 CERCLA Five-Year Reviews

Under CERCLA Section 121(c), "Review," EPA is required to review the remedies at CERCLA sites where hazardous substances remain at levels that potentially pose an unacceptable risk. These reviews must be conducted at least every 5 years to ensure that the remedies remain protective of human health and the environment. At federal facilities such as the Mound site, the federal agency in charge of the facility (DOE) is responsible for conducting the Five-Year Review. EPA will either provide concurrence with the protectiveness determinations or develop its own independent determinations.

DOE will conduct the CERCLA Five-Year Review and prepare a report in accordance with current EPA Five-Year Review guidance. DOE will add essential elements to the inspection to capture necessary field observations and will conduct any additional evaluation of site monitoring data deemed necessary for the 5-year period that the review covers.

The report will evaluate remedy performance and present recommendations for modifying the surveillance and maintenance program, implementing corrective action, or revising the selected remedies (if necessary). The report will also serve as the principle mechanism for monitoring, evaluating, improving, and reporting on all long-term management activities, including O&M, long-term monitoring, IC monitoring and enforcement, community involvement, information systems, contingency actions, and post-ROD changes.

DOE received concurrence from EPA to combine all CERCLA remedies for the site RODs into a single Five-Year Review report. The most recent Five-Year Review (DOE 2011c) was completed in 2011. The next Five-Year Review will be conducted in 2016.

3.8 Management and Oversight of ICs

3.8.1 Roles and Responsibilities

The landowners are legally responsible for adhering to the ICs, which run with the land in the form of restrictions and covenants in quitclaim deeds, or activity and use limitations in the environmental covenant and lease agreement. Landowners shall also notify DOE of street name changes, because the city permits, Ohio Department of Natural Resources well-drilling permits, and similar activities are filed by street addresses. Owner or transferee, if applicable, shall notify Ohio EPA within 10 days after each conveyance of an interest of the property or any portion thereof.

Landowners will contact EPA and Ohio EPA to approve other land uses, soil removal, groundwater use, penetration and/or removal of concrete in T Building. Appendix C contains guidance and an example request form that documents EPA and Ohio EPA decisions with DOE concurrence.

DOE—or its successors or assignees—is responsible for implementing, reporting on, monitoring, maintaining, and enforcing the ICs before and after the transfer of the site to MDC. DOE will consult with EPA should an enforcement action be required due to inconsistent land use as described in the deed restriction.

3.8.2 IC Oversight Mechanisms

LM has worked with EM, EPA, Ohio EPA, ODH, MDC, the City of Miamisburg, and other government entities to identify formal and informal processes for managing ICs, monitoring ICs, and providing information on compliance with ICs. Examples of these processes, which are also described in the LTS&M Plan, are as follows:

EM

- Amended Site Sales Agreement (DOE 2012b) with MDC, which delayed transfer of Parcels 6–9 for up to 5 years (Appendix E).
- General purpose lease agreement, Amendment #24 (DOE 2012c) with MDC for Parcels 6–9, which requires quarterly building inspections.
- General purpose lease agreement, Appendix #1 (DOE 2013) with MDC for Parcels 6–9, which requires adherence to ICs.
- A requirement in the Parcel 9 environmental covenant (DOE 2011d) to notify Ohio EPA of other site events (such as property transfers) that states “Owner or transferee, if applicable, shall notify Ohio EPA within ten (10) days after each conveyance of an interest of the Property or any portion thereof ...”

LM

- O&M Plan.
- FFA—tripartite agreement with DOE, EPA, and Ohio EPA.
- Periodic IC assessments (now annual).

- Periodic groundwater monitoring assessments.
- CERCLA Five-Year Reviews of remedy effectiveness.
- Core Team protocol for T Building special ICs (Appendix B).
- ICs guidance by Core Team (including soil handling protocol) (Appendix C). Includes a form for property owners to request EPA and Ohio EPA approval of site uses not specifically covered by ICs. Decisions made on these requests will be documented in annual IC assessment reports and CERCLA Five-Year Reviews.
- A requirement in the Parcel 9 environmental covenant (DOE 2011d) to notify Ohio EPA of other site events (such as property transfers) that states “Owner or transferee, if applicable, shall notify Ohio EPA within ten (10) days after each conveyance of an interest of the Property or any portion thereof ...”
- LM website that includes contact information, site information, and documents.
- 24-hour toll-free phone number.

MDC

- The *Comprehensive Reuse Plan Update* (MMCIC 2003), which covers topics such as soil handling and staging, and states “All improvements must conform to local building, planning, and zoning regulations. Exceptions to local requirements must be granted by the City. Land utilization for the MATC [Mound Advanced Technology Center] redevelopment will be guided by the *Miamisburg Land Use Plan, 1990 Update*” (Miamisburg 1990).
- General purpose lease agreement, Amendment #24 (DOE 2012c) for Parcels 6–9, which requires quarterly building inspections.
- General purpose lease agreement, Appendix #1 (DOE 2013) with MDC for Parcels 6–9, which requires adherence to ICs.
- MDC lease documents with their tenants that include ICs.
- Requirement to notify DOE of street name changes (permits, well drilling, and similar activities are identified by street addresses).
- ICs guidance by Core Team (including soil-handling protocol) (Appendix C).
- A requirement in the Parcel 9 environmental covenant (DOE 2011d) to notify Ohio EPA of other site events (such as property transfers) that states “Owner or transferee, if applicable, shall notify Ohio EPA within ten (10) days after each conveyance of an interest of the Property or any portion thereof ...”

City of Miamisburg

- City Ordinance 5733 dated September 3, 2003, which adopted MDC’s *Comprehensive Reuse Plan Update* (MMCIC 2003) as the City’s guide for review and approval of development of the Mound site.
- City Ordinance 6393 dated April 16, 2013, which allows the City to accept temporary ownership of certain parcels owned by MDC. The property will remain tax exempt until redevelopment. MDC will maintain the property.

- The 1-2 General Industrial District zoning requirement for the Mound site property as shown on the official zoning map (Miamisburg 2012).
- The *Miamisburg Land Use Plan, 1990 Update* (Miamisburg 1990) with overlay showing industrial use for the Mound site property (one area in Parcel 4 does not show industrial use, and this will be corrected when the plan is updated and approved by the City Council).
- Zoning modifications or other use changes require public notification.
- Permit requirements (e.g., for building, occupancy, street openings).

Montgomery County

- Auditor maintains the property ownership records for every parcel of real estate in Montgomery County. A deed transfer is required for any property transfer to be considered a legal transaction.
- The Combined Health District regulates private water systems.

EPA

- FFA—tripartite agreement with DOE, EPA, and Ohio EPA.
- CERCLA Five-Year Review requirements.

State of Ohio

- FFA—tripartite agreement with DOE, EPA, and Ohio EPA.
- Ohio EPA oversight.
- Ohio Revised Code requirement to obtain a permit to drill and register a well with Ohio Department of Natural Resources.
- Ohio EPA regulates public water systems.

Mound Science and Energy Museum

- CERCLA Reading Room (until no longer required).
- Contains information on the site's history.
- Located on the Mound site.
- Conducts public educational programs on Mound site history.

3.9 Enforcement Instruments and Local Controls

3.9.1 Federal Facility Agreement

The FFA (EPA 1990; EPA 1993) is a tripartite agreement that clarifies DOE and regulator roles and responsibilities.

3.9.2 Quitclaim Deeds and Environmental Covenant

The quitclaim deeds for Parcels D, H, 3, and 4; the Phase I Parcel; and Tracts 1 and 2, which are filed with Montgomery County and included in Appendix D, describe the ICs as “restrictions and

covenants.” The Parcel 9 environmental covenant describes the ICs as an “activity or use limitation” (DOE 2011d). These legal documents run with the land and require landowners and managers to comply with ICs. IC requirements must be included in all property sale or transfer legal documents.

The Parcel 9 environmental covenant (DOE 2011d) was filed with Montgomery County as a Special Instrument (Deed), Instrument Number 2012-00004722, on January 24, 2012.

EM has temporarily re-accepted the quitclaim deeds to Parcels 6–9 until the date of deferred conveyance.

3.9.3 Amended Site Sales Agreement

EM and MDC signed the *Amendment to Sales Contract dated August 28, 2008, between the U.S. Department of Energy and Mound Development Corporation (Previously The Miamisburg Mound Community Improvement Corporation)* (DOE 2012b) on November 30, 2012. EM is allowing MDC to defer acceptance of Parcels 6, 7, 8, and 9 for up to 5 years. During the deferral, EM shall lease those parcels to MDC. Refer to Appendix E for specific details of the amendment.

3.9.4 General Purpose Lease Agreements

EM and MDC signed *Amendment #24 to the General Purpose Lease* (DOE 2012c) for a 5-year period ending on December 14, 2017. *Appendix #1 to the General Purpose Lease* (DOE 2013) requires compliance with the ICs. During the lease period, MDC is responsible for maintenance of all facilities in Parcels 6–9 except for the pump-and-treat system in Building 300 and Trailers 1 and 16 in Parcel 9 (Appendix E).

3.9.5 Industrial Reuse—MDC Controls

MDC’s *Comprehensive Reuse Plan Update* (MMCIC 2003) reflects the industrial-use-only requirement.

3.9.6 Industrial Reuse—City of Miamisburg Controls

The City of Miamisburg has officially adopted the MDC’s *Comprehensive Reuse Plan Update* in City Ordinance 5733 dated September 2, 2003, “...retaining the right to modify, alter or improve upon said Plan in appropriate circumstances in accordance with the laws, statutes, charter and ordinances of the City of Miamisburg.” In accordance with Section 2 of City Ordinance 5733, the *Comprehensive Reuse Plan Update* serves as a guide for review and approval of development of the Mound site.

The *Miamisburg Land Use Plan, 1990 Update* (Miamisburg 1990) describes the land uses permitted within the City of Miamisburg, including the Mound site. The overlay map included in that plan shows the entire Mound site approved for industrial and commercial use, except for one area of Parcel 4. This plan, currently approved by City Ordinance 4368, will be corrected to add this area when it is updated.

The industrial-use-only requirement is codified in the City of Miamisburg Zoning Ordinance. The “Official Zoning Map, City of Miamisburg,” shows the entire Mound site as I-2, General Industrial District.

3.10 IC Violations

DOE—or its successors or assignees—is responsible for implementing, reporting on, monitoring, maintaining, and enforcing the ICs. It is DOE’s responsibility to ensure that established remedies remain in place by enforcing the environmental covenant and deed restrictions. When DOE conveyed the property, DOE retained the right to restrict certain activities on the property via restrictive deed covenants. Should a landowner attempt to conduct an activity that violates any of the ICs, then the landowner is violating DOE’s rights in the property and DOE has the right to enforce the restriction.

3.11 Disputes under the FFA

If a dispute arises among EPA, Ohio EPA, ODH, and DOE, Section XXII, “Resolution of Disputes,” of the July 15, 1993, FFA will be implemented. Ohio EPA will represent all state agencies during the dispute resolution process. The FFA defines DOE’s, EPA’s, and Ohio EPA’s responsibilities and authorities.

If the FFA is terminated, then DOE, EPA, and the State of Ohio will need to enter into a new legally binding agreement. For now, the FFA (including its dispute-resolution clause) remains the governing document for all DOE activities undertaken at the “1998 Mound Plant Property.”

3.12 Contacts

Contact information for the LM staff responsible for implementing the IC management and land use control requirements described in this section is shown below and included in the *Mound Site Community Involvement Plan* (DOE 2014b), which will be reviewed and updated as necessary each year. These updates will not require a revision to the IC management and land use control section of this O&M Plan.

LM’s 24-hour phone number and web address will be posted locally so that citizens can report sightings or concerns, such as nonconforming land use or vandalism to monitoring wells, P&T equipment, or other DOE property.

The official contact list, maintained by LM and posted on LM’s Mound website, shall include the following information:

LM 24-Hour Monitored Security Telephone Numbers (Grand Junction, CO)
(970) 248-6070 or (877) 695-5322

Website: <http://www.lm.doe.gov/Mound/Sites.aspx>

General site inquiries: (513) 648-5051

Email: Mound@lm.doe.gov

The following are the EPA and Ohio EPA points of contact for the Mound site:

David Seely
Remedial Project Manager
EPA Region 5 (SR-6J)
77 W. Jackson Blvd.
Chicago, IL 60604
(312) 886-7058
Email: Seely.David@epa.gov

Brian Nickel
Remedial Project Manager
Ohio EPA
401 E. Fifth Street
Dayton, OH 45402-2911
(937) 285-6468
Email: Brian.Nickel@epa.ohio.gov

LM shall maintain a site stakeholder list to ensure that the public and community leaders are informed of DOE activities and status changes. Anyone can request to be added to the list, which now includes:

- Legislative and executive branch officials (federal and state).
- Local elected and appointed officials (city, township, and county).
- Regulators, including EPA, Ohio EPA, and ODH.
- Property owners, including MDC and subsequent owners.
- Local news media.
- Interested citizens and former employees (groups and individuals).

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4.0 Remedy Monitoring

The remedies for groundwater at the site combine groundwater monitoring and ICs in the form of deed restrictions on future land and groundwater use. These combined remedies will prevent current and future exposure of workers, the public, and the environment to contaminated groundwater from the Mound site. This section describes the work activities necessary for sample collection and data evaluation to ensure the effectiveness of remedy monitoring at the site. This section applies to the monitoring components for the following remedies:

- **Phase I:** MNA of TCE in groundwater and a seep
- **Parcels 6, 7, and 8:** MNA of TCE and tritium in groundwater and seeps
- **OU-1 hydraulic capture:** Performance monitoring

4.1 Descriptions of Areas

4.1.1 Phase I MNA

The Phase I ROD (DOE 2003a) was finalized in July 2003 to use MNA and ICs to address groundwater contaminated with TCE in this discrete area. Phase I is an approximately 52-acre area that consists of Phases IA, IB, and IC. It is made up of three distinct sections of the site property (Figure 7). This area contains monitoring wells that are screened in both the Buried Valley Aquifer (BVA) and the bedrock aquifer system. MNA is the remedy selected for a small section of the bedrock groundwater system contaminated with TCE. Monitoring will verify that concentrations within the bedrock groundwater are decreasing to levels below EPA's Safe Drinking Water Act maximum contaminant level (MCL) and that TCE does not impact the downgradient BVA.

Several wells in this area also exhibited levels of barium, radium, chromium, or nickel that exceeded MCLs established under the Safe Drinking Water Act. The elevated levels of barium and radium were evaluated and determined to be naturally occurring, with the local bedrock matrix serving as the mineral source. The elevated chromium and nickel were determined to be the result of corrosion of the stainless-steel well casings.

DOE monitored selected wells to confirm the results of the previous investigations that led to these conclusions. Based on this additional monitoring, and with approval of the Core Team, LM discontinued the monitoring program for chromium and nickel in 2009 and discontinued the program for barium and radium in 2013.

4.1.2 Parcels 6, 7, and 8 MNA

The Parcels 6, 7, and 8 ROD (DOE 2009) was finalized in August 2009 to address groundwater and seeps associated with the Main Hill (the area where the main production facilities were located within Parcels 6 and 8) that are contaminated with TCE (and its degradation products) or with tritium, and radionuclides. MNA and ICs were the selected remedies. Parcels 6, 7, and 8 occupy approximately 101 acres of the northern portion of the Mound site. Significant soil contamination was present beneath the main production facilities (Figure 8).

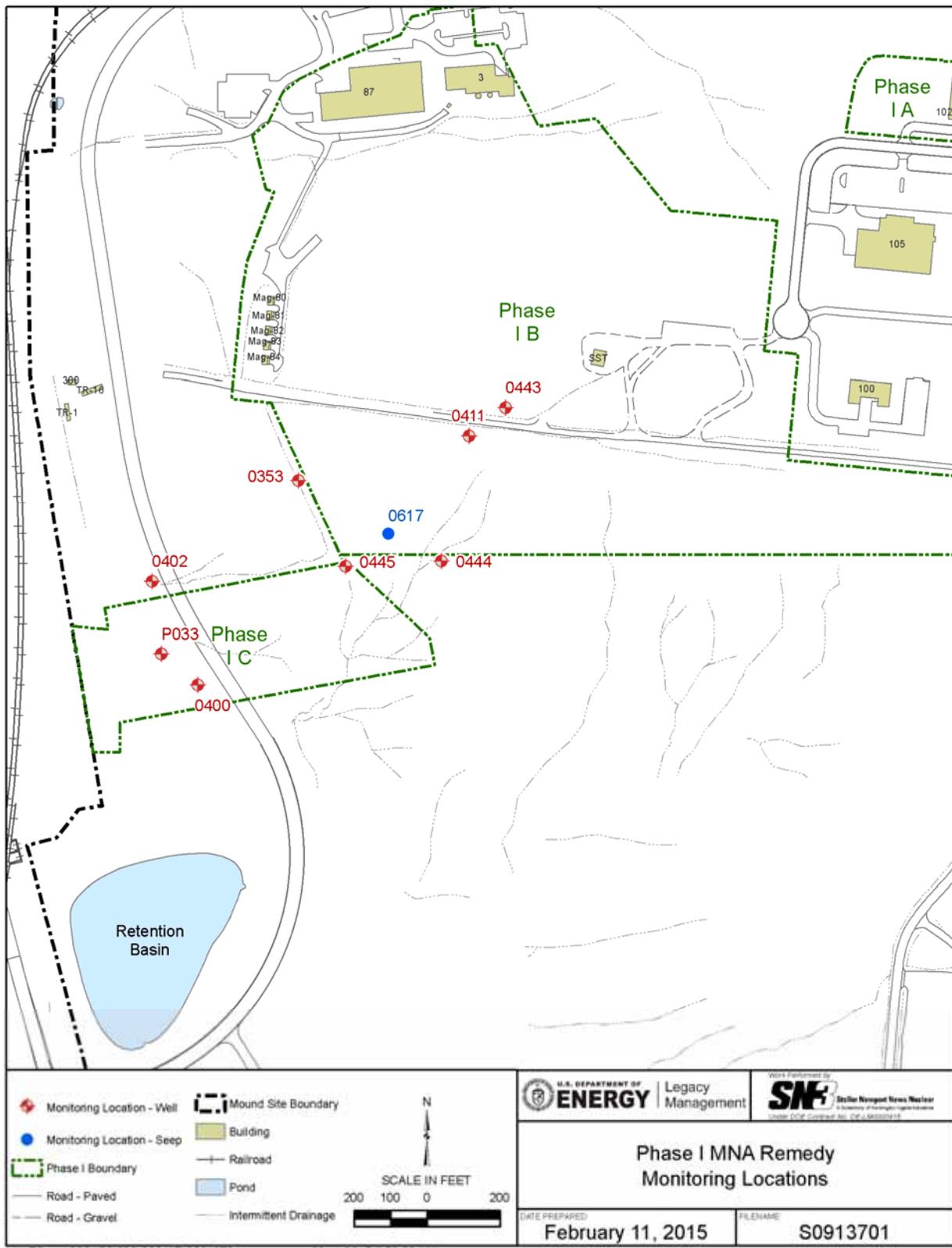


Figure 7. Phase I MNA Monitoring Locations

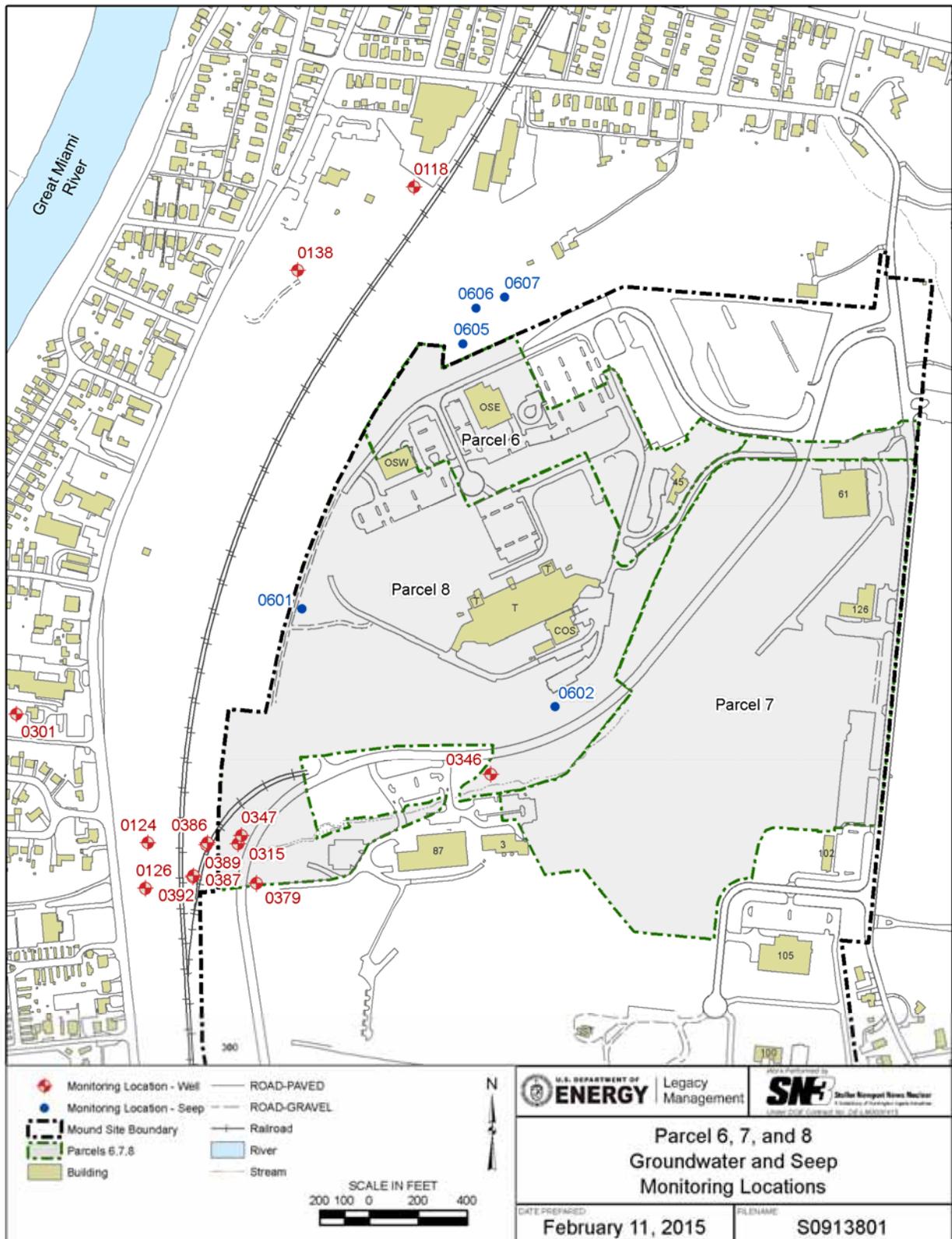


Figure 8. Parcels 6, 7, and 8 Monitoring Locations

The Main Hill contains monitoring wells that are screened in the BVA and seeps. Groundwater within the fractured bedrock beneath the Main Hill flows along horizontal bedding planes and fractures, and ultimately discharges to seeps or to the downgradient BVA. MNA is the remedy selected for the bedrock groundwater system and the BVA contaminated with TCE (and its degradation products) or with tritium, and radionuclides to ensure that the concentrations of these constituents within the groundwater are decreasing to levels below MCLs and do not impact the downgradient BVA offsite.

4.1.3 OU-1 P&T Performance Monitoring

4.1.3.1 Current status

DOE temporarily ceased operation of the P&T system and placed it into standby mode in September 2014 with the concurrence of EPA and Ohio EPA. This action was taken to support the ongoing OU-1 Enhanced Attenuation Field Demonstration described in Section 4.1.3.3 and to prevent edible oils from being captured by the system during the field demonstration.

4.1.3.2 Background

OU-1 is located in the southwestern portion of the Mound site (Figure 9). It encompassed a historical waste disposal area (landfill) and the plant production wells, which were removed from service in 2005. In June 1995, DOE finalized the OU-1 ROD (DOE 1995) to address contaminated groundwater in this discrete portion of the Mound site. The selected remedy for controlling contamination from the soils and groundwater at OU-1 is the collection, treatment, and disposal of groundwater. Surface water controls, ICs to limit site access, and long-term groundwater monitoring are also parts of the remedy in the ROD for OU-1. This action is being implemented through the collection and treatment of contaminated groundwater and discharge of the treated water. Maintenance and operation of the P&T system is described in the configuration-controlled document, *Mound OU-1 Pump-and-Treat System Operation and Maintenance Procedure* (DOE 2012a). The chemical properties and hydraulic behavior of the groundwater system are monitored to verify the adequacy of the remedy. The major components of the original 1995 OU-1 remedy were:

- Extracting groundwater, using three conventional wells;
- Treating the extracted groundwater to remove the VOCs, using air stripping;
- Discharging the treated groundwater to the Great Miami River;
- Monitoring the chemical properties of the groundwater system;
- Monitoring the hydraulic behavior of the groundwater system;
- Monitoring the discharge effluent; and
- Periodically testing the OU-1 extraction system (rebound testing).

The remedy also included surface water controls, the implementation of ICs to limit access to the site, and long-term groundwater monitoring. Surface water controls managed the surface water to reduce infiltration into the wastes in the landfill. Access restrictions were implemented to minimize contact with the soils until the property was transferred.

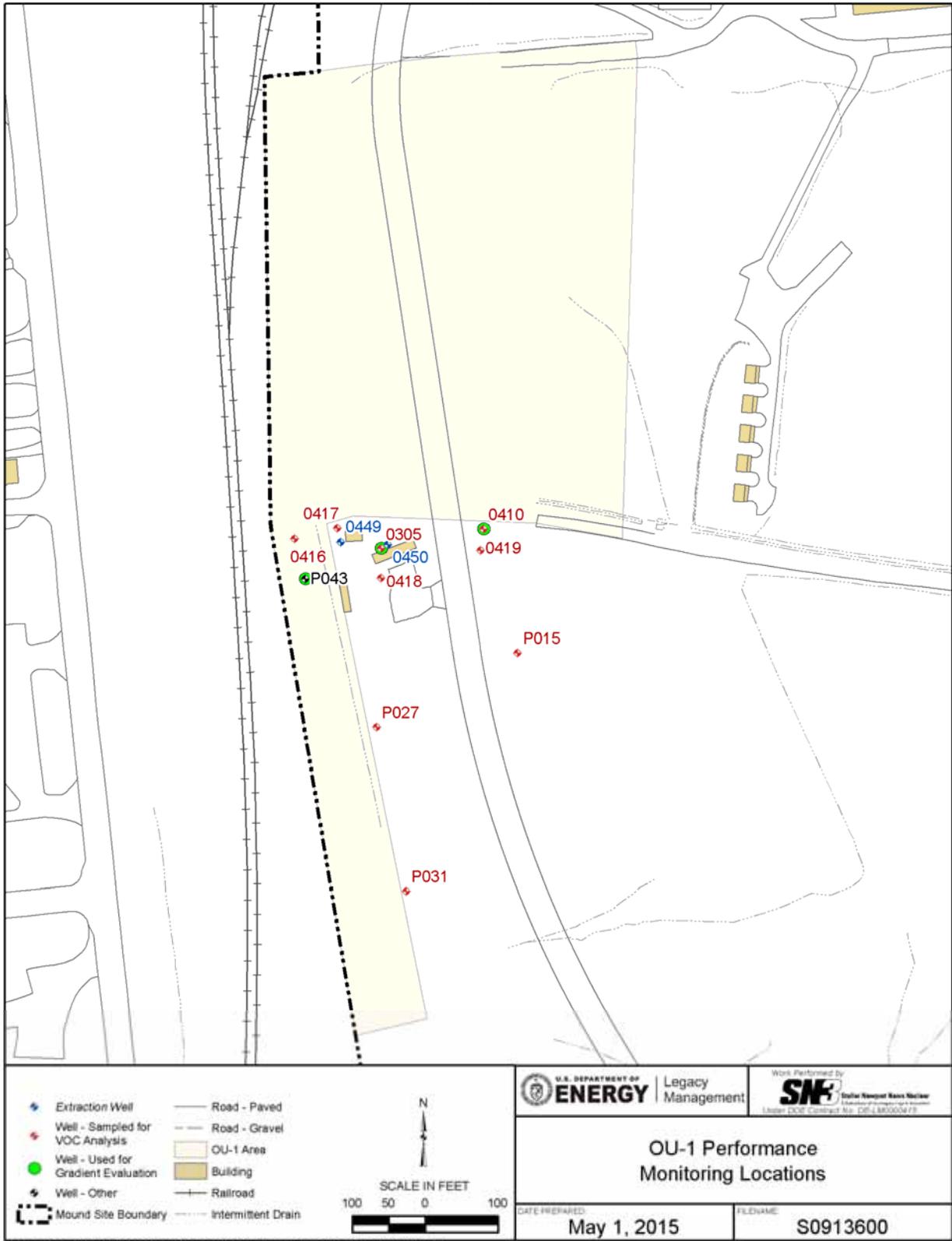


Figure 9. Operable Unit 1 Monitoring Locations

In 2007, the three original extraction wells were removed to allow for the excavation of the OU-1 landfill. Two replacement extraction wells (0449 and 0450) were installed south of the landfill to provide hydraulic containment of the impacted groundwater. More frequent groundwater monitoring was implemented in 2007. Surface water controls were modified to direct water away from the excavation area. Also, the pond on the north end of the OU-1 landfill area was removed to allow for excavation below the footprint of the pond. The OU-1 landfill, including the pond area, was backfilled to allow for future reuse.

Since the landfill has been removed, access restrictions and fencing have also been removed. ICs that control land and groundwater use were implemented in the OU-1 ROD amendment (DOE 2011a) and the environmental covenant (DOE 2011d).

A rebound test was performed in 2003, and the system was restarted due to increases in TCE above previously negotiated trigger levels in downgradient wells. The 2003 test was performed before the landfill was removed; therefore, materials that could have provided a VOC source to groundwater were still present.

Another rebound test was initiated in June 2011, after the completion of the landfill excavation, to evaluate the possibility of moving to a passive groundwater remedy. The study was concluded in December 2011 when VOC concentrations exceeded 2011 trigger levels in sampling locations along the downgradient boundary of the study area. The P&T system was restarted at that time.

4.1.3.3 2014 Enhanced Attenuation Field Demonstration

DOE is conducting a field demonstration to determine whether the use of edible oils can establish and stimulate discrete treatment zones that expedite the attenuation of chlorinated volatile organic compounds (cVOCs) in the OU-1 groundwater. Edible oils (neat and emulsified) were deployed into the subsurface to create treatment zones to reduce the concentrations of tetrachloroethene (PCE) and TCE in groundwater and enhance the ongoing attenuation of these parent compounds and degradation (daughter) products. The design criteria for implementing this approach are outlined in the *Field Demonstration Work Plan for Using Edible Oils to Achieve Enhanced Attenuation of cVOCs and a Groundwater Exit Strategy for the OU-1 Area, Mound, Ohio* (DOE 2013b).

As stated in Section 4.1.3.1, the P&T system is now in standby mode.

4.2 Contaminants of Concern

4.2.1 Phase I Contaminants of Concern

The primary contaminant of concern in Phase I groundwater is TCE. However, vinyl chloride (VC), *cis*-1,2-dichloroethene (DCE), and *trans*-1,2-DCE—which are degradation products of TCE—are also analyzed. During the remedial investigation program for the project, VOC contamination was identified in the Phase I area. Concentrations of TCE greater than the MCL of 5 micrograms per liter were identified in well 0411 and seep 0617. Soil and groundwater data from the wells in the vicinity of well 0411 suggest that the TCE contamination is most likely limited to the area adjacent to the well. There is no known continuing source of TCE contamination in the soil in Phase I; however, TCE was widely used in plant operations.

4.2.2 Parcels 6, 7, and 8 Contaminants of Concern

Two monitoring wells (0315 and 0347) in the BVA indicate VOC impact, primarily TCE that exceeds the MCLs. In the ROD for Parcels 6, 7, and 8 (DOE 2009), MNA was selected as the remedy for the VOCs in the groundwater associated with the Main Hill. Sampling is being performed to assess the contaminant concentrations and to ensure that the downgradient BVA is not being affected. The primary contaminant of interest in the well 0315/0347 area is TCE. VC, *cis*-1,2-DCE, and *trans*-1,2-DCE are degradation products of TCE, and their presence indicates that TCE is being decomposed.

Also associated with this area are seeps located along the Main Hill. Two seeps are on the Mound site, and the remaining five seeps are offsite to the north. Several seeps in this area have elevated levels of tritium and VOCs. The primary contaminants of interest in the Main Hill seeps and downgradient groundwater are PCE, TCE, and tritium. VC, *cis*-1,2-DCE, and *trans*-1,2-DCE are degradation products of TCE, and their presence indicates that TCE is being decomposed.

4.2.3 OU-1 Contaminants of Concern

A groundwater contaminant plume emanates southward from the former landfill area and travels in a generally southward direction. The primary contaminants of concern for groundwater in the OU-1 area are PCE, TCE, *cis*-1,2-DCE, *trans*-1,2-DCE, VC, tetrachloromethane, 1,1,1-trichloroethane, trichlorofluoromethane, and chloroform.

4.3 Hydrogeologic Setting

The aquifer system at the Mound site consists of two different hydrogeologic environments: groundwater flow through the Ordovician shale and limestone bedrock beneath the hills, and groundwater flow within the unconsolidated glacial deposits and alluvium associated with the BVA in the Great Miami River valley. A thin tributary valley divides the two main portions of the Mound site and contains a narrow tongue of glacial deposits that are in hydraulic communication with the BVA. The bedrock flow system is dominated by fracture flow and is not considered a highly productive aquifer. The BVA is dominated by porous flow with interbedded gravel deposits providing the major pathway for water movement. The unconsolidated deposits are Quaternary Age sediments that consist of both glacial and fluvial deposits. The BVA is a highly productive aquifer capable of yielding a significant quantity of water and it is designated as a sole-source aquifer. The general structure and flow characteristics for these two interconnected systems are depicted on Figure 10.

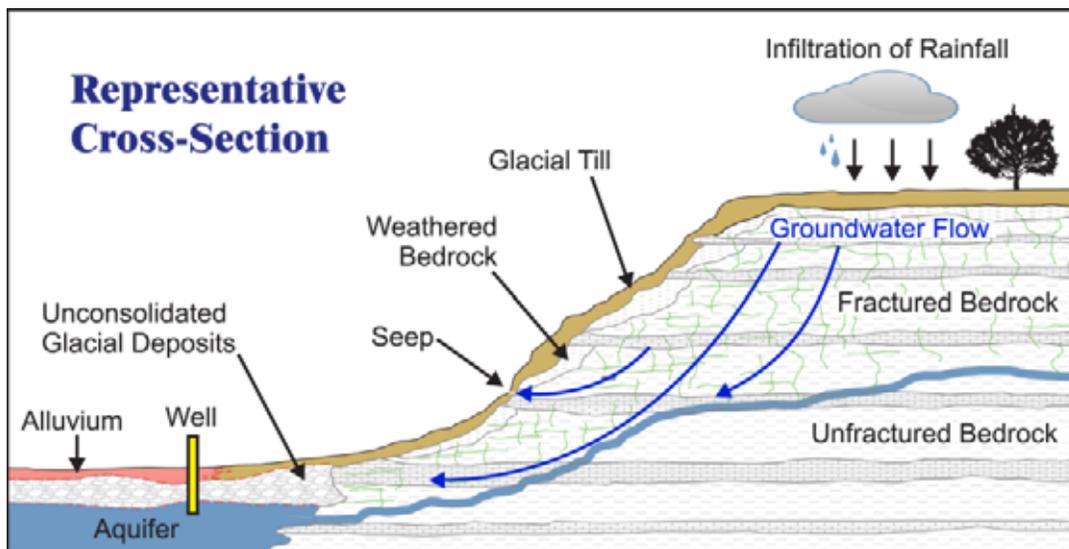


Figure 10. Generalized Cross-Section Showing Bedrock Flow

The approximate boundary of the BVA is depicted on Figure 11. The OU-1 area overlies the BVA. The southwestern portion of Parcel 8 lies above the BVA and the tributary valley groundwater system. A small section of the northern portion of Phase IB lies above the tributary valley groundwater system. The western portion of Phase IC lies directly above the BVA.

For a detailed description of the groundwater flow regimes at the Mound site and specific hydrogeologic information for each area, refer to the following entries in the references list: DOE 1992, DOE 1994a, DOE 1994b, DOE 1995, DOE 1999b, DOE 2003b, and DOE 2009.

Static water level measurements are collected at each well location prior to sampling. Since these measurements are made within a short time frame, the data are used to depict the general groundwater flow in the area (Figure 11). Two groundwater regimes are present at the site: groundwater in the bedrock, and groundwater in the BVA. Groundwater flow in the bedrock typically mimics the bedrock topography, with groundwater discharging to the BVA or at seeps from the upper bedrock. Groundwater flow in the BVA flows south, following the downstream course of the Great Miami River.

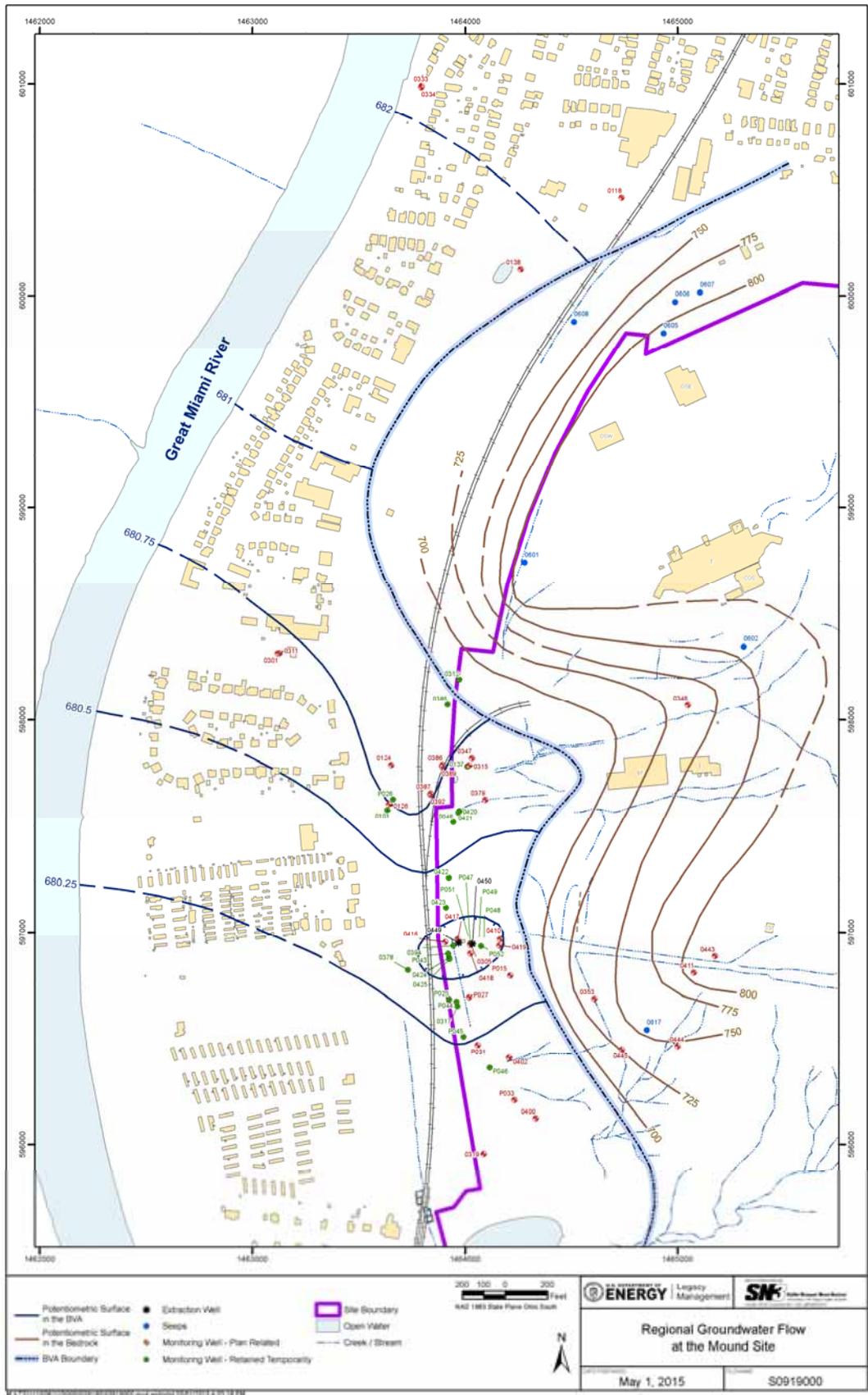


Figure 11. Regional Groundwater Flow at the Mound Site

4.4 Monitoring Programs

This section compiles the monitoring requirements for each area as of the date of this report. The original requirements were outlined in the appropriate ROD; however, some modifications have been made based on data results as approved by the Core Team. Specific changes are documented in the annual groundwater monitoring reports.

4.4.1 Phase I MNA

Bedrock groundwater in Phase I is monitored for TCE and its degradation products to verify that the concentration of TCE is decreasing due to natural attenuation. A groundwater monitoring program was established to verify that concentrations of TCE in the vicinity of well 0411, well 0443, and seep 0617 are decreasing and that TCE is not adversely impacting the BVA. The monitoring frequency may be decreased or the program may be terminated when TCE concentrations observed in well 0411, well 0443, and seep 0617 meet the MCL for four consecutive sampling events.

Although not part of the selected remedy, monitoring was performed to evaluate barium, radium, chromium, and nickel impact in the Phase I groundwater. Based on investigations, none of these constituents were considered contaminants of concern in Phase I groundwater. Monitoring for nickel and chromium was discontinued in 2009, and monitoring for radium and barium was discontinued in 2013.

4.4.1.1 Remedial Action Objectives

The remedial action objectives include the following:

- Protect the BVA by verifying that the concentrations of TCE in the vicinity of well 0411, well 0443, and seep 0617 are decreasing and that TCE is not impacting the BVA.
- Demonstrate the reduction of TCE to concentrations below the MCL in well 0411, well 0443, and seep 0617.

4.4.1.2 Monitoring Locations, Analytes, and Frequencies

The objectives associated with the selection of monitoring locations, analytes, and sampling frequencies provide adequate spatial and temporal groundwater monitoring coverage of the Phase I bedrock system to demonstrate that MNA is mitigating the TCE contamination effectively. The monitoring locations are selected to take advantage of the flow dynamics of the bedrock system such that the potential migration of TCE will be detected. The monitoring frequencies are selected to ensure that any change in the system will be detected without significant opportunity for downgradient migration.

Under the MNA monitoring program, samples are collected from selected wells and a seep and analyzed as outlined in Table 3. Bedrock wells 0411 and 0443 are monitored to provide spatial coverage of flow paths in the immediate vicinity of the well 0411 area. Bedrock wells 0353, 0444, and 0445 and seep 0617 are monitored to provide spatial coverage of flow paths downgradient of the well 0411 area. In conjunction with the bedrock wells, BVA wells 0400,

0402, and P033 are monitored to assess potential movement of TCE from the bedrock system to the BVA.

Table 3. Remedy (MNA) Monitoring for Phase I

Monitoring Location	Area	Sampling Frequency	Parameters
Well 0411	Well 0411 Area	Semiannual (First and third quarter of each calendar year)	TCE DCE VC
Well 0443			
Well 0353	Downgradient Bedrock Monitoring		
Well 0444			
Well 0445			
Seep 0617			
Well 0400	Downgradient BVA Monitoring		
Well 0402			
Well P033			

The primary contaminant of concern in Phase I groundwater is TCE. However, VC, *cis*-1,2-DCE, and *trans*-1,2-DCE will also be analyzed. The field parameters of dissolved oxygen, temperature, oxidation-reduction potential (ORP), and pH will also be measured for each sampling event.

The monitoring frequency is determined based on concentration trends previously observed in the VOC data collected from the monitoring wells. Initially, samples were collected quarterly because doing so was effective for capturing both the general trends in concentrations and minor fluctuations in VOC concentrations observed in these wells. Presently, groundwater samples are collected semiannually. The VOC concentrations in these wells and the seep have not fluctuated and have generally decreased since monitoring began. If groundwater quality improves, the monitoring frequencies can be adjusted to reflect the increased understanding and predictability of the data. Table 4 outlines the conditions that must be met to reduce the sampling frequencies for Phase I MNA. Any changes to the monitoring frequency must be agreed to by the Core Team.

Table 4. Proposed Sampling Frequency Reductions for Phase I MNA

Sampling Frequency	Monitoring Locations	Condition
Semiannual	0411, 0443, 0617 0353, 0444, 0445 0400, 0402, P033	VOC concentrations in well 0411 decline after completion of four quarterly sampling events.
Annual	0411, 0443, 0617 0353, 0444, 0445 0400, 0402, P033	VOC concentrations in well 0411 decline after completion of six sampling events.
	0411, 0443, 0617	VOC concentrations in well 0411 decline after completion of nine sampling events—monitoring focuses on impacted wells.

Notes: In 2007, the sampling frequency for the MNA program was reduced to semiannual, with the approval of the Mound site Core Team.

4.4.1.3 Discontinuation of Monitoring

If at any time VOC concentrations in well 0411, well 0443, and seep 0617 drop below the MCLs for the analytes listed in Table 3 for a minimum of 2 years, it can be recommended to the Core Team to discontinue sampling for all the wells and the seep.

4.4.1.4 Monitoring Contingencies

If the monitoring results indicate that MNA is not adequately addressing the VOC concentrations in the bedrock groundwater system, the Core Team will evaluate more-active remediation approaches.

4.4.1.5 Triggers and Response Actions

The purpose of the trigger level is to provide a threshold level that indicates a definitive change in the groundwater quality of the Phase I bedrock groundwater system. The objective of the response action is to notify the Core Team of the detected change. The Core Team will reevaluate the situation and determine a course of action.

The VOC data are evaluated against previous data collected at each location to determine if MNA is adequately addressing groundwater impact and to monitor the geochemical conditions in the aquifer. Trigger levels and response actions have been established for each contaminant (DOE 2003b), as summarized in Table 5. An exceedance of a trigger level requires immediate notification of the Core Team.

Table 5. Trigger Levels for Phase I MNA Remedy

Location	TCE ($\mu\text{g/L}$)	DCE ($\mu\text{g/L}$)	VC ($\mu\text{g/L}$)
0353	5	70	2
0400	5	70	2
0402	5	70	2
0411	30	70	2
0443	18	70	2
0444	5	70	2
0445	5	70	2
P033	5	70	2
0617 (seep)	16	70	2

Reference: DOE 2003b
 $\mu\text{g/L}$ = micrograms per liter

4.4.2 Parcels 6, 7, and 8 MNA

Groundwater in Parcels 6, 7, and 8 is monitored for TCE and its degradation products to verify that the downgradient BVA is not affected and that concentrations are decreasing. In addition, groundwater discharging from seeps is monitored for tritium and TCE and its degradation products to verify that source removal will result in decreasing concentrations over time.

The sampling is separated into two programs, each of which relates to an area of impact:

- **Wells 0315/0347 area:** Wells at the edge of the BVA on the southwestern corner of Parcel 8 that have elevated concentrations of VOCs. The program for the wells 0315/0347 area encompasses wells that have TCE greater than the MCL and downgradient wells to the west.
- **Main Hill seeps:** Seeps on the northern and southern sides of the Main Hill that have elevated concentrations of VOCs and tritium. The program for the Main Hill seeps encompasses seeps and downgradient wells to the west.

4.4.2.1 Remedial Action Objectives

The remedial action objectives include the following:

- Protect the downgradient BVA by verifying that TCE concentrations in the vicinity of wells 0315 and 0347 are decreasing and not impacting the BVA.
- Monitor the reduction of TCE concentrations to determine if they fall below the MCL in wells 0315 and 0347 and to verify the hypothesis that natural decomposition of TCE will result in concentrations below the MCL over time.
- Monitor the reduction of TCE and PCE concentrations and tritium activity to determine if those parameters fall below the MCLs in seeps 0601, 0602, 0605, 0606, and 0607 and to verify the hypothesis that—with the removal of the TCE, PCE, and tritium sources—natural decomposition will result in concentrations below the MCL over time.

4.4.2.2 Monitoring Locations, Analytes, and Frequencies

The objective associated with the selection of monitoring locations, specific analytes, and monitoring frequencies is to provide adequate spatial and temporal coverage of the Parcels 6, 7, and 8 bedrock groundwater system to demonstrate that the selected remedy, MNA, is mitigating the contamination in groundwater effectively. The monitoring locations are selected to take advantage of the flow dynamics of the bedrock system such that potential migration of VOCs and tritium will be detected. The monitoring frequencies are selected to ensure that any change in the system will be detected without significant opportunity for downgradient migration.

Wells 0315/0347 Area

Under the Parcels 6, 7, and 8 MNA monitoring program for the well 0315/0347 area, samples are collected from selected wells as outlined in Table 6. Wells 0315 and 0347 will be sampled to provide spatial monitoring coverage of a zone of localized TCE groundwater contamination, which could act as a potential source to the downgradient BVA. Wells 0124, 0126, 0386, 0387, 0389, and 0392 will be sampled to provide spatial coverage of groundwater flow paths downgradient of the wells 0315/0347 area. All of the wells in this program are screened within the BVA.

Table 6. Monitoring for Wells 0315/0347 Area

Monitoring Location	Area	Sampling Frequency	VOC
Well 0315	Source Wells	Quarterly	PCE TCE DCE VC
Well 0347			
Well 0124	Downgradient BVA		
Well 0126			
Well 0386			
Well 0387			
Well 0389			
Well 0392			

The primary contaminant of interest in the well 0315/0347 area is TCE. VC, *cis*-1,2-DCE, and *trans*-1,2-DCE are degradation products of TCE, and their presence indicates that TCE is being decomposed. Samples collected from the wells identified in Table 6 will be analyzed for TCE, *cis*-1,2-DCE, *trans*-1,2-DCE, and VC. The field parameters of dissolved oxygen, temperature, ORP, and pH will also be measured during each sampling event.

The monitoring frequency is determined based on concentration trends previously observed in the VOC data collected from the monitoring wells. Collecting samples quarterly captures both the general trends in concentrations and minor fluctuations in VOC concentrations observed in these wells. Based on historical data, the VOC concentrations in these wells are not expected to fluctuate rapidly; therefore, initial quarterly sampling will be sufficient to capture any potential changes. If groundwater quality improves, the monitoring frequencies can be adjusted to reflect the increased understanding and predictability of the data. Table 7 outlines the conditions that must be met to reduce the sampling frequencies for the well 0315/0347 area. Any changes to the standard initial quarterly monitoring frequency must be agreed to by the Core Team.

Table 7. Proposed Sampling Frequency Reductions for Well 0315/0347 Area

Sampling Frequency	Monitoring Locations	Condition
Quarterly	0315, 0347 0124, 0126 0386, 0387 0389, 0392	Initial sampling frequency—frequency must be maintained for a minimum of 1 year.
Semiannual	0315, 0347 0124, 0126 0386, 0387 0389, 0392	VOC concentrations in wells 0315 and 0347 decline after completion of four quarterly events.
Annual	0315, 0347 0124, 0126 0386, 0387 0389, 0392	VOC concentrations in wells 0315 and 0347 decline after completion of two semiannual sampling events.

If groundwater quality does not remain stable or improve (e.g., TCE concentrations trend above trigger levels) in either of the Parcels 6, 7, and 8 sampling programs, the Core Team shall determine an appropriate sampling frequency.

Main Hill Seeps

Water from selected seeps along the Main Hill and wells screened within the BVA are sampled to support the MNA remedy for the Main Hill seeps (as outlined in Table 8). Seeps 0601, 0602, 0605, 0606, and 0607 will be sampled to determine contaminant levels in these direct groundwater discharge points. Wells 0346, 0347, and 0379 will be sampled to evaluate the changes in contaminant levels in the tributary valley. Wells 0118, 0138, 0301, 0346, and 0379 will be sampled to provide spatial coverage of groundwater flow paths downgradient of the Main Hill.

The primary contaminants of interest in the Main Hill seeps and downgradient groundwater are PCE, TCE, and tritium. VC, *cis*-1,2-DCE, and *trans*-1,2-DCE are degradation products of TCE, and their presence indicates that TCE is being decomposed. Samples collected from the wells will be sampled for the analytes outlined in Table 8. The field parameters dissolved oxygen, temperature, ORP, and pH will also be measured during each sampling event.

Table 8. Monitoring for Main Hill Seeps and Groundwater

Monitoring Location	Area	Sampling Frequency	Parameters
Seep 0601	Main Hill Seeps	Quarterly—VOCs	PCE TCE DCE VC Tritium
Seep 0602			
Seep 0605			
Seep 0606			
Seep 0607			
Well 0118	Downgradient BVA	Semiannual—Tritium	PCE TCE DCE VC Tritium
Well 0138			
Well 0301			
Well 0346			
Well 0347			
Well 0379			

Notes: In 2012, the sampling frequency for the tritium monitoring was reduced to semiannual with the approval of the Mound site Core Team.

The monitoring frequency is determined based on concentration trends previously observed in the VOC data collected from the monitoring wells. Collecting samples quarterly captures both the general trends in concentrations and minor fluctuations in VOC concentrations observed in these wells. Based on historical data, the VOC concentrations in these wells are not expected to fluctuate rapidly; therefore, initial quarterly sampling will be sufficient to capture any potential changes. If groundwater quality improves, the monitoring frequencies can be adjusted to reflect the increased understanding and predictability of the data. Table 9 outlines the conditions that must be met to reduce the sampling frequencies for the Main Hill seeps program for Parcels 6, 7, and 8. Any changes to the standard initial quarterly monitoring frequency must be agreed to by the Core Team.

If groundwater quality does not remain stable or improve (e.g., TCE concentrations trend above trigger levels) in either of the Parcels 6, 7, and 8 sampling programs, the Core Team shall determine an appropriate sampling frequency.

Table 9. Proposed Sampling Frequency Reductions for Main Hill Seeps and Groundwater

Sampling Frequency	Monitoring Locations	Condition
Quarterly	Seeps 0601, 0602, 0605, 0606, 0607 Wells 0118, 0138, 0301, 0333, 0334, 0346, 0347, 0379	Initial sampling frequency—frequency must be maintained for a minimum of 1 year.
Semiannual	Seeps 0601, 0602, 0605, 0606, 0607 Wells 0118, 0138, 0301, 0333, 0334, 0346, 0347, 0379	Contaminant levels in seeps 0601, 0602, 0605, 0606, and 0607 continue to decline after completion of four quarterly events.
Annual	Seeps 0601, 0602, 0605, 0606, 0607 Wells 0118, 0138, 0301, 0333, 0334, 0346, 0347, 0379	Contaminant levels in seeps 0601, 0602, 0605, 0606, and 0607 continue to decline after completion of two semiannual events.
	Seeps 0601, 0605, 0607	VOC concentrations in seeps 0601, 0602, 0605, 0606, and 0607 continue to decline for three annual events. Monitoring focused on seeps with highest historical impact.

4.4.2.3 Discontinuation of Monitoring

If at any time VOC concentrations in wells 0315 and 0347 drop below the MCLs for the analytes listed in Table 6 for a minimum of 2 years, it can be recommended to the Core Team to discontinue sampling for all wells in the well 0315/0347 area.

If at any time VOC concentrations in seeps 0601, 0605, and 0607 drop below the MCLs for the analytes listed in Table 8 for a minimum of 2 years, it can be recommended to the Core Team to discontinue sampling for all the Main Hill seeps and wells.

4.4.2.4 Monitoring Contingencies

If the quarterly monitoring results indicate that MNA is not adequately addressing the contaminant levels in the Parcels 6, 7, and 8 groundwater, the Core Team will evaluate more-active remediation approaches.

4.4.2.5 Triggers and Response Actions

The purpose of the trigger level is to provide a threshold level that indicates a definitive change in the groundwater quality of the Parcels 6, 7, and 8 bedrock groundwater system. The objective of the response action is to notify the Core Team of the detected change. The Core Team will reevaluate the situation and determine a course of action.

The VOC data are evaluated against previous data collected at each location to determine if MNA is adequately addressing groundwater impact and to monitor the geochemical conditions in the aquifer. Trigger levels and response actions have been established for each contaminant (as summarized in Table 10) from information in the Parcels 6, 7, and 8 ROD (DOE 2009). Exceedance of a trigger level requires immediate notification of the Core Team.

Table 10. Trigger Levels for Parcels 6, 7, and 8 Monitoring Locations

Location	TCE (µg/L)	PCE (µg/L)	Tritium (nCi/L)	Radium-226/228 (pCi/L)	Strontium-90 (pCi/L)
0315	30	[Hatched Area]	[Hatched Area]	[Hatched Area]	[Hatched Area]
0347	30				
0124	5				
0126	5				
0386	5				
0387	5				
0389	5				
0392	5				
0601 (seep)	[Hatched Area]				
0605 (seep)	150	[Hatched Area]	[Hatched Area]	[Hatched Area]	[Hatched Area]

Reference: DOE 2009
 µg/L = micrograms per liter
 nCi/L = nanocuries per liter
 pCi/L = picocuries per liter

4.4.3 OU-1 P&T Performance Monitoring

In June 1995, DOE finalized the OU-1 ROD (DOE 1995) to address contaminated groundwater in this discrete portion of the Mound site. OU-1 is located in the southwestern portion of the Mound site. It encompasses a historical waste disposal area (landfill) and the plant production wells, which were removed from service in 2005. The OU-1 remedial action was designed to control groundwater contamination (primarily low-level VOCs) to prevent migration of contamination toward the plant production wells, and to minimize exposure to potential receptors. The pathway of concern consisted of leaching of contaminants from site soils or landfill wastes into the groundwater and withdrawal by the Mound Plant production wells or by other future wells. The plant production wells were abandoned in October 2005 when the facility was connected to the municipal water supply. The OU-1 landfill was excavated in two phases from 2007 through 2010 to support future redevelopment of the property by MDC. DOE issued an amended OU-1 ROD in 2011 (DOE 2011a).

As stated in Section 4.1.3, DOE ceased operation of the OU-1 P&T system and put it into a safe standby mode as a result of the ongoing enhanced attenuation field demonstration.

This demonstration was started in 2014 to evaluate the use of edible oils to enhance natural attenuation processes in OU-1. The goal of the field demonstration is to show that structured geochemical treatment zones can be established and effectively maintained to decrease cVOC concentrations in groundwater to MCLs in a reasonable time frame. Data is being collected to evaluate the feasibility of MNA as a remedy to address cVOC contamination in the OU-1 groundwater. Factors to be evaluated include stability of the plume, degradation rates, and downgradient groundwater quality. If it is determined that MNA is a viable remedy for OU-1 groundwater and the P&T system remains off, then DOE will request to transition from P&T to MNA, likely through an amendment to the ROD.

At the time of this O&M Plan update in January 2015, performance monitoring is being conducted based on the *OU-1 Enhanced Attenuation Field Demonstration Sampling and Analysis Plan Mound, Ohio, Site* (DOE 2014). If the P&T system is restarted, the monitoring program described in Sections 4.4.3.1 through 4.4.3.5 will be reinstated.

4.4.3.1 Remedial Action Objectives

The remedial action objectives associated with groundwater include the following:

- Prevent the ingestion of water with contaminant concentrations that exceed the remediation goals.
- Control or reduce (to remediation goals) contaminant concentrations in the area of the aquifer adjacent to OU-1.

4.4.3.2 Monitoring Locations, Analytes, and Frequencies

Closely related to the operation of the P&T system are certain measurements of groundwater that are used to verify the satisfactory performance of the P&T system. The P&T system is designed to gain control of groundwater flow and contaminant transport beneath the OU-1 landfill footprint. The primary objectives of the sampling are as follows:

- Provide evidence during the remedial action that the P&T system is capturing the contaminant plume, as intended.
- Obtain information that will allow the P&T system to be fine-tuned throughout the remedial action so that groundwater extraction rates are high enough to capture the plume, but not so high that they extract unnecessary amounts of groundwater.
- Provide evidence that the air stripper protectively removes all contaminants of concern to acceptable levels prior to discharge.

Two approaches are used to evaluate capture of contaminated groundwater in OU-1. The short-term assessment of capture relies on groundwater level measurements in selected wells and piezometers. The long-term assessment of capture relies on monitoring the concentrations of contaminants in nearby wells. These data are complementary. The hydraulic measurements are immediate but indirect evidence of capture, and the groundwater quality data are delayed but definitive proof of successful capture.

Nine wells downgradient of OU-1 (Table 11) are sampled to evaluate the changes in concentrations in the area of groundwater contamination that has been isolated from its source by the operation of the P&T system. These wells will be sampled quarterly for VOCs. This current monitoring network is smaller than the one initially used to monitor groundwater quality. Reducing the monitoring network is the result of decommissioning wells in the OU-1 area during excavation activities performed from 2007 through 2010. Data are analyzed to determine sustained downward trends in VOC concentrations as proof of successful capture of the plume. An upward trend might indicate that the extraction rates in the wells need to be increased to maintain the capture zone of the VOC-impacted groundwater.

Table 11. Groundwater Quality and Hydraulic Monitoring for OU-1

Location	VOC Analysis	Water Level Measurement	Location	VOC Analysis	Water Level Measurement
0305	X	X	0419	X	
0410	X	X	P015	X	
0416	X		P027	X	
0417	X		P031	X	
0418	X		P043		X

Static water level measurements will be performed quarterly in the three wells specified in Table 11. Initially, the head measurements were made using a network of 16 wells. It was later determined that hydraulic capture could be determined through the use of a small network of wells located on the compliance boundary. These wells are used to perform a three-point evaluation for determining the gradient immediately downgradient of the P&T system. An average inward gradient of 0.002 foot per foot (ft/ft) is necessary to demonstrate containment of the contaminated groundwater.

For assessment of the performance of the P&T system, samples of the plant influent and effluent are collected and analyzed for VOCs. Comparison of data from these two samples is used to determine removal efficiencies. Furthermore, the treated effluent chemistry is compared to Ohio EPA discharge standards to determine whether the water is suitable for discharge.

Influent and effluent samples are collected monthly during routine operation of the P&T system. More-frequent sampling may be required after system overhaul or modification. Ohio EPA may also adjust the frequency of sampling via its Authorization to Discharge for the P&T system. If sampling data indicate that concentrations remain stable, a less-frequent sampling schedule may be requested. Any changes to the monitoring frequency must be agreed to by the Core Team.

4.4.3.3 *Monitoring Contingencies*

If monitoring results indicate that the P&T system is not adequately controlling the groundwater in OU-1, the Core Team will evaluate more-active remediation approaches.

4.4.3.4 *Discontinuation of Monitoring*

The outlined sampling may be discontinued when it has been determined that the operation of the P&T system is not required as part of the remedial action. If VOC concentrations in groundwater still exceed the MCLs, groundwater may be addressed under a separate remedy, which would be agreed on by the Core Team, and a new monitoring program would likely be developed. Also, this program may be replaced by another monitoring program during periodic rebound testing. Any changes to or discontinuation of this monitoring must be agreed to by the Core Team.

4.4.3.5 *Triggers and Response Actions*

If a 0.002 ft/ft or greater inward gradient is created along the southern edge of the former landfill, hydraulic control is considered successful. If the inward gradient is significantly greater

than 0.002 ft/ft, then reducing the extraction rates of the wells should be considered to limit the amount of water treated through the system and reduce the unnecessary withdrawal of groundwater from the aquifer. If the inward gradient is less than the 0.002 ft/ft target value, then the extraction rates should be increased to ensure that capture is maintained.

Changes in VOC concentrations over time will be evaluated to determine successful capture of impacted groundwater. A sustained downward slope of concentration trends will be interpreted as proof of successful capture of the plume. A steady or upward slope will be interpreted as failure to capture the plume. In the case of successful capture, operation of the P&T system will continue. In the case of failure, the extraction rates in the well should be increased, even if the gradients suggest that the higher extraction rates are unnecessary.

5.0 Site Monitoring and Quality Assurance Requirements

Environmental programs at CERCLA sites involve many diverse activities that address complex environmental issues. If decision makers are to have confidence in the quality of environmental data used to support decisions, a structured process for quality must be in place. The ultimate success of an environmental program depends on the quality of the environmental data collected and used in decision-making, and this may depend significantly on the adequacy of the Quality Assurance Program Plan (QAPP) and its effective implementation.

A structured system that describes the policies and procedures for ensuring that work processes, products, or services satisfy stated expectations or specifications is called a quality system. DOE prepares QAPPs that incorporate quality assurance program requirements to address the specifications listed in the following requirements and guidance documents:

- DOE Order 414.1D, *Quality Assurance*
- Title 10 *Code of Federal Regulations* Part 830 (10 CFR 830), Subpart A, “Quality Assurance Requirements”
- American National Standards Institute (ANSI)/ASQC E4-2004, *Quality Systems for Environmental Data Technology Programs—Requirements with Guidance for Use* (ANSI 2004)
- International Organization for Standardization (ISO) 14001-2004, *Environmental management systems -- Requirements with guidance for use* (ISO 2004)
- *EPA Requirements for Quality Assurance Project Plans* (EPA 2001)
- *EPA Guidance for Quality Assurance Project Plans* (EPA QA/G-5) (EPA 2002)

As outlined in the FFA (EPA 1993), DOE shall use quality assurance, quality control, and chain-of-custody procedures in accordance with EPA guidance documents. EPA and Ohio EPA will be provided QAPPs for review and approval.

Quality assurance for environmental monitoring activities at the Mound site is divided into two separate categories. The first is programmatic or overall project quality assurance, and it relates to the incorporation and documentation of quality of all site activities. The second is specific to the environmental monitoring activities presented in this plan. This program is generally managed by the DOE contractor overseeing the O&M activities at the Mound site. Programmatic plans are developed for use under the contract with DOE. Site-specific requirements pertaining to quality assurance at the Mound site will be outlined in this section and incorporated into the contract quality assurance program.

5.1 Programmatic Quality Assurance

The Mound site is obligated to comply with DOE Order 414.1D, *Quality Assurance*, and 10 CFR 830, Subpart A, “Quality Assurance Requirements.” The quality assurance requirements are documented in accordance with DOE plans created to ensure that work performed at facilities that handle, process, or use radioactive materials is of documented quality.

These requirements include:

- Project organization
- A quality assurance program
- A document control system
- Identification and control of items
- Inspections
- Control of measuring and test equipment
- Handling, storing, and shipping quality-affecting items
- A program for implementing and verifying corrective action
- A program for maintaining quality assurance records
- A routine assessment program

5.2 Environmental Monitoring Program Quality Assurance

The quality of the environmental monitoring program is maintained and documented through a number of measures, including:

- Using standard operating procedures and methods
- Collecting, analyzing, and evaluating quality control samples
- Collecting, analyzing, and evaluating performance evaluation samples
- Using standard analytical methods
- Incorporating data management activities
- Performing data quality evaluations (data validation)
- Maintaining quality assurance records
- Evaluating analytical laboratory data
- Collecting samples
- Following programmatic procedures

The following sections outline specific requirements associated with environmental monitoring at the Mound site.

5.2.1 Standard Operating Procedures

Routine activities associated with environmental monitoring at the Mound site will be performed using standard operating procedures based on EPA and DOE guidance and standard industry practices. Controlled copies of procedures will be maintained in accordance with the document control requirements of DOE Order 414.1D and 10 CFR 830, Subpart A.

The Mound site has developed site-specific procedures for collecting samples of groundwater and seeps. Wells will be sampled using a low-flow, micro-purge sampling method. Some of the bedrock wells are not capable of supporting micro-purge sampling, and an alternate method will

be used. These procedures were developed with input from EPA and Ohio EPA and were approved for use by the Mound Core Team. The site-specific sample collection procedures for the Mound site are contained in Appendix G, “Mound Site Sample Collection Procedures.” These sampling requirements have also been incorporated into a Legacy Management Support controlled document that will be used to maintain consistency with previously collected data.

5.2.2 Quality Control Samples

Numerous quality controls samples are collected in support of environmental monitoring activities. Samples are also provided to the laboratory for internal laboratory quality control evaluation specific to the samples’ media (matrix spikes, matrix spike duplicates, and matrix duplicate samples). The following is a summary of the various quality control samples that will be collected to support the environmental monitoring activities at the site:

- **Field duplicate:** One collected per 20 samples
- **Equipment blank:** One collected per 20 samples
- **Matrix spike/matrix spike duplicate:** One collected per 20 samples
- **Matrix duplicate:** One collected per 20 samples
- **Trip blank:** One collected per cooler containing VOC samples

5.2.3 Analytical Methods

Analytes, along with the required analytical methods and detection limits, are listed in Table 12. The analytical methods used for groundwater and surface water analyses are typically from *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (EPA 1996) or *Methods for Chemical Analysis of Water and Wastes* (EPA 1983).

Table 12. Analytes and Required Analytical Methods and Detection Limits

Analyte	Analytical Method	RDL	Units
TCE	EPA SW-846 Method 8260B (Low Level)	1	µg/L
PCE			
<i>cis</i> -1,2-DCE			
<i>trans</i> -1,2-DCE			
VC			
Barium	EPA SW-846 Method 3005/6010B	20	µg/L
Sodium		20	µg/L
Chloride	EPA Method 300.0	10	mg/L
Ra-226	EPA Method 903.1 (Modified)	1	pCi/L
Ra-228	EPA Method 904.0 (Modified)	1	pCi/L
Tritium	EPA Method 906A	600	pCi/L

µg/L = micrograms per liter
 mg/L = milligrams per liter
 pCi/L = picocuries per liter
 RDL = required detection limit

5.2.4 Data Management and Data Quality Evaluation

The primary activities associated with data management and data quality are field documentation, sample management, data validation, data review, and database maintenance. These programs ensure that analytical data generated by laboratories for samples collected at the Mound site are reviewed and qualified before they are released for general use.

Data validation is the process of reviewing the sampling documentation and analytical data to ensure that adequate documentation was maintained and that results are qualified in compliance with established reporting requirements. Data generated from the groundwater remedies for the Mound site are validated. All monitoring data obtained from the MNA remedies will be validated.

DOE will maintain a database of historical and recent soil and water chemistry data obtained to monitor the progress of the remedies and to verify the final remediated status of the site. Groundwater and seep data from the O&M sampling programs are available at <http://gems.lm.doe.gov>. Final soil verification data are published in the close-out report for each remediated unit and are archived in the Administrative Record for the Mound site. The administrative record can be accessed at http://www.lm.doe.gov/CERCLA_home.aspx.

6.0 Reporting

6.1 Monthly

6.1.1 Environmental Restoration Monthly Report

Section XVI, "Reporting Requirements," of the FFA requires a monthly progress report to be sent to EPA and Ohio EPA by the 10th of each month. These reports are also described in Attachment II of the FFA, on pages 4 and 5.

The content of these reports was significantly reduced after the final CERCLA removal action was completed. At this time, the primary content of the monthly report is the OU-1 field demonstration groundwater monitoring results, the monthly FFA meeting notes, and the current site contact list. The quarterly or semiannual groundwater monitoring analysis for Phase I and Parcels 6, 7, and 8 is included when the data are available.

When the OU-1 groundwater monitoring plans for Parcel 9 are finalized after the current testing is completed and results are analyzed, DOE will request Core Team approval to include this information in the Mound Site Groundwater Monitoring Report described below. At that time, DOE will also request that the Environmental Restoration Monthly Report be published less frequently or discontinued.

6.2 Annual

6.2.1 IC Assessment Report

The IC Assessment Report, which documents the effectiveness of the sitewide ICs, is due to EPA, Ohio EPA, and ODH by June 13 of each year.

EPA, Ohio EPA, ODH, MDC, and the City of Miamisburg participate in the physical site walkdown and provide comments to DOE that are included in the report.

DOE will distribute paper copies and post the report on the LM website (<http://www.lm.doe.gov/mound/Sites.aspx>).

6.2.2 Mound Site Groundwater Monitoring Report

The Mound Site Groundwater Monitoring Report shall report the groundwater monitoring information for the Phase I Parcel and Parcels 6, 7, and 8, including analytical results, trend analyses, data interpretations, and operational changes during the previous calendar year. The report will identify any maintenance or repair activities associated with the monitoring wells. The report will document the progress of the natural attenuation remedy toward meeting the remedial objectives.

This report combines data previously reported separately and replaces the annual Phase I Groundwater Monitoring Report and the annual Parcels 6, 7, 8 Groundwater Monitoring Report.

As stated in Section 6.1.1, DOE will propose adding the OU-1 Parcel 9 groundwater monitoring results to this annual report when the monitoring plan has been finalized.

DOE will provide a draft of the report to the regulators by June 13 of each year, starting in 2014. The regulators will review the draft and provide comments. DOE will publish a final report when comments have been resolved.

DOE will post the final report on the LM website (<http://www.lm.doe.gov/mound/Sites.aspx>).

6.3 Five-Year Review Report

DOE prepares CERCLA Five-Year Review reports for the Mound site. The most recent Five-Year Review was completed in 2011. The next Five-Year Review will be conducted in 2016.

DOE will submit the draft CERCLA Five-Year Review report to EPA by July 28 of the year in which it is conducted to allow sufficient time for review, comment resolution, and EPA concurrence by September 28.

DOE will post the final report on the LM website (<http://www.lm.doe.gov/mound/Sites.aspx>).

7.0 Plan Review and Revisions

7.1 Review of the O&M Plan

DOE is responsible for preparing, revising, and implementing this O&M Plan. At a minimum, DOE will review this O&M Plan annually to ensure the following:

- Methods used to implement the remedies, including the ICs, remain effective.
- Environmental monitoring objectives are aligned with and reflect the groundwater data being collected.

The results of this review will be documented in the reports described in Section 6.0.

7.2 Revision of the O&M Plan

When necessary, DOE will make administrative changes to the plan, such as updating contact information, and will notify regulators and stakeholders.

DOE may request EPA and Ohio EPA concurrence to change monitoring programs—such as well locations, sampling frequencies, analytes sampled, or P&T operations—at any time. Other changes, resulting from CERCLA Five-Year Reviews, may be requested.

DOE and the regulators must agree on any significant changes to this plan. DOE, EPA, and Ohio EPA will determine the significance of the changes, using the criteria for determining if ROD changes are significant.

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8.0 References

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Appendix A

Sample Inspection Checklist Questions and *Mound Site Landowners – Institutional Controls Compliance Form*

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The following is an example checklist of items covered by the annual IC assessment.

Scope: IC Compliance for the Mound, Ohio, Site				
Preliminary inspections performed on: <dates>				
Physical inspection walkdown with regulators on:			Review led by:	
Participants in physical inspection walkdown:				
Summary and status of open issues or recommendations from previous annual IC assessment reports, follow-up inspections, Five-Year Reviews, etc.:				
	Origin	Issue/Recommendation	Corrected?	Current status
Describe major property improvements or physical changes since the previous IC assessment. Buildings demolished or erected, extensive landscaping, road or parking lots constructed or modified, and so on?				
List personnel interviewed during the physical walkdowns or during review of documentation.				
List site use requests for site activities not covered by industrial use. Include copies of requests and regulators' responses in IC report.				
List the city, township, county, and state records reviewed for the period of the review (e.g., street opening permits or construction permits, engineering drawings for improvements to property, aerial photographs, maps, City Planning Commission requests, Ohio Department of Natural Resources well logs).				
Based on the review of documents and interviews, were property improvements covered by the appropriate approvals? (For example, was construction permit approved by the City of Miamisburg?)				
Based on the review of MDC Reuse Plan Update, Miamisburg Zoning Map, and Miamisburg Land Use Plan, were any changes made to those documents that affect IC compliance?				
List the legal property documents reviewed to determine if ownership had changed (e.g., quitclaim deeds, environmental covenants, property transfer records).				
If property ownership changed, were the requirements for IC compliance included in the legal documents filed with Montgomery County? Was EPA notified of the property transfer as required in the quitclaim deed? Were there any reported issues relating to access by DOE, EPA, Ohio EPA, ODH, their agents, contractors, or employees to property to implement or enforce the ICs?				
During physical inspections, was there:				
• Evidence of unauthorized soil removal?				
• Evidence of unauthorized groundwater use?				
• Evidence of land use other than "industrial" (e.g., residential)?				
• Signage/markers in good repair (if applicable)?				
• Evidence of tampering on the groundwater monitoring wells or seeps? (Well maintenance is not an IC.)				
Is pump-and-treat system functioning as designed and in good repair?				
T Building areas with additional institutional controls:				
Have ICs been followed? See O&M Plan, Appendix B, "T Building Special IC Areas—Core Team Agreement, Position Paper, and Floor Plan Figure."				

Scope: IC Compliance for the Mound, Ohio, Site		
Based on physical inspections and records reviews, was there evidence of IC noncompliance?		
Miscellaneous items noted during review or physical walkdown:		
Note: Attach copies of completed <i>Mound Site Landowners – Institutional Control Compliance Forms</i> and <i>Site Use Request Forms</i> in the annual IC report.		
Recommendations from preliminary physical walkdowns:		
Recommendations from physical walkdown with regulators:		
Conclusion/comments:	Checklist prepared by:	Date:

Mound Site Landowners – Institutional Controls Compliance Form

The United States Department of Energy (DOE) remediated the Mound Site Property to the Environmental Protection Agency's (EPA's) risk-based standards for **industrial/commercial use only**. Because the site is not approved for unlimited use, the CERCLA remedy includes institutional controls (ICs) in the form of use restrictions.

ICs are administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. The DOE Office of Legacy Management (LM) is required to monitor for adherence to the ICs to assure compliance.

Please complete the following questionnaire for the period of May 1, 20xx through April 30, 20xx, and return to DOE LM within 30 days.

As identified in your quitclaim deed, the Mound Site ICs are designed to:

- 1) **Prohibit the removal of soil** from the original DOE Mound Plant Property boundaries, unless prior written approval from Ohio EPA and Ohio Department of Health (ODH) has been obtained.
 - 1a) Was soil removed from your property? Yes ___ No ___.
 - 1b) If yes, was the soil removed from the original DOE Mound Plant Property boundaries?
Yes ___ No ___.
 - 1c) If yes, please include a copy of the written approval.

- 2) **Prohibit the extraction or consumption of, exposure to, or the use in any way of the groundwater** underlying the premises, unless prior written approval from EPA and Ohio EPA has been obtained.
 - 2a) Was a new well installed on your property? Yes ___ No ___.
 - 2b) If yes, please include a copy of the written approval.

- 3) **Limit land use to industrial/commercial use only**. The Record of Decision for each parcel identifies land uses that will not be permitted, but the list is not all-inclusive. Parcels may not be used for any residential or farming activities, or any activities that could result in the chronic exposure of children less than 18 years of age to soil or groundwater from the premises. Restricted uses include, but are not limited to:
 - Single or multi-family dwellings or rental units.
 - Daycare facilities.
 - Schools or other educational facilities for children less than 18 years of age.
 - Community centers, playgrounds, or other recreational or religious facilities for children less than 18 years of age.
 - 3a) Did any of these restricted uses occur on your property within the past year? Yes ___ No ___.
 - 3b) If yes, please provide an explanation:

- 4) **Prohibit the removal of concrete floor material in specified rooms of T Building** to off-site locations without prior approval from EPA, OEPA, and ODH.
 - 4a) Do you occupy T-Building? Yes ___ No ___
 - 4b) If yes, did you remove any of the floor material in the specified T building rooms to an off-site location? Yes ___ No ___.
 - 4c) If yes, please provide approval documentation.

- 5) **Prohibit the penetration of concrete floors in specified rooms of T Building** without prior approval from EPA, OEPA, and ODH.
- 5a) Do you occupy T-Building? Yes ___ No ___
- 5b) Did you penetrate the concrete floors in the specified T building rooms? Yes ___ No ___.
- 5c) If yes, please provide approval documentation.
- 6) **Allow site access** to federal and state agencies and their contractors for sampling and monitoring.

As a property owner or company representative, I understand and comply with these ICs.

Printed Name	Signature	Date
Title	Company	

Please return the signed form within 30 days of receipt. If you have any questions, please contact Gwen Hooten, the LM Mound Site Manager, at gwen.hooten@lm.doe.gov or at (720) 880-4349.

Appendix B

T Building Special IC Areas—Core Team Agreement, Position Paper, and Floor Plan Figure

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The Mound Core Team
P.O. Box 66
Miamisburg, Ohio 45343-0066

6/29/09

As you know, The Proposed Plan for Parcels 6, 7 and 8 contains a restriction on the use of T Building which prohibits the penetration of concrete floors in rooms 50, 57 and 59 of T Building without prior approval from USEPA, OEPA, and ODH. The Miamisburg Mound Community Improvement Corporation (MMCIC) has asked the Core Team for a “blanket” approval to conduct limited activities in these rooms that should not result in an unacceptable risk to workers in the building.

The Core Team has evaluated this request and hereby grants approval for these activities provided they are conducted in accordance with the following policy guidelines:

1. Any driven penetration (e.g. concrete nails or explosive driven nails) of up to four inches in depth can be conducted without approval. As notification, the Core Team shall be provided a description of the activity, drawing of the room, and location of the proposed penetrations two weeks prior to physical activity.
2. Penetrations that involve removal of concrete shall be filled with concrete or steel. They shall not exceed four inches depth without approval of the Core Team. All penetrations of four inches or less requiring removal of concrete (drilling etc.) will require the submittal of a description of the activity, drawing of the room, and location of the proposed penetrations to the Core Team two weeks prior to the physical activity for notification purposes.
3. Any actions which remove or damage the concrete (including “driven penetrations”) shall be filled within 120 days of completion.
4. Routine T Building occupants should be excluded from the area of activity for the duration of the renovation.

For your information, the Core Team has prepared the attached Position Paper which the Core Team used in its evaluation. MMCIC can use this Position Paper and these policy guidelines in determining which future activities may be acceptable to the Core Team in rooms 50, 57 and 59 of T Building. In any event, MMCIC must request approval for any activity not on this approved list.

DOE/MEMP: Paul C. Lucas 7/14/09
Paul C. Lucas, Remedial Project Manager

USEPA: Timothy J. Fischer
Timothy J. Fischer, Remedial Project Manager

OEPA: Brian K. Nickel 7/14/09
Brian K. Nickel, Project Manager

Position Paper
T Building Cap Areas Renovation Guidelines

Background: T Building (Technical Building) is a massively constructed building on the Mound site with ten foot thick heavily reinforced concrete floors and similarly robust ceilings and walls. During the remediation of the T Building, the contractor encountered bulk contamination of the floor and footings in certain areas. Attempts to complete remediation of the contaminated floor and footer in the west end of room 50 and east end of rooms 57 and 59 were technically and economically difficult to justify. Following an assessment of the risks involved to the building's structural integrity if removal of contaminated concrete continued (attached), a decision was made to leave the contaminated concrete sub floor and footer in place, and to add a cap of color coded (red) concrete to provide a margin of safety from the residual contamination. The Department of Energy (DOE) currently owns the facility and wishes to transfer ownership to the Miamisburg Mound Community Improvement Corporation (MMCIC) for future development. To ensure the health and safety of future workers and occupants of T Building, a deed restriction will be placed on T Building limiting the disturbance of concrete in those areas with residual contamination. This paper outlines some of the technical basis allowing latitude in the disturbance of the concrete cap.

As stated above, the DOE and its contractors evaluated the residual contamination to ensure that future worker safety was protected. Specifically future worker doses were modeled to ensure that they would not reasonably be expected to receive an additional 15 mrem of equivalent dose due to occupation in T Building. Samples of the residual contamination were taken. As a conservative measure, the average of the five highest areas of contamination was used as input for the entire area. This data was input into the RESRAD Build dose evaluation code. This code is jointly developed by the DOE and the Nuclear Regulatory Commission (NRC) for just this type of situation.

Under this scenario, two types of workers were evaluated. The first type was an office worker who occupies the building for an entire year. Doses for this type of worker were previously calculated and found to fall within the 15 mrem per year guidelines. The calculations for this type of worker assume that no renovation is occurring while that worker occupies the area, i.e. the concrete cap is intact. A second worker, the renovation worker, was originally modeled using similar physical characteristics of the building, but differing inputs commensurate with the type of work. For example, the breathing rates and occupancy rates for the renovation worker differ from that of an office worker. The original calculations for the renovation worker in T Building were 1.86 mrem. Of that dose, 0.17 mrem is due to direct radiation from the residual contamination under the protective cap. The remainder is from low level residual contamination throughout T Building.

A review of the Final Status Surveys for T Building indicates that the thickness of the cap is nominally 11 inches. It was placed at this thickness to bring the floor elevation level with the adjoining hallway floor surfaces. Based on the very low dose rates cited above (0.17 mrem) for external exposure, there is excess concrete serving as a shielding material for the bulk contamination below. This would allow for temporary removal or penetration of some portion of this concrete to allow for anchoring of equipment and walls of future tenants. It should be noted,

that in order to maintain the integrity of the calculations for the office worker, any floor penetration should be repaired or steel anchors inserted (steel being a better shield than concrete).

Calculations: As implied, records for the original calculations were retrieved from storage. Although it was generally known that excess concrete was placed, there was no known calculation of how much excess existed and none was found during the review of the records. The RESRAD Build calculations that were found used all 11 inches of concrete as shielding to arrive at the 0.17 mrem cited earlier. In addition, due to the presence of the cap, it was assumed that none of the contamination contained in the subsurface concrete and footers becomes airborne.

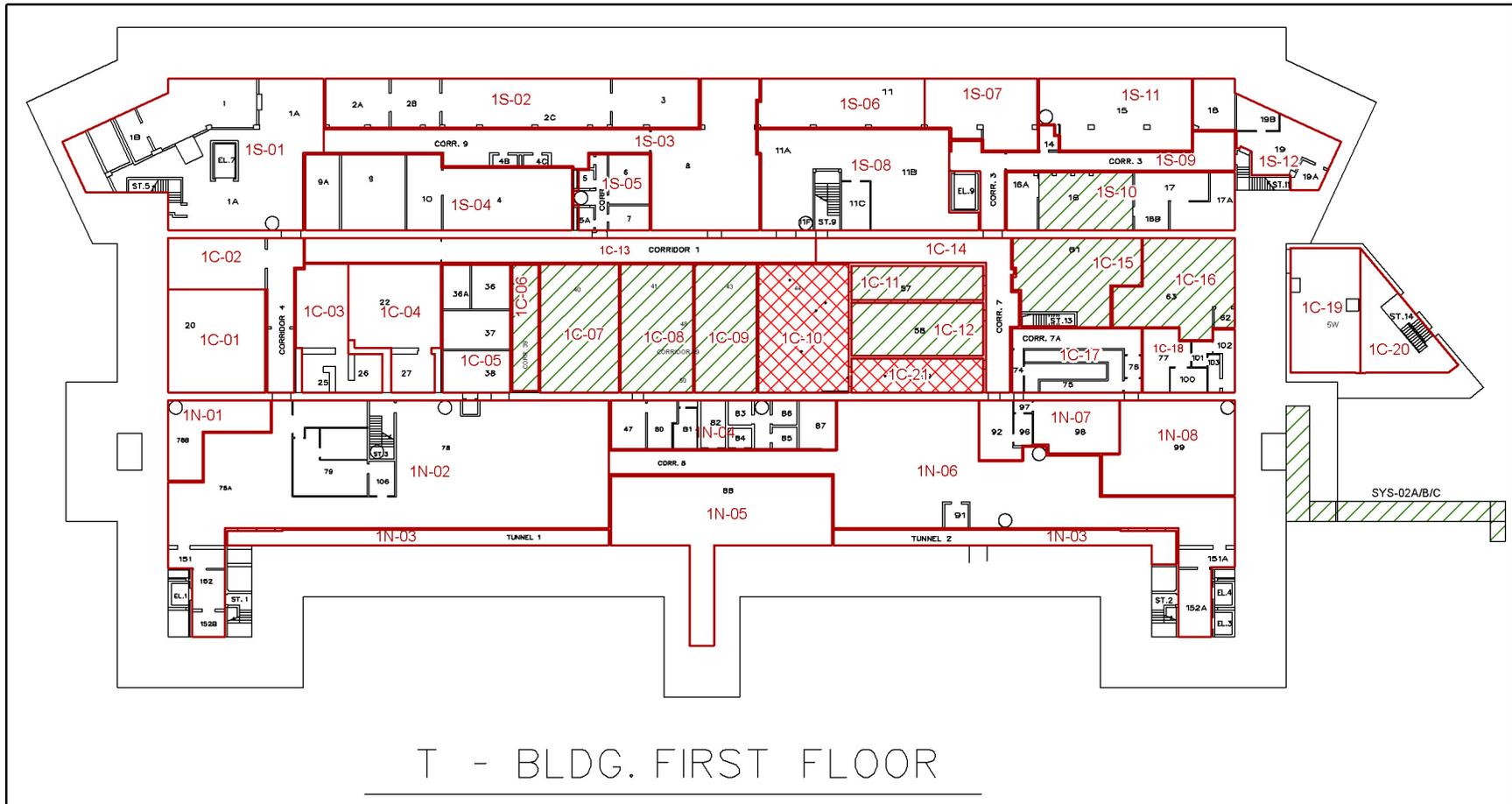
RESRAD Build continues to be maintained and updated by Argonne National Laboratory. The current version is slightly modified from the version originally used to model these doses. In order to ensure continuity, a baseline calculation was performed using the parameters from the original calculations. With only slight variations, they agreed. The original calculations indicated 1.70 mrem due to other building residual contamination. The new version calculated this same component to be 1.69 mrem. The total for both the cap area and the remainder of the building was 1.86 mrem for both versions, indicating strong agreement between the two.

In order to establish a margin of safety another calculation used the same input parameters except that the thickness of the cap was reduced by seven inches (to a nominal four inches total thickness). This further reduced thickness yielded an exposure to the renovation worker of 5.93 mrem. This remains protective of the renovation worker.

Recommendation: If the core team decides to allow penetration of the “red” concrete cap, it would be prudent to allow for some margin of safety to preclude accidental penetration to depths greater than currently analyzed. Note that the cap penetrations should be restored or replaced with anchors that provide similar or greater shielding capabilities. Recall also that one of the major assumptions is that the cap prevents the contamination below it from becoming airborne, so that the integrity of the cap must be maintained. Consideration must be given to the ability to ensure that recommendations are followed (i.e. penetrations are not greater than depth specified etc.). Also note that additional work could be carried out safely but may require additional analysis.

Policy Guidelines: As discussed, some guidelines should be established to administer penetration of the concrete in these areas. Such guidelines could be as follows:

1. Any driven penetration (e.g. concrete nails or explosive driven nails) of up to four inches in depth can be conducted without approval. As notification, the Core Team should be provided a description of the activity, drawing of the room, and location of the proposed penetrations two weeks prior to physical activity.
2. Penetrations that involve removal of concrete shall be filled with concrete or steel. They shall not exceed four inches depth without approval of the Core Team. All penetrations of four inches or less requiring removal of concrete (drilling etc.) will require the submittal of a description of the activity, drawing of the room, and location of the proposed penetrations to the Core Team two weeks prior to the physical activity for notification purposes.
3. Any actions which remove or damage the concrete (including “driven penetrations”) shall be filled within 120 days of completion.
4. Routine T Building occupants should be excluded from the area of activity for the duration of the renovation.

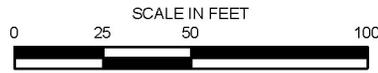


T - BLDG. FIRST FLOOR

Legend

Controlled Area

-  Removal Prohibition
-  Penetration Prohibition



Work Performed by
SNE Stoller Newport News Nuclear
 A Subsidiary of Huntington Ingalls Industries
 Under DOE Contract No. DE-EM0000415

**Mound Site
 T Building Controlled Areas**

DATE PREPARED:
May 1, 2015

FILENAME:
S0914100

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Appendix C

**ICs Guidance by Core Team (Including Soil Handling Protocol)
and *Site Use Request Form***

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The Mound Core Team
250 East Fifth Street, Suite 500
Cincinnati, Ohio 45202

9/12/12 Update

Purpose

The Core Team has prepared the following guidance for assisting with compliance with the existing Mound Site Institutional Controls (ICs). Mound Development Corporation (MDC), or any other future owners of Mound Site property, can use the following guidance and best management practices to maintain compliance with Mound Site ICs when conducting future site activities. It is important to note that this guidance is not intended to be all inclusive, and requirements, including this document, could be subject to change or updating based on site activities, future remedy changes or changes to existing environmental laws.

Background Summary

The former Mound Site Property was remediated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) with associated Records of Decision (RODs) requiring adherence to enforceable Institutional Controls (IC's).

Records of Decision

The following are the approved RODs for the Mound Site:

1. *Operable Unit 1 Record of Decision, Final, June 1995 (amended in 2011)*
2. *Record of Decision for Release Block D, Final February 1999*
3. *Record of Decision for Release Block H, Final June 1999*
4. *Parcel 3 Record of Decision, Final, August 2001*
5. *Parcel 4 Record of Decision, Final, February 2001*
6. *Phase 1 Record of Decision, Final, July 2003*
7. *Miami-Erie Canal, Record of Decision, Final September 2004 (OU-4)*
8. *Parcels 6, 7, and 8 Record of Decision, August 2009*
9. *Amendment of the Operable Unit 1 Record of Decision, August 2011*

Institutional Controls (ICs)

The Mound Site RODs, except for the OU4 Miami Erie Canal area, require ICs in the form of deed restrictions or an environmental covenant. The U.S. Department of Energy (DOE) is the lead agency with the responsibility to monitor, maintain and enforce the ICs. The U.S. Environmental Protection Agency (EPA), the Ohio Environmental Protection Agency (Ohio EPA), and the Ohio Department of Health (ODH) provide independent oversight and authority to approve requests regarding IC compliance. The ICs are designed to ensure:

- Maintenance of industrial or commercial land use and prohibition of residential land use.
- Prohibition against the use of groundwater without prior approval by EPA and Ohio EPA.
- Prohibition against the removal of soils from the Mound Site boundary (as of 1998) to offsite locations without prior approval. by EPA, Ohio EPA, and ODH.
- Allowing site access for federal and state agencies for the purpose of taking response actions, including sampling and monitoring.

The Parcels 6, 7 and 8 ROD includes the following additional institutional control requirements:

- Prohibition against the penetration of concrete floors in specified rooms in T Building without prior approval by EPA, Ohio EPA, and ODH.
- Prohibition against the removal of concrete floor material in specified rooms in T Building to offsite locations without prior approval by EPA, Ohio EPA, and ODH.

Details on the ICs listed above are included in the *Mound Site Operations and Maintenance Plan*, (O&M), Section 3, IC Management and Land Use Control. Additional information regarding each parcel and the associated ICs is included in the individual ROD for the specific parcel(s). These RODs are available on the DOE Office of Legacy Management (LM) website http://www.lm.doe.gov/CERCLA_Home.aspx.

Implementation – Best Management Practice

Implementation of the above IC language in contract and work planning documents may be accomplished as follows:

IC #1 - Maintenance of industrial or commercial land use and prohibition of residential land use.

Continue regular observation of site activities for signs of use other than industrial.

Allow no single or multi-family dwellings or rental units; day care facilities; schools or other educational facilities for children under 18 years of age; and no community centers, playgrounds or other recreational or religious facilities for children under 18 years of age are permitted on the property.



Fishing is considered recreational use and is prohibited. The photo above shows two individuals observed fishing in a Mound facility pond in Parcel 4. Note the “Recreational Use Prohibited” sign in the foreground. DOE, EPA, and Ohio EPA considered the exposure assumptions used to develop the industrial/commercial cleanup standards for the Mound site and concluded that occasional visits to the retention pond by area residents will not result in an unacceptable risk to the visitors.

However, if recreational activities are observed, MDC and future property owners will continue to monitor and discourage these unauthorized uses. Continued fishing or other recreational activities may result in more rigorous enforcement of ICs

IC#2 - Prohibition against the use of groundwater without prior approval from EPA and Ohio EPA.

No new wells may be installed on the Mound Site without prior approval from EPA and Ohio EPA. Groundwater use is prohibited.

IC#3 - Prohibition against the removal of soils from the Mound Site boundary (as of 1998) to offsite locations without prior approval. by EPA, Ohio EPA, and ODH.

One small area at the northeast corner of the site along Mound Road is excepted from this prohibition as described in the O&M Plan.

On typical plans that involve excavation, the following are examples of what should be considered for compliance with ICs:

- Earthwork/Demolition -- Due to deed restrictions, no soil shall be removed from the Mound Site without EPA and Ohio EPA approval. Excavated material may be used as fill in other areas on the project within the former Mound Site boundary. Spoil areas on the Mound Site shall be coordinated with the landowner. All materials removed from the site must be hauled per state and federal regulations.
- Soil -- No soil is allowed to leave the Mound Site without written approval of the EPA, Ohio EPA, and ODH. All excavated soil materials may be transported within the area of the Mound Site to an area or areas on site designated by the landowner.
- Concrete/Asphalt and Other Large Miscellaneous Debris – Prior to removal from the Mound Site, turn debris over and remove excess soils. *The following photo shows concrete removed during the construction of the Vanguard Blvd. extension. The removal of residual soil material on the concrete is viewed as being adequate for off site disposal.*



Trees – Prior to removal from the Mound Site, remove the majority of dirt from the root ball.

The photo below from the Vanguard Project shows a tree that was removed and cleared of excess soil for off property disposal.



IC#4 - Provide site access for federal and state agencies for the purpose of taking response actions, including sampling and monitoring:

All future work planned at the former Mound site should include a provision allowing for federal and state agency access to the site.

IC#5 - The ROD for Parcels 6, 7 and 8 includes the following additional institutional control requirements:

- Prohibition against the penetration of concrete floors in specified rooms in T Building without prior approval by EPA, Ohio EPA, and ODH.
- Prohibition against the removal of concrete floor material in specified rooms in T Building to offsite locations without prior approval by EPA, Ohio EPA, and ODH.

In a Position Paper, *T Building Special ICs Core Team Agreement and Position Paper*, dated June 29, 2009, the Core Team previously addressed compliance with restrictions against penetration of the floor in certain areas of T Building. Please refer to Sections 3.6.4 and 3.6.5 and Appendix B of the *Mound Site Operations and Maintenance Plan LMS/MND/S08406-0.0* for further details.

As mentioned above, this guidance is not intended to address every circumstance that may require compliance with ICs. For questions or further information, please contact the DOE Legacy Management at:

Grand Junction 24-Hour Monitored Security Telephone Numbers
(970) 248-6070 or (877) 695-5322
Website: <http://www.lm.doe.gov>

Gwendolyn Hooten, LM Mound Site Manager
U.S. Department of Energy/LM-20.1
10995 Hamilton-Cleves Highway
Harrison, OH 45030-9728
(513) 648-3148
Gwen.Hooten@lm.doe.gov

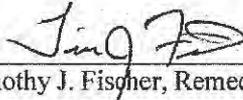
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Hooten**

Digitally signed by Gwen N Hooten
DN: c=us, o=u.s. government,
ou=department of energy,
ou=headquarters, ou=people,
cn=Gwen N Hooten
Date: 2012.09.13 09:52:33 -06'00'

Gwendolyn Hooten, Site Manager

USEPA:



9/13/12

Timothy J. Fischer, Remedial Project Manager

OEPA:

Brian Nickel

Digitally signed by Brian Nickel
DN: cn=Brian Nickel, o=Ohio EPA,
ou=DEPR/SWDO,
email=Brian.Nickel@epa.state.oh.us, c=US
Date: 2012.09.13 14:02:43 -04'00'

Brian K. Nickel, Project Manager

This is a formal request to the Environmental Protection Agency (EPA) and the Ohio EPA to provide written approval of an activity not generally covered by the institutional controls at the Mound Site. The institutional controls are part of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedies established in the Records of Decision for the Mound Site.

The Mound site institutional controls run with the land in the form of restrictions and covenants in quitclaim deeds or activity and use limitations in the Environmental Covenant: See the *Operations and Maintenance (O&M) Plan for the U.S. Department of Energy Mound Site, Miamisburg, Ohio*, for details on records of decision.

- Maintenance of industrial or commercial land use and prohibition against residential land use.
- Prohibition against the use of groundwater without prior written approval from EPA and Ohio EPA.
- Prohibition against the removal of soil from within the site boundary (as of 1998) to offsite locations without prior written approval from EPA, Ohio EPA, and ODH.
- Prohibition against the removal of concrete floor material in specified rooms of T Building to offsite locations without prior written approval from EPA, Ohio EPA, and ODH.
- Prohibition against the penetration of concrete floors in specified rooms of T Building locations without prior written approval from EPA, Ohio EPA, and ODH.
- Allowing site access for federal and state agencies for the purpose of sampling and monitoring.

Submitting Organization: _____
 Sponsoring Organization: _____
 Date Submitted: _____

1. The proposed activity:
2. Describe the proposed site activity. (Add supplemental documentation to this form if required)
3. Does the proposed activity violate any of the following restricted uses described in quitclaim deeds and the Environmental Covenant? Yes <input type="checkbox"/> No <input type="checkbox"/> <ul style="list-style-type: none"> • Will not use, or allow the use of, the Premises for any residential or farming activities, or any other activities which could result in the chronic exposure of children under eighteen years of age to soil or groundwater from the Premises. Restricted uses shall include, but not be limited to: <ol style="list-style-type: none"> 1) single or multifamily dwellings or rental units; 2) day care facilities; 3) schools or other educational facilities for children under eighteen years of age; 4) community centers, playgrounds, or other recreational or religious facilities for children under eighteen years of age • Will not extract, consume, expose, or use in any way the groundwater underlying the premises without the prior written approval of the EPA and the Ohio EPA. • Will not remove soil from the property except for exempted area in northeast corner Parcel H. without the prior written approval of the EPA and the Ohio EPA.
4. Is this a short-term or permanent activity? If short term, what duration do you anticipate? Specific date(s)?
5. When do you wish to begin this activity?

6. What ages of individuals would participate in this activity?
7. Estimate an average duration of time on site that these individuals participate in this activity? (hours per day x number of days per year; or hours per month; or total hours per year)
8. Does a risk assessment need to be performed? Attach a copy.

FOR REGULATOR USE ONLY
1. What is the basis for approval/disapproval?
2. What actions, precautions, notifications (if any) are required to mitigate risk?

Approvals:

Print name	Signature	Date
U.S. Environmental Protection Agency Representative		

Print name	Signature	Date
Ohio Environmental Protection Agency Representative		

Concurrence:

Print name	Signature	Date
U.S. Department of Energy Representative		

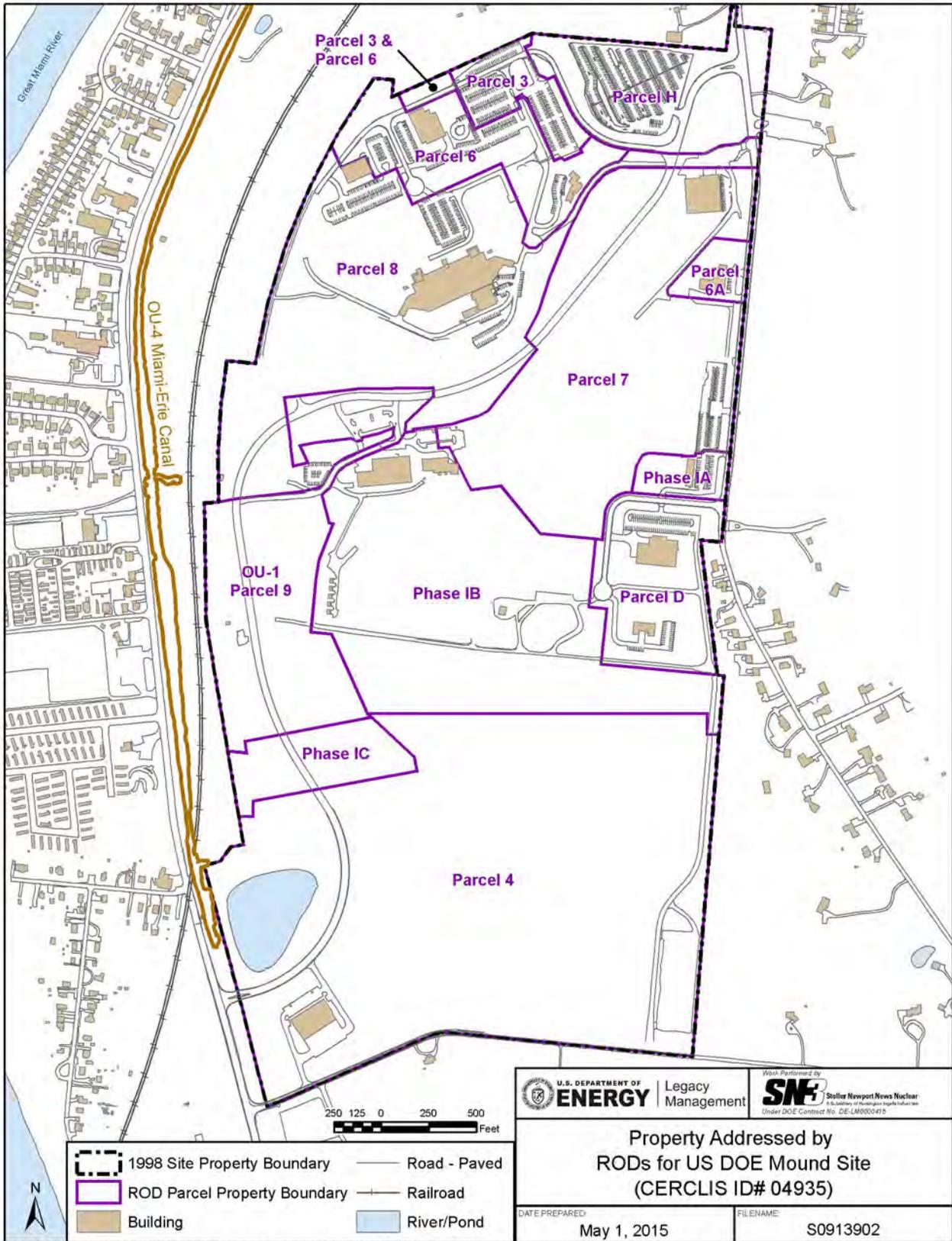
Appendix D

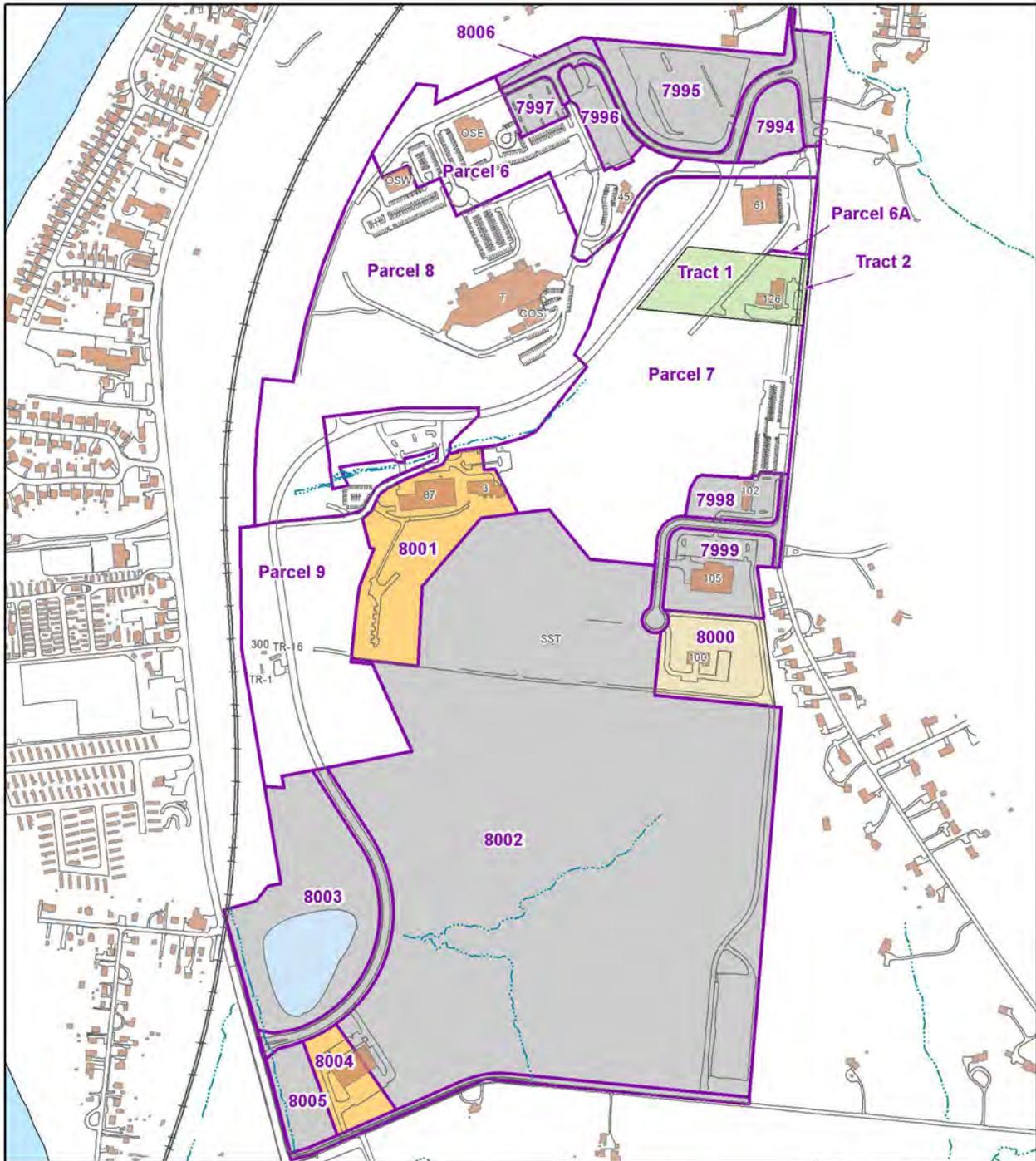
Legal Enforcement Instruments: Deeds, Property Descriptions, and Environmental Covenant

Appendix D Contents

- 1) **Site drawings**
 - **ROD parcel outlines**
 - **Current parcel boundaries and ownership**
- 2) **1982 Legal Description for 1998 Mound Plant Property (Area covered by Mound Site Institutional Controls)**
- 3) **Parcels D, H, 3, 4, and Phase I (A, B, and C) Quitclaim deed and Property Descriptions – EMCBC to MDC**
- 4) **Parcels D, H, 3, 4, and Phase I (A, B, and C) Quitclaim deed by for Lots Numbered 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8002, 8003, 8005, and 8006 - MDC to City of Miamisburg**
- 5) **Parcel D (portion of), Building 100, 790 Enterprise Court, Parcel 8000, County ID K46 01507 0031. Parcel transfer from City of Miamisburg to MDC and MDC sale to Dyrdek Group**
- 6) **Parcel 6A Quitclaim deed and Property Description – DOE HQ to EMCBC**
- 7) **Parcel 7 Quitclaim deed and Property Description – DOE HQ to EMCBC**
- 8) **Parcel 6B Quitclaim deed and Property Description – EMCBC to MDC**
- 9) **Tracts 1 and 2– MDC sale to BOI Solutions, Inc.**
- 10) **Parcels 6 and 8 Property Descriptions**
- 11) **Parcel 9 Property Description and Environmental Covenant**

Site drawings





<ul style="list-style-type: none"> Building River Pond Creek Road - Paved Railroad Parcel - DOE Parcel - Miamisburg Parcel - MDC Parcel - BOI Solutions Inc. Parcel - Dyrdek Group Inc. 	<p style="text-align: center;">N</p> <p style="text-align: center;">SCALE IN FEET</p> <p style="text-align: center;">400 200 0 400</p>	<p style="text-align: center;">U.S. DEPARTMENT OF ENERGY Legacy Management</p> <p style="text-align: center;">Work Performed by SNE Steller Neutron News Nuclear <small>A Subsidiary of Huntington Ingalls Industries Under DOE Contract No. DE-EM0000415</small></p> <p style="text-align: center;">Mound Site Current Parcels, Buildings, and Ownership</p>
<p>DATE PREPARED February 5, 2015</p>		<p>FILENAME S1241301</p>

**1982 Legal Description for 1998 Mound Plant Property
(Area covered by Mound Site Institutional Controls)**

LEGAL DESCRIPTION

Situate in the State of Ohio, County of Montgomery, in the City of Miamisburg, being a part of section 30 and fractional sections 35 and 36, Town 2, Range 5, Miami Rivers Survey (M.R.S.), and being all of city lots numbered 2259, 2290, 4777, 4778, 4779, 6127 and 6128, and part of out lot 6 lying within the corporation limits of the City of Miamisburg, being all of the tracts of land conveyed to the United States of America by instruments as recorded in Deed Book 1214 pages 10, 12, 15, and 17; Deed Book 1215, page 347, Deed Book 1214 page 248, Deed Book 1246 page 45, Deed Book 1258 page 74, Deed Book 1258 page 56, Deed Book 1256 page 179, Micro-Fiche 81-376A01, and Micro-Fiche 81-323A11 of the Deed Records of said County; and being more particularly bounded and described with bearings referenced to the Ohio State Plane Coordinate System, South Zone, as follows:

Beginning at a spike found (0.5' deep) and reset in concrete, being the Southwest corner of said section 30 and the Southeast corner of fractional section 36, said point being in the center of Benner Road (40 feet R/W) and being referenced North 84° 28' 10" West 3102.92 feet from a spike found (0.5' deep) at the intersection of the centerline of Mound Road (60 feet R/W) with the centerline of said Benner Road in said Miami Township, and being the true point of beginning for the land herein described; thence along the centerline of Benner road South 66° 32' 35" West 958.79 feet to a railroad spike found and reset in concrete; thence continuing along said centerline of Benner Road South 73° 18' 20" West 31.01 feet to a railroad spike found and reset in concrete, being a point in the East right-of-way line of the abandoned Miami and Erie Canal; thence leaving Benner Road and with said East right-of-way line for the following four courses: North 14° 05' 35" West 62.14 feet to an iron pin found; thence north 14° 11' 50" West 440.75 feet to an iron pin found; thence North 14° 47' 30" West 259.93 feet to an iron pin found; thence North 14° 45' 50" West 546.20 feet to an iron pin found and reset in concrete in the East right-of way line of the Consolidated Railway Corporation; thence with said Conrail right-of-way line for the following 10 courses: North 75° 00' 55" East 85.04 feet to an iron pin found and reset in concrete; thence North 37° 16' 35" East 96.65 feet to an iron pin set in concrete; thence North 80° 28' 05" East 66.00 feet to an iron pin found and reset in concrete; thence North 09° 31' 55" West 499.80 feet to a concrete monument found; thence North 09° 26' 35" West 696.85 feet to an iron pin set in concrete; thence North 0° 48' 25" West 616.81 feet to a concrete monument found; thence North 84° 43' 35" East 75.08 feet to an iron pin set in concrete; thence along the arc of a curve to the right having a radius of 3669.83 feet, being concentric with and 150 feet distant, measured Eastwardly at right angles, from the centerline between main tracks of said railroad; for a distance of 744.94 feet to a concrete monument set, the chord of said curve bears North 03° 17' 05" East 743.66 feet; thence South 84° 39' 20" East 150.34 feet to a concrete monument set; thence along the arc of a curve to the right having a radius of 3519.83 feet, being concentric with and 300 feet distant, measured Eastwardly at right angles, from the centerline between main tracks of said railroad, for a distance of 1640.97 feet to a

concrete monument found, the chord of said curve bears North 22° 36' 55" East 1626.15 feet; thence leaving said railroad right-of-way line South 84° 14' 50" East 102.31 feet to a concrete monument found; thence South 05° 37' 45" West 90.03 feet to a concrete monument found; thence North 65° 35' 50" East 809.36 feet to an iron pipe found and being referenced South 05° 47' 45" West 130.89 feet from a concrete monument found at the Northwest corner of said section 30 and the Northeast corner of fractional section 36; thence South 85° 04' 55" East 1023.90 feet to a concrete monument found; thence North 06° 53' 15" East 231.00 feet to a concrete monument found on the West right-of-way line of Mound Road (60 feet R/W); thence South 84° 38' 15" East 30.00 feet to an iron pin set in the centerline of Mound Road; thence South 06° 53' 15" West 100.00 feet to an iron pin set; thence South 84° 38' 15" East 193.40 feet to a concrete monument set; thence along the centerline of Mound Road South 05° 32' 40" West 2709.36 feet to a railroad spike found; thence leaving said Mound Road North 85° 28' 20" West 111.00 feet to an iron pipe found; thence South 07° 06' 55" East 714.44 feet to a concrete monument found; thence South 83° 59' 35" East 34.19 feet to a concrete monument found; thence South 04° 42' 45" West 2010.06 feet to a railroad spike found (0.2' deep) and reset in concrete located in the center of Benner Road; thence along the centerline of Benner Road North 84° 29' 45" West 1333.66 feet to the true point of beginning containing 305.116 acres more or less, and subject to all legal highways and easements of record.

(This description based upon an actual field survey of the described land conducted May, 1982. The description was prepared by Lockwood, Jones & Beals, Dayton, Ohio)

**Parcels D, H, 3, 4, Phase I (A, B, and C)
Quitclaim Deed and Property Descriptions
From EMCBC to MDC**

Div/2

K46-5-1-13

K46-15-7-1,2

Div/13 K46-5-3-29

Div/2 K46-5-1-14

Div/11 K46-11-9-9

QUIT CLAIM DEED

134

TRANSFER
12:01 PM
FEBRUARY 24, 2009
KARL L. KEITH, COUNTY AUDITOR
Conv/Tran #: 02662 \$.00

The UNITED STATES OF AMERICA, acting by and through the Secretary of the Department of Energy (hereinafter sometimes called "Grantor"), under and pursuant to the authority of the Atomic Energy Act of 1954, Section 161 (g) (42U.S.C. §2201(g)), in consideration of the covenants contained herein, and other good and valuable consideration, duly paid by the Miamisburg Mound Community Improvement Corporation, a not-for-Profit corporation subsisting under the laws of Ohio and recognized by the Secretary of Energy as the agent for the community wherein the former Mound Facility is located (hereinafter sometimes called "Grantee"), the receipt of which is hereby acknowledged, hereby QUIT CLAIMS unto Grantee its successors and assigns, subject to the reservations, covenants, and conditions hereinafter set forth, all of its right, title and interest, together with all improvements thereon and appurtenances thereto, in the following described real property (hereinafter the "Premises), commonly referred to as Phase 1 – Parcels 1A, 1B and 1C, Parcel D, Parcel H, Parcel 3 and Parcel 4:

K46-11-9-2,10

Phase 1, Parcel 1 A:

Situated in the Northwest Quarter of Section 30, Town 2, Range 5, M.R.S., City of Miamisburg, County of Montgomery, State of Ohio, being part of a 87.28 acre tract conveyed to the United States of America, as recorded in Deed Book volume 1214, Page 12 of the Deed Records of Montgomery County, Ohio, said 87.28 acre tract being comprised of a 59.75 acre tract, also a 19.40 acre tract, also a 9.97 acre tract, also a 0.78 acre tract and a 0.78 acre tract all known as Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, being a new division of 2.542 acres from said 87.28 acre tract and being more full bounded and described in **Exhibit A** attached hereto and incorporated herein.

Phase 1, Parcel 1 B:

Situate in Section 30 and 36, Town 2, Range 5, M.Rs., City of Miamisburg, County of Montgomery, State of Ohio, being part of a 87.28 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1214, Page 12 of the Deed Records of Montgomery County, Ohio, said 87.28 acre tract being comprised of a 59.75 acre tract, also a 19.40 acre tract, also a 9.97 acre tract, also a 0.78 acre tract and a 0.78 acre tract all known as Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, also being part of a 79.74 acre tract conveyed to the United States of America, as recorded in Microfiche No. 81-376A01 of the Deed Records of Montgomery County, Ohio, said 79.74 acre tract being comprised of a 24.197 acre tract and known as Lot Numbered 6128 of the consecutive numbered lots of the City of Miamisburg, also a 35.50 acre tract known as Lot Numbered 6127 of the consecutive numbered lots of the City of Miamisburg, and a 24.24 acre tract known as Lot Numbered 4777 of the consecutive numbered lots of the City of Miamisburg, also being part of a 20.46 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1215, Page 347 and part of a 17.58 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1214, Page 248, all of the Deed Records of Montgomery County, Ohio, said 20.46 acre tract and 17.58 acre tract being known as Lot Numbered 2290 of the consecutive numbered lots of the City of Miamisburg, being a new division of 42.882 acres from said 87.28 acre tract, 79.74 acre tract, 20.46 acre tract and 17.58 acre tract and being more fully bounded and described in **Exhibit B** attached hereto and incorporated herein:

090182

Phase 1, Parcel 1 C:

Situate in Section 36, Town 2, Range 5, MRs., City of Miamisburg, County of Montgomery, State of Ohio, being part of a 79.74 acre tract conveyed to the United States of America, as recorded in Microfiche No. 81-376A01 of the Deed Records of Montgomery County, Ohio, said 79.74 acre tract being comprised of a 24.197 acre tract and known as Lot Numbered 6128 of the consecutive numbered lots of the City of Miamisburg, also a 35.50 acre tract known as Lot Numbered 6127 of the consecutive numbered lots of the City of Miamisburg, and a 24.24 acre tract known as Lot Numbered 4777 of the consecutive numbered lots of the City of Miamisburg, also being part of a 42.56 acre tract conveyed to the United States of America, as recorded in Microfiche No. 81-323A11 of the Deed Records of Montgomery County, Ohio, said 42.56 acre tract being comprised of a 46.313 acre tract known as Lot Numbered 4778 of the consecutive numbered lots of the City of Miamisburg, said 42.56 acre tract being all the remainder of an 80 acre tract as conveyed from Ray C. Dunaway and Thelma Mae Dunaway to Oak Knoll Development and Investment Co., Inc., as recorded in Microfiche No. 71-513B06 of the Deed Records of Montgomery County, Ohio, being a new division of 6.568 acres from said 79.74 acre tract and 42.56 acre tract and being more fully described in **Exhibit C** attached hereto and incorporated herein.

Parcel D:

Situate in the State of Ohio, County of Montgomery, City of Miamisburg and being part of Section 30, Fractional Town 2, Range 5 M.R.S. and being the tract of land previously transferred by the Grantor to Grantee by Quit Claim Deed recorded at Microfiche 99-0852B05 of the Montgomery County, Ohio Recorder's Deed Records and being more fully described in **Exhibit D** attached hereto and incorporated herein.

Parcel H:

Situate in the State of Ohio, County of Montgomery, City of Miamisburg and being part of Section 30 & 36, Fractional Town 2, Range 5 M.R.S. also part of Section 25, Fractional Town 1, Range 6 MRS and being the tract of land previously transferred by Grantor to Grantee by Quit Claim Deed recorded at Microfiche 99-0852 B11 of the Montgomery County, Ohio Deed Records and being more fully described in **Exhibit E** attached hereto and incorporated herein.

Parcel 4:

Situate in the Southwest Quarter of Section 30, Town 2, Range 5, M.R.S., the Southeast Quarter of Section 36, Town 2, Range 5, M.R.S., Northeast Quarter Section 36, Town 2, Range 5, M.R.S., City of Miamisburg, County of Montgomery, State of Ohio, and being the tract of land previously transferred by Grantor to Grantee by Quit Claim Deed recorded at Instrument Number 02-128007 of the Montgomery County, Ohio Official Records and being more fully described in **Exhibit F** attached hereto and incorporated herein.

Parcel 3:

Situate in the Northwest Quarter of Section 30 and the Northeast Quarter of Fractional Section 36, Town 2, Range 5, M.R.S., City of Miamisburg, County of Montgomery, State of Ohio, being the tract of land previously transferred by Grantor to Grantee by Quit Claim Deed recorded at Instrument Number 02-128206 of the Montgomery County, Ohio Official Records

and being more fully described in **Exhibit G** attached hereto and incorporated herein.

EXCEPTING THEREFROM an easement hereby granted, upon or across the Premises, in connection with the covenants of Grantor and/or Grantee in paragraphs numbered 1.1-1.3, 3.2 and 3.3 of this Deed and as otherwise needed for purposes of any response action as defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, including but not limited to, environmental investigation or remedial action on the Premises or on property in the vicinity thereof, including the right of access to, and use of, to the extent permitted by applicable law, utilities at reasonable cost, to the State of Ohio, acting by and through the Director of the Ohio Environmental Protection Agency (OEPA) and the Ohio Department of Health (ODH), their successors and assigns. Grantee understands that any such response action will be conducted in a manner so as to attempt to minimize interfering with the ordinary and reasonable use of the Premises;

RESERVING unto Grantor, the United States of America, acting by and through the U.S. Department of Energy (DOE) and/or the U.S. Environmental Protection Agency (USEPA), their successors and assigns, an easement to, upon or across the Premises in connection with the covenants of Grantor and/or Grantee in paragraphs numbered 1.1-1.3, 3.2 and 3.3 of this Deed and as otherwise needed for purposes of any response action as defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, including but not limited to, environmental investigation or remedial action on the Premises or on property in the vicinity thereof, including the right of access to, and use of, to the extent permitted by applicable law, utilities at reasonable cost to Grantor. Grantee understands that any such response action will be conducted in a manner so as to attempt to minimize interfering with the ordinary and reasonable use of the Premises.

In connection with this conveyance, Grantor shall hold harmless and indemnify Grantee and any successor, assignee, transferee, lender or lessee of a person or entity that acquires ownership or control of any portion of the Premises, according to the provisions of 50 United States Code (USC) § 2811(b) and as limited by the scope, purposes and conditions contained in 50 USC § 2811 against any claim for injury to a person or property that results from the release or threatened release of a hazardous substance or pollutant or contaminant as a result of Department of Energy activities on the area commonly known as the former Mound Facility including but not limited to the Premises. This covenant shall run with the land.

This Deed and conveyance is made and accepted without warranty of any kind, either expressed or implied, except for the indemnity of 50 USC § 2811(b) and the warranty in paragraph 3.3 of this Deed, and is expressly made under and subject to all reservations, restrictions, rights, covenants, easements, licenses, and permits, whether or not of public record, to the extent that the same affect the Premises.

1. The parties hereto intend the following restrictions and covenants to run with the land and to be binding upon the Grantee and its successors, transferees, and assigns or any other person acquiring an interest in the Premises, for the benefit of Grantor, USEPA and the State of Ohio, acting by and through the Director of OEPA or ODH, their successors and assigns.

1.1(a) As to that part of the Premises commonly known as Phase I, Parcels 1A, 1B and 1C, Grantee covenants that any soil from that part of the Premises shall not be placed on any property outside the boundaries of that described in instruments

recorded at Deed Book 1214, pages 10, 12, 15, 17 and 248; Deed Book 1215, page 347; Deed Book 1246, page 45; Deed Book 1258, pages 56 and 74; Deed Book 1256, page 179; Micro-Fiche 81-376A01; and Micro-Fiche 81-323A11 of the Deed Records of Montgomery County, Ohio (and as illustrated in the Phase I Parcel Environmental Summary, Notices of Hazardous Substances, Mound Plant, Miamisburg, Ohio dated December 2003) without prior written approval from ODH, OEPA, and USEPA, or successor agencies.

- 1.1(b) As to that part of the Premises commonly known as Parcel D, excepting those soils in the area approximately 40 feet wide and 218.17 feet long bounded on the east by the centerline of Mound Road as described in Exhibit D, Grantee covenants that any soil from that part of the Premises shall not be placed on any property outside the boundaries of that described in instruments recorded at Deed Book 1214, pages 10, 12, 15, 17 and 248; Deed Book 1215, page 347; Deed Book 1246, page 45; Deed Book 1258, pages 56 and 74; Deed Book 1215, page 347; Deed Book 1256, page 179; Micro-Fiche 81-376A01; and Micro-Fiche 81-323A11 of the Deed Records of Montgomery County, Ohio (and as illustrated in the CERCLA 120(h) Summary, Notices of Hazardous Substances Release Block D, Mound Plant, Miamisburg, Ohio dated January, 1999) without prior written approval from the Ohio Department of Health (ODH), or a successor agency.
- 1.1(c) As to that part of the Premises commonly known as Parcel H, excepting those soils contained within an area bounded as follows: Commencing at an iron pin found on the southerly projection of the centerline of Mound Road, said point also being the northeast corner of a 164.13 Acre tract of land as described in Deed Book 1246, Page 45 of the Deed Records of Montgomery County and being the **TRUE POINT OF BEGINNING**, thence South 06°38'48" West, 100.00 feet to an iron pin found; thence South 84°42'56" East, 193.40 feet to an iron pin found; then South 05°33'53" West, 571.98 feet to a point on the centerline of Mound Road; thence due West, 72.93 feet to a point; thence South 51°28'10" West, 9.97 feet to a point on the proposed westerly right-of-way of Mound Road; thence along the proposed westerly right-of-way of Mound Road, North 06°34'20" West, 299.85 feet to a point; thence North 04°05'41" West, 185.03 feet to a point; thence along the proposed westerly right-of-way of Mound Road, North 06°34'20" West, 75.76 feet to a point; thence along the proposed westerly right-of-way of Mound Road, on a curve to the right for a distance of 130.93 feet with a radius of 923.62 feet and a central angle of 08°07'19" and a chord distance of 130.82 feet and a chord bearing of North 02°30'42" West to a point; thence along the existing westerly right-of-way of Mound Road, on a non-tangent curve to the right for a distance of 6.10 feet with a radius of 360.00 feet and a central angle of 00°58'18" and a chord distance of 6.10 feet and a chord bearing of North 12°20'00" West to a point; thence South 89°52'28" East, 18.27 feet to the **POINT OF BEGINNING**, containing 6.604 acres more or less, Grantee covenants that any soil from that part of the Premises shall not be placed on any property outside the boundaries of that described in instruments recorded at Deed Book 1214, pages 10, 12, 15, 17 and 248; Deed Book 1215, page 347; Deed Book 1246, page 45; Deed Book 1258, pages 56 and 74; Deed Book 1256, page 179; Micro-Fiche 81-376A01; and Micro-Fiche 81-323A11 of the Deed Records of Montgomery

County, Ohio (and as illustrated in the CERCLA 120(h) Summary, Notices of Hazardous Substances Release Block H, Mound Plant, Miamisburg, Ohio dated July 26, 1999) without prior written approval from the Ohio Department of Health (ODH), or a successor agency.

1.1(d) As to that part of the Premises commonly known as Parcel 3, Grantee covenants that any soil from that part of the Premises shall not be placed on any property outside the boundaries of that described in instruments recorded at Deed Book 1214, pages 10, 12, 15, 17 and 248; Deed Book 1215, page 347; Deed Book 1246, page 45; Deed Book 1258, pages 56 and 74; Deed Book 1215, page 347; Deed Book 1256, page 179; Micro-Fiche 81-376A01; and Micro-Fiche 81-323A11 of the Deed Records of Montgomery County, Ohio (and as illustrated in the CERCLA 120(h) Summary, Notices of Hazardous Substances Release Parcel 3, Mound Plant, Miamisburg, Ohio dated September, 2001) without prior written approval from the Ohio Department of Health (ODH), or a successor agency.

1.1(e) As to that part of the Premises commonly known as Parcel 4, excepting those soils in the area 35 feet wide and 2,354.38 feet long bounded on the south by the centerline of Benner Road as described in Exhibit F, Grantee covenants that any soil from that part of the Premises shall not be placed on any property outside the boundaries of that described in instruments recorded at Deed Book 1214, pages 10, 12, 15, 17 and 248; Deed Book 1215, page 347; Deed Book 1246, page 45; Deed Book 1258, pages 56 and 74; Deed Book 1215, page 347; Deed Book 1256, page 179; Micro-Fiche 81-376A01; and Micro-Fiche 81-323A11 of the Deed Records of Montgomery County, Ohio (and as illustrated in the CERCLA 120(h) Summary, Notices of Hazardous Substances Release Parcel 4, Mound Plant, Miamisburg, Ohio dated March 21, 2001) without prior written approval from the Ohio Department of Health (ODH), or a successor agency.

1.2 Grantee covenants not to use, or allow the use of the Premises for any residential or farming activities, or any other activities which could result in the chronic exposure of children under eighteen years of age to soil or groundwater from the Premises. Restricted uses shall include, but not be limited to:

- (1) single or multi family dwellings or rental units;
- (2) day care facilities;
- (3) schools or other educational facilities for children under eighteen years of age; and
- (4) community centers, playgrounds, or other recreational or religious facilities for children under eighteen years of age.

The United States Department of Energy or its successor agency shall be contacted to resolve any questions which may arise as to whether a particular activity would be considered a restricted use.

1.3 Grantee covenants not to extract, consume, expose, or use in any way the groundwater underlying the premises without the prior written approval of the United States Environmental Protection Agency (Region V) and the OEPA.

2. The Grantor hereby grants to the State of Ohio and reserves and retains for itself, its successors and assigns an irrevocable, permanent, and continuing right to enforce the covenants of this Quitclaim Deed through proceedings at law or in equity, including resort to an action for specific performance, as against and at the expense of Grantee, its successors and assigns, including reasonable legal fees, and to prevent a violation of, or recover damages from a breach of, these covenants, or both. Any delay or forbearance in enforcement of said restrictions and covenants shall not be deemed to be a waiver thereof.
3. Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. §9620(h)(3)), the following is notice of hazardous substances, the description of any remedial action taken, and a covenant concerning the Premises.

3.1 **Notice of Hazardous Substance:** Grantor has made a complete search of its files and records concerning the Premises. Those records indicate that the hazardous substances listed in **Exhibit H** attached hereto and made a part hereof, have been stored for one year or more or disposed of on the Premises and Exhibit B also shows the dates that such storage/disposal took place.

3.2 **Description of Remedial Action Taken:** Institutional Controls are established. The Institutional Controls are set forth as covenants in Sections 1.1, 1.2, and 1.3 of this Deed.

3.3 **Covenant:** Grantor covenants and warrants that all remedial action necessary for the protection of human health and the environment with respect to any hazardous substances remaining on the property has been taken, and any additional remedial action found to be necessary after the date of this Deed regarding hazardous substances existing prior to the date of this Deed shall be conducted by Grantor, provided, however, that the foregoing covenant shall not apply in any case in which the presence of hazardous substances on the property is due to the activities of Grantee, its successors, assigns, employees, invitees, or any other person subject to Grantee's control or direction.

4. Unless otherwise specified, all the covenants, conditions, and restrictions to this Deed shall be binding upon, and shall inure to the benefit of the assigns of Grantor and the successors and assigns of Grantee.

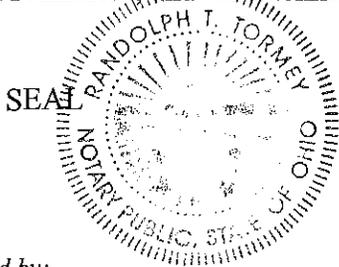
IN WITNESS WHEREOF, the United States of America, acting by and through its Secretary of the Department of Energy, has caused these presents to be executed this 11th day of February, 2009.

UNITED STATES OF AMERICA


Environmental Management Consolidated Business Center

State of Ohio)
County of Montgomery) SS.

Before me, a Notary Public in and for said State and County, appeared this 11 day of February, 2009, Bud Sokolovich, who acknowledged that he is the Real Property Officer of the Environmental Management Consolidated Business Center for the United States Department of Energy, with full authority to execute the foregoing on behalf of the United States of America, and who acknowledged the above to be his signature and his free act and deed.




Notary Public

Prepared by:
Randolph T. Tormey, Esq.
250 E. 5th Street, Ste 500
Cincinnati, OH 45202
(513) 246-0583
OH Atty. Regis. 0007803

RANDOLPH T. TORMEY
NOTARY PUBLIC-STATE OF OHIO
My Commission Has No Expiration Date
(O.R.C. Section 147.03)

DIV 11

Exhibit "A"
DESCRIPTION OF
2.542 Acres
Parcel IA

K46-5-1-13

located in
Section 30, Town 2, Range 5, M.Rs.
City of Miamisburg, Montgomery County, Ohio

Situate in the Northwest Quarter of Section 30, Town 2, Range 5, M.Rs., City of Miamisburg, County of Montgomery, State of Ohio, *being part of a 87.28 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1214, Page 12* of the Deed Records of Montgomery County, Ohio, said 87.28 acre tract being comprised of a 59.75 acre tract, also a 19.40 acre tract, also a 9.97 acre tract, also a 0.78 acre tract and a 0.78 acre tract all known as Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, *being a new division of 2.542 acres from said 87.28 acre tract* and being more fully bounded and described as follows:

Commencing at a "DOE" concrete monument found, said monument being the southwest corner of the Miami Mound Plat as recorded in Record Plat Book Volume 94, Page 34 of the Plat Records of Montgomery County, Ohio, said monument being the southeast corner of a 12.429 acre tract, known as Part lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, Ohio, also known as Parcel "D" of the Mound Complex, conveyed to the Miamisburg Mound Community Improvement Corporation, as recorded in Deed Microfiche No. 99-0852B05 of the Deed Records of Montgomery County, Ohio, said monument lying in the north line of a 79.74 acre tract, known as City Lot Numbered 6128 of the consecutive numbered lots of the City of Miamisburg, Ohio, conveyed to the United States of America, as recorded in Microfiche No. 81-0376A01 of the Deed Records of Montgomery County, Ohio, reference a "DOE" concrete monument found, South 83° 59' 35" East, 34.07 feet, said monument being the northeast corner of said United States of America 79.74 acre tract; thence with the easterly line of said Miamisburg Mound Community Improvement Corp. 12.429 acre tract, the westerly line of the Miami Mound Plat, the westerly line of a 0.7 acre tract conveyed to Melissa A. Wilson, as recorded in Deed Microfiche No. 89-0125D01, the westerly line of a 0.26 acre tract conveyed to Betty J. Eckhart, as recorded in Deed Microfiche No. 98-0834C09, and the westerly line of a 0.78 acre tract conveyed to Randall and Rita Hilgefert, as recorded in Deed Microfiche No. 97-0746A08, all of the Deed Records of Montgomery County, Ohio, North 07° 06' 56" West, a distance of 714.44 feet to a 5/8" capped "LeRoy" iron pin found, said iron pin being set by William C. LeRoy, Professional Surveyor number 7664 of the State of Ohio by prior survey as recorded in the Montgomery County Engineer's Record of Land Surveys, Volume 1999, Page 0326, said iron pin being the northwest corner of said Hilgefert 0.78 acre tract, said iron pin lying in the north line of said original 19.4 acre tract and the south of said original 59.75 acre tract; thence with the north line of said Hilgefert 0.78 acre tract, South 85° 28' 23" East, a distance of 111.00 feet to a Mag nail set, said mag nail being the northeast corner of said Hilgefert 0.78 acre tract, said mag nail being the southeast corner of said original 59.75 acre tract, said mag nail being a center line of deflection point in the original center line of Mound Road; thence with the center line of Mound Road, the east line of said Miamisburg Mound Community Improvement Corp. 12.429 acre tract and the east line of said original 59.75 acre tract, North 05° 32' 42" East, a distance of 218.17 feet to a Mag nail set, said mag nail being the northeast corner of said Miamisburg Mound Community Improvement Corp.

12.429 acre tract and the **True Point of Beginning** of the hereinafter described new division of 2.542 acres;

Thence with the north line of said Miamisburg Mound Community Improvement Corp. 12.429 acre tract, **North 85° 05' 35" West**, passing a Mag nail set at 30.00 feet, said mag nail lying in the west right of way line of Mound Road, in all a distance of **496.88 feet to a 5/8" iron pin set**, said iron pin being a point of curvature in the northwesterly line of said Miamisburg Mound Community Improvement Corp. 12.429 acre tract;

Thence with a new division line on the following eleven (11) courses,

- 1) **North 10° 39' 51" East**, a distance of **144.96 feet to a 5/8" iron pin set**;
- 2) **Thence, North 29° 43' 26" East**, a distance of **62.93 feet to a 5/8" iron pin set**;
- 3) **Thence, North 69° 33' 41" East**, a distance of **26.88 feet to a railroad spike set**;
- 4) **Thence, North 85° 25' 03" East**, a distance of **16.15 feet to a railroad spike set**;
- 5) **Thence, South 85° 59' 22" East**, a distance of **168.77 feet to a railroad spike set**;
- 6) **Thence, South 01° 34' 34" East**, a distance of **4.60 feet to a Mag nail set**;
- 7) **Thence, North 88° 51' 18" East**, a distance of **68.48 feet to a chiseled cross notch set**;
- 8) **Thence, North 06° 06' 00" East**, a distance of **16.15 feet to a 5/8" iron pin set**;
- 9) **Thence, South 85° 06' 10" East**, a distance of **31.61 feet to a 5/8" iron pin set**;
- 10) **Thence**, with a curve to the right, said tangent bearing being South 65° 24' 00" East, having a **delta angle of 69° 33' 41"**, a **radius of 26.90 feet**, an **arc length of 32.78 feet** and a **chord bearing and distance of North 59° 30' 28" East, 18.77 feet to a 5/8" iron pin set**;
- 11) **Thence, South 85° 35' 05" East**, passing a 5/8" iron pin set at 94.16 feet, said iron pin lying in the west right of way line of Mound Road, in all a distance of **124.16 feet to a Mag nail set**, said mag nail lying in the east line of said original 59.75 acre tract, the east line of said United States of America 87.28 acre tract and the center line of Mound Road;

Thence with the east line of said original 59.75 acre tract, the east line of said United States of America 87.28 acre tract and the center line of Mound Road, **South 05° 32' 42" West**, a distance of **255.87 feet to the True Point of Beginning**, containing **2.542 acres**, more or less, being subject to all easements, highways and right of ways of record..

Bearing basis established as Grid North by GPS observation August 7th & 8th, 2002 at Latitude N39° 38' 25.81", Longitude W084° 17' 28.09" (Coast & Geodetic Survey Monument #G-139, 1947); Ohio State Plane Coordinate system, Ohio South Zone 3402 (NAD 83), True North being 01° 08' 11" east of Grid North.

This description prepared from an actual field survey performed under my direct supervision, Timothy W. Schram, Sr., Registered Professional Surveyor number 7299 of the State of Ohio, and that all monuments referenced herein and placed on the ground represents the boundaries of the herein described tract, and based on a Plat of Survey as recorded in the Montgomery County Engineer's Record of Land Surveys in Record Volume number 2002, Page 0483.


Timothy W. Schram, Sr., Regist. Prof. Surveyor No. 7299
of the State of Ohio, September 11, 2002

F: 02088 Mound Parcel 5 Surv Parc

KARL KEITH
COUNTY AUDITOR
MONTGOMERY COUNTY, DAYTON, OHIO
DIVISION

BY 

DATE 2-10-09

GIS MAPPING DEPARTMENT



Exhibit "B"
DESCRIPTION OF
42.882 Acres
Parcel IB

K46-15-7-1,2
Div/13 K46-5-3-29
Div/2 K46-5-1-14
Div/1 K46-11-9-9

located in
Section 30 and 36, Town 2, Range 5, M.Rs.
City of Miamisburg, Montgomery County, Ohio

Situate in Section 30 and 36, Town 2, Range 5, M.Rs., City of Miamisburg, County of Montgomery, State of Ohio, *being part of a 87.28 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1214, Page 12* of the Deed Records of Montgomery County, Ohio, said 87.28 acre tract being comprised of a 59.75 acre tract, also a 19.40 acre tract, also a 9.97 acre tract, also a 0.78 acre tract and a 0.78 acre tract all known as Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, *also being part of a 79.74 acre tract conveyed to the United States of America, as recorded in Microfiche No. 81-376A01* of the Deed Records of Montgomery County, Ohio, said 79.74 acre tract being comprised of a 24.197 acre tract and known as Lot Numbered 6128 of the consecutive numbered lots of the City of Miamisburg, also a 35.50 acre tract known as Lot Numbered 6127 of the consecutive numbered lots of the City of Miamisburg, and a 24.24 acre tract known as Lot Numbered 4777 of the consecutive numbered lots of the City of Miamisburg, *also being part of a 20.46 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1215, Page 347 and part of a 17.58 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1214, Page 248*, all of the Deed Records of Montgomery County, Ohio, said 20.46 acre tract and 17.58 acre tract being known as Lot Numbered 2290 of the consecutive numbered lots of the City of Miamisburg, *being a new division of 42.882 acres from said 87.28 acre tract, 79.74 acre tract, 20.46 acre tract and 17.58 acre tract* and being more fully bounded and described as follows:

Commencing at a "DOE" concrete monument found, said monument being the southwest corner of the Miami Mound Plat as recorded in Record Plat Book Volume 94, Page 34 of the Plat Records of Montgomery County, Ohio, said monument being the southeast corner of a 12.429 acre tract, known as Part lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, Ohio, also known as Parcel "D" of the Mound Complex, conveyed to the Miamisburg Mound Community Improvement Corporation, as recorded in Deed Microfiche No. 99-0852B05 of the Deed Records of Montgomery County, Ohio, said monument lying in the north line of a 79.74 acre tract, known as City Lot Numbered 6128 of the consecutive numbered lots of the City of Miamisburg, Ohio, conveyed to the United States of America, as recorded in Microfiche No. 81-0376A01 of the Deed Records of Montgomery County, Ohio, said "DOE" monument being the **True Point of Beginning** of the hereinafter described new division of 42.882 acres;

Thence with the south line of the Miami Mound Plat, **South 83° 59' 35" East**, a distance of **34.07 feet to a "DOE" concrete monument found**, said monument being the northeast corner of said United States of America 79.74 acre tract, said monument being the northwest corner of a 7.502 acre tract conveyed to Daniel R. Shell, as recorded in Deed Microfiche No. 85-443D02 of the Deed Records of Montgomery County, Ohio, said 7.502 acre tract being known as Lot Numbered 6130 of the consecutive numbered lots of the City of Miamisburg, Ohio;

Thence with the east line of said United States of America 79.74 acre tract and the west line of said Shell 7.502 acre tract, **South 04° 42' 45" West**, a distance of **311.82 feet to a 5/8" capped**

“Schram” iron pin set by previous survey by myself, Timothy W. Schram, Sr. for a new division of 94.838 acre tract, known as Parcel 4 of the Mound Complex, said iron pin being the northeasterly corner of said new division of 94.838 acre tract;

Thence with said new division line of said 94.838 acre tract on the following three (3) courses,

- 1) **Due West**, a distance of **62.54 feet to a 5/8” capped “Schram” iron pin set by previous survey**;
- 2) **Thence, Due North**, a distance of **111.18 feet to a 5/8” capped “Schram” iron pin set by previous survey**;
- 3) **Thence** with said new division line of 94.838 acres and a new division line of the herein described 45.259 acres, **South 89° 59’ 52” West**, passing a point on the west line of Section 30 and the east line of Section 36 at 1249.47 feet, reference from said point a railroad spike found, South 05° 16’ 42” West, 1682.63 feet, said spike being the south section corner of Section 30 and 36, also a concrete monument found, disturbed, North 05° 16’ 42” East, 3724.33 feet, said concrete monument being the north corner of Section 30 and 36, also passing a 5/8” capped “Schram” iron pin set by previous survey at 1767.43 feet, said iron pin being a northerly corner of said new division of 94.838 acres, in all a distance of **1784.02 feet to a 5/8” iron pin set**, said iron pin being the southwest corner of the herein described new division of 45.259 acres, said iron pin also being a northerly corner of a new division of 6.568 acre tract, known as Parcel 1C of the Mound Complex;

Thence with a new division line on the following twenty-three (23) courses,

- 1) **North 24° 17’ 45” West**, a distance of **458.95 feet to a 5/8” iron pin set**;
- 2) **Thence, North 83° 58’ 45” West**, a distance of **109.56 feet to a 5/8” iron pin set**;
- 3) **Thence, North 05° 38’ 00” East**, a distance of **284.12 feet to a 5/8” iron pin set**;
- 4) **Thence, North 08° 45’ 53” East**, a distance of **94.64 feet to a 5/8” iron pin set**;
- 5) **Thence, North 21° 05’ 14” East**, a distance of **206.77 feet to a 5/8” iron pin set**;
- 6) **Thence, North 75° 37’ 35” West**, a distance of **22.86 feet to a 5/8” iron pin set**;
- 7) **Thence, North 14° 15’ 45” West**, a distance of **152.26 feet to a 5/8” iron pin set**;
- 8) **Thence, North 50° 25’ 32” East**, a distance of **58.44 feet to a 5/8” iron pin set**;
- 9) **Thence, North 25° 13’ 50” East**, a distance of **88.97 feet to a 5/8” iron pin set**;
- 10) **Thence, North 50° 57’ 41” East**, a distance of **58.71 feet to a 5/8” iron pin set**;
- 11) **Thence, North 63° 34’ 44” East**, a distance of **106.77 feet to a railroad spike set**;
- 12) **Thence, North 67° 55’ 35” East**, a distance of **195.36 feet to a railroad spike set**;
- 13) **Thence, North 32° 10’ 07” East**, a distance of **60.19 feet to a 5/8” iron pin set**;
- 14) **Thence, North 80° 03’ 26” East**, a distance of **45.82 feet to a 5/8” iron pin set**;
- 15) **Thence, North 01° 21’ 45” West**, a distance of **10.36 feet to a 5/8” iron pin set**;
- 16) **Thence, North 82° 56’ 15” East**, a distance of **120.55 feet to a 5/8” iron pin set**;
- 17) **Thence, South 05° 28’ 44” East**, a distance of **114.21 feet to a 5/8” iron pin set**;
- 18) **Thence, North 84° 30’ 00” East**, a distance of **56.66 feet to a 5/8” iron pin set**;
- 19) **Thence, South 27° 23’ 24” East**, a distance of **170.96 feet to a 5/8” iron pin set**;
- 20) **Thence, South 26° 26’ 49” East**, a distance of **82.75 feet to a 5/8” iron pin set**;
- 21) **Thence, North 82° 42’ 58” East**, passing a point on the west line of Section 30 and the east line of Section 36 at 101.51 feet, reference from said point a railroad spike found, South 05° 16’ 42” West, 2878.31 feet, said spike being the south section corner of Section 30 and 36, also a concrete monument found, disturbed, North 05° 16’ 42” East, 2528.66 feet, said concrete monument being the north corner of Section 30 and 36, in all a distance of **158.83 feet to a 5/8” iron pin set**;

- 22) **Thence, South 39° 17' 18" East**, a distance of **324.25 feet to a 5/8" iron pin set**;
- 23) **Thence, South 84° 30' 40" East**, a distance of **292.51 feet to a 5/8" iron pin set**, said iron pin being a westerly corner of a 12.429 acre tract, known as Part Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, Ohio, also known as Parcel "D" of the Mound Complex, conveyed to the Miamisburg Mound Community Improvement Corporation, as recorded in Deed Microfiche No. 99-0852B05 of the Deed Records of Montgomery County, Ohio;

Thence with the westerly line of said Miamisburg Mound Community Improvement Corp. 12.429 acre tract on the following three (3) courses,

- 1) **South 05° 34' 05" West**, a distance of **360.00 feet to a 5/8" iron pin set**;
- 2) **Thence, South 84° 25' 51" East**, a distance of **93.50 feet to a 5/8" iron pin set**;
- 3) **Thence, South 05° 34' 05" West**, a distance of **291.47 feet to a 5/8" capped "LeRoy" iron pin found**, said iron pin being set by William C. LeRoy, Professional Surveyor number 7664 of the State of Ohio by prior survey as recorded in the Montgomery County Engineer's Record of Land Surveys, Volume 1999, Page 0326, said iron pin being the southwest corner of said Miamisburg Mound Community Improvement Corp. 12.429 acre tract, said iron pin lying in the south line of said United States of America 87.28 acre tract, said iron pin lying in the north line of said United States of America 79.74 acre tract;

Thence with the south line of said Miamisburg Mound Community Improvement Corp. 12.429 acre tract, the south line of said United States of America 87.28 acre tract and the north line of said United States of America 79.74 acre tract, **South 84° 32' 54" East**, a distance of **613.34 feet to the True Point of Beginning**, containing **42.882 acres**, more or less, of which **18.230 acres lying in Section 30, 24.652 acres lying in Section 36**, of which **3.032 acres being part of Lot Numbered 6128, 5.088 acres being part of Lot Numbered 6127, 5.365 acres being part of Lot Numbered 4777, 10.109 acres being part of Lot Numbered 2259 and 19.288 acres being part of Lot Numbered 2290**, all of the consecutive numbered lots of the City of Miamisburg, Ohio, and being subject to all easements, highways and right of ways of record.

Bearing basis established as Grid North by GPS observation August 7th & 8th, 2002 at Latitude N39° 38' 25.81", Longitude W084° 17' 28.09" (Coast & Geodetic Survey Monument #G-139, 1947); Ohio State Plane Coordinate system, Ohio South Zone 3402 (NAD 83), True North being 01° 08' 11" east of Grid North.

This description prepared from an actual field survey performed under my direct supervision, Timothy W. Schram, Sr., Registered Professional Surveyor number 7299 of the State of Ohio, and that all monuments referenced herein and placed on the ground represents the boundaries of the herein described tract, and based on a Plat of Survey as recorded in the Montgomery County Engineer's Record of Land Surveys in Record Volume number 2003, Page 0158.

Timothy W. Schram, Sr., Regist. Prof. Surveyor No. 7299
of the State of Ohio, March 21, 2003.
F: 030026 Mound Parcel 1B Revised

KARL KEITH
COUNTY AUDITOR
MONTGOMERY COUNTY, DAYTON, OHIO
DIVISION

BY DATE 2-23-07

GIS MAPPING DEPARTMENT



JOSEPH LITVIN, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
APPROVED FOR POINT OF BEGINNING
ACREAGE AND CLOSURE ONLY
DATE 2/10/07 FILE NO. 2003-0158
BY "BE STAMP FEE ORIGINAL"

D14/11

K46-11-9-2, 10

Exhibit "C"
DESCRIPTION OF
6.568 Acres
Parcel IC

located in
Section 36, Town 2, Range 5, M.Rs.
City of Miamisburg, Montgomery County, Ohio

Situate in Section 36, Town 2, Range 5, M.Rs., City of Miamisburg, County of Montgomery, State of Ohio, *being part of a 79.74 acre tract conveyed to the United States of America, as recorded in Microfiche No. 81-376A01* of the Deed Records of Montgomery County, Ohio, said 79.74 acre tract being comprised of a 24.197 acre tract and known as Lot Numbered 6128 of the consecutive numbered lots of the City of Miamisburg, also a 35.50 acre tract known as Lot Numbered 6127 of the consecutive numbered lots of the City of Miamisburg, and a 24.24 acre tract known as Lot Numbered 4777 of the consecutive numbered lots of the City of Miamisburg, *also being part of a 42.56 acre tract conveyed to the United States of America, as recorded in Microfiche No. 81-323A11* of the Deed Records of Montgomery County, Ohio, said 42.56 acre tract being comprised of a 46.313 acre tract known as Lot Numbered 4778 of the consecutive numbered lots of the City of Miamisburg, said 42.56 acre tract being all the remainder of an 80 acre tract as conveyed from Ray C. Dunaway and Thelma Mae Dunaway to Oak Knoll Development and Investment Co., Inc., as recorded in Microfiche No. 71-513B06 of the Deed Records of Montgomery County, Ohio, *being a new division of 6.568 acres from said 79.74 acre tract and 42.56 acre tract* and being more fully bounded and described as follows:

Commencing at a "DOE" concrete monument found, said monument being the southwest corner of the Miami Mound Plat as recorded in Record Plat Book Volume 94, Page 34 of the Plat Records of Montgomery County, Ohio, said monument being the southeast corner of a 12.429 acre tract, known as Part lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, Ohio, also known as Parcel "D" of the Mound Complex, conveyed to the Miamisburg Mound Community Improvement Corporation, as recorded in Deed Microfiche No. 99-0852B05 of the Deed Records of Montgomery County, Ohio, said monument lying in the north line of a 79.74 acre tract, known as City Lot Numbered 6128 of the consecutive numbered lots of the City of Miamisburg, Ohio, conveyed to the United States of America, as recorded in Microfiche No. 81-0376A01 of the Deed Records of Montgomery County, Ohio, thence with the south line of the Miami Mound Plat, South 83° 59' 35" East, a distance of 34.07 feet to a "DOE" concrete monument found, said monument being the northeast corner of said United States of America 79.74 acre tract, said monument being the northwest corner of a 7.502 acre tract conveyed to Daniel R. Shell, as recorded in Deed Microfiche No. 85-443D02 of the Deed Records of Montgomery County, Ohio, said 7.502 acre tract being known as Lot Numbered 6130 of the consecutive numbered lots of the City of Miamisburg, Ohio; thence with the east line of said United States of America 79.74 acre tract and the west line of said Shell 7.502 acre tract, South 04° 42' 45" West, a distance of 311.82 feet to a 5/8" capped "Schram" iron pin set by previous survey by myself, Timothy W. Schram, Sr. for a new division of 94.838 acre tract, known as Parcel 4 of the Mound Complex, said iron pin being the northeasterly corner of said new division of 94.838 acres; thence with said new division line of said 94.838 acre tract on the following three (3) courses, 1) Due West, a distance of 62.54 feet to a 5/8" capped "Schram" iron pin set by previous survey; 2) thence, Due North, a distance of 111.18 feet to a 5/8" capped "Schram" iron pin set by previous survey; 3) thence, South 89° 59' 52" West, passing a point on the west line of Section 30 and

the east line of Section 36 at 1249.47 feet, reference from said point a railroad spike found, South 05° 16' 42" West, 1682.63 feet, said spike being the south section corner of Section 30 and 36, also a concrete monument found, disturbed, North 05° 16' 42" East, 3724.33 feet, said concrete monument being the north corner of Section 30 and 36, in all a distance of 1767.43 feet to a 5/8" capped "Schram" iron pin set by previous survey, said iron pin being a northerly corner of said new division of 94.838 acres, said iron pin being the **True Point of Beginning** of the hereinafter described new division of 6.568 acres;

Thence with said new division line of said 94.838 acre tract on the following six (6) courses,

- 1) **South 23° 53' 27" West**, a distance of **12.17 feet to a 5/8" capped "Schram" iron pin set by previous survey**;
- 2) **Thence, South 47° 17' 05" East**, a distance of **318.93 feet to a 5/8" capped "Schram" iron pin set by previous survey**;
- 3) **Thence, South 10° 55' 31" East**, a distance of **75.93 feet to a 5/8" capped "Schram" iron pin set by previous survey**;
- 4) **Thence, South 79° 34' 35" West**, a distance of **878.76 feet to a 5/8" capped "Schram" iron pin set by previous survey**;
- 5) **Thence, Due South**, a distance of **82.39 feet to a 5/8" capped "Schram" iron pin set by previous survey**;
- 6) **Thence, Due West**, a distance of **72.92 feet to a 5/8" capped "Schram" iron pin set by previous survey**, said iron pin lying in the northeasterly line of a 5.481 acre tract conveyed to the Consolidated Railroad Corporation, as recorded in Microfiche No. 78-502A01 of the Deed Records of Montgomery County, Ohio, said Consolidated Railroad Corporation 5.481 acre tract also known as Lot Numbered 4780 of the consecutive numbered lots of the City of Miamisburg, Ohio;

Thence with the northeasterly line of said Consolidated Railroad Corporation 5.481 acre tract, **North 09° 33' 38" West**, a distance of **351.85 feet to a 5/8" iron pin with aluminum cap found**, said iron pin lying in the north line of said United States of America 42.56 acre tract, said iron pin being the southwest corner of a 1.6 acre tract, known as Tract number A-112, conveyed to the United States of America, as recorded in Deed Book Volume 1258, Page 74 of the Deed Records of Montgomery County, Ohio;

Thence with the north line of said United States of America 42.56 acre tract and the south line of said United States of America 1.6 acre tract, **South 84° 25' 01" East**, a distance of **100.51 feet to a 5/8" iron pin set**, said iron pin being the southeast corner of said United States of America 1.6 acre tract;

Thence with the easterly line of said United States of America 1.6 acre tract, **North 09° 26' 26" West**, a distance of **60.47 feet to a 5/8" iron pin set**, said iron pin being the northwesterly corner of the herein described new division of 6.568 acres;

Thence with a new division line on the following two (2) courses,

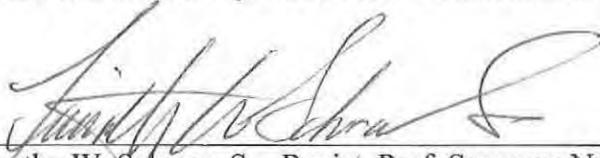
- 1) **North 79° 08' 30" East**, a distance of **666.53 feet to a 5/8" iron pin set**;

2) **Thence, North 24° 17' 45" West**, a distance of **23.06 feet to a 5/8" iron pin set**, said iron pin being a northerly corner of the herein described 6.568 acre tract, said iron pin being the southwest corner of a new division of 45.259 acre tract, known as Parcel IB of the Mound Complex;

Thence with the south line of said new division of 45.259 acres, **North 89° 59' 52" East**, a distance of **16.59 feet to the True Point of Beginning**, containing **6.568 acres**, more or less, of which **3.195 acres being part of Lot Numbered 4777 and 3.373 acres being part of Lot Numbered 4778**, all of the consecutive numbered lots of the City of Miamisburg, Ohio, and being subject to all easements, highways and right of ways of record.

Bearing basis established as Grid North by GPS observation August 7th & 8th, 2002 at Latitude N39° 38' 25.81", Longitude W084° 17' 28.09" (Coast & Geodetic Survey Monument #G-139, 1947); Ohio State Plane Coordinate system, Ohio South Zone 3402 (NAD 83), True North being 01° 08' 11" east of Grid North.

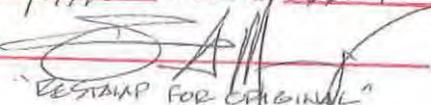
This description prepared from an actual field survey performed under my direct supervision, Timothy W. Schram, Sr., Registered Professional Surveyor number 7299 of the State of Ohio, and that all monuments referenced herein and placed on the ground represents the boundaries of the herein described tract, and based on a Plat of Survey as recorded in the Montgomery County Engineer's Record of Land Surveys in Record Volume number **2002**, Page **0483**.



Timothy W. Schram, Sr., Regist. Prof. Surveyor No. 7299
of the State of Ohio, September 11, 2002.
P: 02088 Mound Parcel 5 Surv Parcel IC



KARL KEITH
COUNTY AUDITOR
MONTGOMERY COUNTY, DAYTON, OHIO
DIVISION
BY  DATE 2-23-09
GIS MAPPING DEPARTMENT

JOSEPH LITVIN, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
APPROVED FOR POINT OF BEGINNING,
ACREAGE AND CLOSURE ONLY
DATE 2/14/09 FILE NO. 2002 0483C
BY 
"RE-STAMP FOR ORIGINAL"

DESCRIPTION OF

12.429 Acres

located in

Section 30, Fractional Town 2, Range 5 MRS

part of

City of Miamisburg Lot No. 2259

DIV/2,9

K46-5-1-11

December 09, 1999

Situate in the State of Ohio, County of Montgomery, City of Miamisburg and being part of Section 30, Fractional Town 2, Range 5 M.R.S. and being part of City of Miamisburg Lot No. 2259 and being part of a tract of land conveyed to The United States of America as described in Deed Book 1214, Page 12-14 and being more particularly described as follows:

COMMENCING at a Concrete Monument Found (top broken off) at the Northwest Corner of Section 30, **THENCE** with the north line of said Section 30 and the northerly line of Fractional Township 2, Range 6 MRS, **South 84° 00'12" East for a distance of 1249.75 feet** to the Northwest corner of the Roads End Plat as recorded in Plat Book DD, Page 75 and the centerline of Mound Road extended north, (witness a 5/8" Rebar Found bearing South 63° 34'50" East at a distance of 0.30 feet from the Northwest corner of said Plat);

THENCE with said Centerline of Mound Road, **South 05° 32'42" West for a distance of 2490.95 to a Mag Nail Set at the TRUE POINT OF BEGINNING** of the herein described tract;

THENCE continuing with said centerline, **South 05° 32' 42" West for a distance of 218.17 feet to a Railroad Spike Found** by common report at the Northeast corner of a 0.78 Acre tract of land conveyed to Randall & Rita Hilgefert as described in Deed MF 97-0746-A08;

THENCE with said 0.78 Acre Hilgeferts North line, **North 85° 28'23" West for a distance of 111.00 feet to a 5/8" Rebar Set** at said 0.78 Acre Hilgeferts Northwest corner, (passing a 5/8" Rebar Set at 30.00 feet);

THENCE with said 0.78 Acre Hilgeferts West line and the West line of a 0.26 Acre tract conveyed to Betty J. Eckhart as described in Deed MF 98-0834-C09 and the West line of a 0.7 Acre tract conveyed to Melissa A. Wilson as described in Deed MF 89-0125-D01 and the West Line of the Miami Mound Plat as recorded in Plat Book 94, Page 34, **South 07° 06'56" East for a distance of 714.44 feet to a IP in Concrete Found** at the Southwest corner of said Miami Mound Plat;

DEED

99-0852

B09

THENCE with the Southerly line of said City of Miamisburg Lot No. 2259, **North 84° 32'54" West for a distance of 613.34 feet to a 5/8" Rebar Set;**

THENCE on a new division line, **North 05° 34'05" East for a distance of 291.47 feet to a 5/8" Rebar Set;**

THENCE continuing on a new division line, **North 84° 25' 51" West for a distance of 93.50 feet to a 5/8" Rebar Set;**

THENCE continuing on a new division line, **North 05° 34'05" East for a distance of 360.00 feet to a 5/8" Rebar Set;**

THENCE continuing on a new division line, **South 84° 26'02" East for a distance of 35.50 feet to a 5/8" Rebar Set;**

THENCE continuing on a new division line, **North 05° 34'05" East for a distance of 131.23 feet to a 5/8" Rebar Set;**

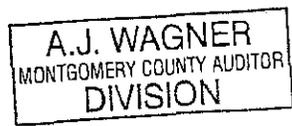
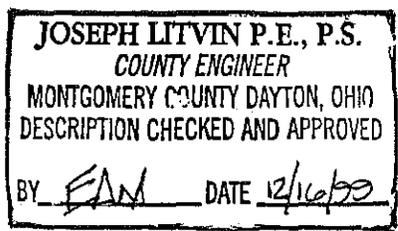
THENCE continuing on a new division line on a **TANGENT CURVE to the RIGHT** with a **RADIUS of 130.00 feet, a DELTA ANGLE of 89° 20'20", a ARC LENGTH of 202.72 feet with a CHORD BEARING of North 50° 14'15" East for a CHORD DISTANCE of 182.80 feet to a 5/8" Rebar Set;**

THENCE continuing on a new division line, **South 85° 05'35" East for a distance of 496.88 feet BACK TO THE TRUE POINT OF BEGINNING**, (passing a 5/8" Rebar set at 466.88 feet).

RECORDED
81

Described tract contains 12.429 Acres more or less. North based on State Plane Coordinates, South Zone State of Ohio as taken from a drawing prepared by Lockwood, Jones and Beals dated 6-01-82, Project No. 2149. This Description is based on an actual Field Survey performed by HLS Surveyors and Engineers under the direct supervision of William C. LeRoy P.S. Ohio License Number 7664. Subject to all Easements, Highways, Covenants and Restrictions of Public Record.

William C. LeRoy P.S.
Ohio License No. 7664
12-9-99



PARCEL D MOUND 99152PD

DESCRIPTION OF

14.288 Acres

located in

Section 30&36, Fractional Town 2, Range 5 MRS

Section 25, Fractional Town 1, Range 6 MRS

part of

City of Miamisburg Lot No. 2259

DN/2,9

K46-5-1-10

December 09, 1999

Situate in the State of Ohio, County of Montgomery, City of Miamisburg and being part of Section 30 & 36, Fractional Town 2, Range 5 M.R.S. also part of Section 25, Fractional Town 1, Range 6 MRS and being part of City of Miamisburg Lot No. 2259 and being part of a tract of land conveyed to The United States of America as described in Deed Book 1214, Page 12-14, also part of a tract of land conveyed to the United States of America as described in Deed Book 1246, Page 49 and being more particularly described as follows:

COMMENCING at a Concrete Monument Found (top broken off) at the Northwest Corner of Section 30, **THENCE** with the west line of said Section 30, **South 05° 45' 57" West for a distance of 130.89 feet to a 1" Pinch Top Pipe Found** at the Southwest corner of a 2.90 acre tract conveyed to Robert P. Heist as described in Deed MF 74-526-C09 and at the **TRUE POINT OF BEGINNING** of the herein described tract;

THENCE with the south line of said 2.90 Acre Heist Lands, **South 85° 04' 57" East for a distance of 1023.91 feet to a Concrete Monument with brass disc Found** at the Southeast corner of said 2.90 Acre Heist Lands;

THENCE with the east line of said 2.90 Acre Heist Lands and the west right of way line of Mound Street extended, **North 06° 53' 16" East for a distance of 231.00 feet to a Concrete Monument with brass disc Found**, (passing a 5/8" Rebar Set at 100.99 feet, also passing a 5/8" Rebar Set on the North line of Section 30 at 129.56 feet);

THENCE leaving said right of way line, **South 84° 38' 35" East for a distance of 30.00 feet to a 5/8" Rebar Capped Found (LJB)** on the centerline of said Mound Street;

THENCE with the centerline of said Mound Street, **South 06° 53' 16" West for a distance of 100.00 feet to a 5/8" Rebar Capped Found (LJB)**;

THENCE continuing with said centerline of said Mound Street, **South 84° 38' 08" East for a distance of 193.41 feet** to the Northwest Corner of the Roads End Plat as recorded in Plat Book DD, Page 75, (witness a 5/8" Rebar Found bearing South 63° 34' 50" East at a distance of 0.30 feet from the Northwest corner of said plat);

THENCE continuing with said centerline of said Mound Street, *South 05° 32'42" West for a distance of 571.99 feet to a Mag Nail Set;*

THENCE on a new division line, *South 89° 58' 18" West for a distance of 72.86 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *South 51° 26'20" West for a distance of 48.51 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *South 83° 30'22" West for a distance of 97.29 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *South 63°47'11" West for a distance of 98.67 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *North 89° 57'40" West for a distance of 173.02 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *North 83° 51'21" West for a distance of 247.27 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line on a *TANGENT CURVE to the RIGHT* with a *RADIUS of 360.67 feet, a DELTA ANGLE of 58° 46'33"*, a *ARC LENGTH of 369.99 feet with a CHORD BEARING of North 54° 28'04" West for a CHORD DISTANCE of 353.98 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *North 25° 04'47" West for a distance of 194.43 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *South 64° 01'25" West for a distance of 37.94 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *North 64° 37' 16" West for a distance of 56.61 feet to a 5/8" Rebar Set;*

THENCE continuing on a new division line, *North 25° 44'48" West for a distance of 160.76 feet to a 5/8" Rebar Set, (passing a 5/8" Rebar Set at 99.15 feet on the west line of said Section 30);*

THENCE continuing on a new division line through Section 36, *North 65° 31'15" East for a distance of 35.05 feet to a 5/8" Rebar Set* on the East line of said Section 36;

THENCE with the East line of said Section 36, *North 05° 29'16" East for a distance of 57.67 feet BACK TO THE TRUE POINT OF BEGINNING.*

Described tract contains 14.288 Acres more or less. North based on State Plane Coordinates, South Zone State of Ohio as taken from a drawing prepared by Lockwood, Jones and Beals dated 6-01-82, Project No. 2149. This Description is based on an actual Field Survey performed by HLS Surveyors and Engineers under the direct supervision of William C. LeRoy P.S. Ohio License Number 7664. Subject to all Easements, Highways, Covenants and Restrictions of Public Record.

Also subject to a Soil Exclusion Easement being more particularly described as follows:

COMMENCING at a Concrete Monument Found (top broken off) at the Northwest Corner of Section 30, **THENCE** with the west line of said Section 30, **South 05° 45' 57" West for a distance of 130.89 feet to a 1" Pinch Top Pipe Found** at the Southwest corner of a 2.90 acre tract conveyed to Robert P. Heist as described in Deed MF 74-526-09;

THENCE with the south line of said 2.90 Acre Heist Lands, **South 85° 04' 57" East for a distance of 1023.91 feet to a Concrete Monument with brass disc Found** at the Southeast corner of said 2.90 Acre Heist Lands;

THENCE with the east line of said 2.90 Acre Heist Lands and the west right of way line of Mound Street extended, **North 06° 53' 16" East for a distance of 231.00 feet to a Concrete Monument with brass disc Found**, (passing a 5/8" Rebar Set at 100.99 feet, also passing a 5/8" Rebar Set on the North line of Section 30 at 129.56 feet) and the **TRUE POINT OF BEGINNING** of the herein described tract;

THENCE leaving said right of way line, **South 84° 38' 35" East for a distance of 30.00 feet to a 5/8" Rebar Capped Found (LJB)** on the centerline of said Mound Street;

THENCE with the centerline of said Mound Street, **South 06° 53' 16" West for a distance of 100.00 feet to a 5/8" Rebar Capped Found (LJB)**;

THENCE continuing with said centerline of said Mound Street, **South 84° 38' 08" East for a distance of 193.41 feet** to the Northwest Corner of the Roads End Plat as recorded in Plat Book DD, Page 75, (witness a 5/8" Rebar Found bearing South 63° 34' 50" East at a distance of 0.30 feet from the Northwest corner of said plat);

THENCE continuing with said centerline of said Mound Street, **South 05° 32' 42" West for a distance of 571.99 feet to a Mag Nail Set**;

THENCE with a new division line, **South 89° 58' 18" West for a distance of 72.86 feet to a 5/8" Rebar Set**;

THENCE North 06° 48'23" West for a distance of 694.41 feet BACK TO THE TRUE POINT OF BEGINNING.

Said Easement contains 1.840 Acres more or less.



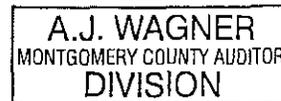
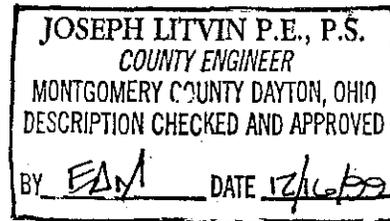
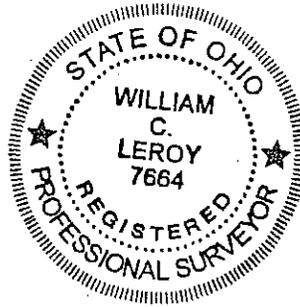
William C. LeRoy P.S.
Ohio License No. 7664

12-9-09

RECORDED

80 DEC 31 AM 1:25

A.J. WAGNER
AUDITOR



PARCEL H MOUND 99152ph.dwg

DESCRIPTION OF

94.838 Acres

located in

Section 30, 35 and 36, Town 2, Range 5, MRs.
City of Miamisburg, Montgomery County, Ohio

DIN/1,2

K46-15-7-21,22

2,1

K46-11-9-7,8

Situate in the Southwest Quarter of Section 30, Town 2, Range 5, MRs., the Southeast Quarter of Section 36, Town 2, Range 5, MRs., Northeast Quarter Section 36, Town 2, Range 5, MRs., City of Miamisburg, County of Montgomery, State of Ohio, *being part of a 79.74 acre tract conveyed to the United States of America, as recorded in Microfiche No. 81-376A01* of the Deed Records of Montgomery County, Ohio, said 79.74 acre tract being comprised of a 24.197 acre tract and known as Lot Numbered 6128 of the consecutive numbered lots of the City of Miamisburg, also a 35.50 acre tract known as Lot Numbered 6127 of the consecutive numbered lots of the City of Miamisburg, and a 24.24 acre tract known as Lot Numbered 4777 of the consecutive numbered lots of the City of Miamisburg, *also being part of a 42.56 acre tract conveyed to the United States of America, as recorded in Microfiche No. 81-323A11* of the Deed Records of Montgomery County, Ohio, said 42.56 acre tract being comprised of a 46.313 acre tract known as Lot Numbered 4778 of the consecutive numbered lots of the City of Miamisburg, said 42.56 acre tract being all the remainder of an 80 acre tract as conveyed from Ray C. Dunaway and Thelma Mae Dunaway to Oak Knoll Development and Investment Co., Inc., as recorded in Microfiche No. 71-513B06 of the Deed Records of Montgomery County, Ohio, *being a new division of 94.838 acres from said 79.74 acre and 42.56 acre tracts* and being more fully bounded and described as follows:

Commencing at a railroad spike found in concrete, said spike being the southwest corner of Section 30, the southeast corner of Section 36 and the northeast corner of Section 35, said spike lying in the center line of Benner Road at an angle point in said road, said spike also being the southwest corner of said United States of America 79.74 acre tract and the southeast corner of said United States of America 42.56 acre tract, also being the northeast corner of a 0.47 acre tract conveyed to Danny and Judith Hall, as recorded in Microfiche No. 88-598D12 of the Deed Records of Montgomery County, Ohio, said spike having a scale coordinate value of North 594,365.34, East 1,496,165.88 of the Ohio Plane Coordinate System, South Zone, said spike being the **True Point of Beginning** of the hereinafter described 95.146 acre tract;

Thence with the center line of Benner Road and the northwesterly line of said Hall 0.47 acre tract, also the northwesterly line of a 0.764 acre tract conveyed to the City of Miamisburg, Ohio, as recorded in Microfiche No. 00-356C07 of the Deed Records of Montgomery County, Ohio, **South 66° 32' 34" West**, a distance of **958.76 feet to a Mag nail set**, said Mag nail being an angle point in the center line of Benner Road;

Thence continuing with the center line of Benner Road and the northwesterly line of said City of Miamisburg, Ohio 0.764 acre tract, **South 73° 18' 03" West**, a distance of **31.01 feet to a Mag nail set**, said Mag nail being the southwest corner of said United States of America 42.56 acre tract, said Mag nail also lying in the northeasterly line of the abandoned Miami & Erie canal lands, said lands being a 1.448 acre tract conveyed to the Miami Conservancy District, as recorded in Deed Book Volume 2450, Page 190 of the Deed Records of Montgomery County, Ohio, said Miami Conservancy

District 1.448 acre tract also being known as Lot Numbered 4782 of the consecutive numbered lots of the City of Miamisburg, Ohio;

Thence with the southwesterly line of said United States of America 42.56 acre tract and the northeasterly line of said Miami Conservancy District 1.448 acre tract on the following three (3) courses,

- 1) **North 14° 05' 40" West**, a distance of **62.17 feet to an axle found**, said axle being an angle point in said line;
- 2) **Thence, North 14° 12' 04" West**, a distance of **440.84 feet to an axle found**, said axle lying in the north line of the Northeast Quarter of Section 35 and the south line of the Southeast Quarter of Section 36, said axle also being an angle point in said line;
- 3) **Thence, North 14° 47' 54" West**, a distance of **259.69 feet to an axle found**, said axle being the northeasterly corner of said Miami Conservancy District 1.448 acre tract, said axle also being the southeasterly corner of lands conveyed to the Miami Conservancy District, as recorded in Deed Book Volume 2450, Page 194 of the Deed Records of Montgomery County, Ohio, said lands also being known as Lot Numbered 4781 of the consecutive numbered lots of the City of Miamisburg, Ohio;

Thence with the southwesterly line of said United States of America 42.56 acre tract and the northeasterly line of said Miami Conservancy District lands, **North 14° 45' 30" West**, a distance of **546.20 feet to a 5/8" iron pin set**, said iron pin being the southwesterly corner of a 5.481 acre tract conveyed to the Consolidated Railroad Corporation, as recorded in Microfiche No. 78-502A01 of the Deed Records of Montgomery County, Ohio, said Consolidated Railroad Corporation 5.481 acre tract also known as Lot Numbered 4780 of the consecutive numbered lots of the City of Miamisburg, Ohio;

Thence with the southerly line of said Consolidated Railroad Corporation 5.481 acre tract on the following three (3) courses,

- 1) **North 74° 56' 41" East**, a distance of **85.24 feet to a 1" iron pipe found**, said pipe being an angle point in said line;
- 2) **Thence, North 37° 22' 23" East**, a distance of **96.59 feet to a 5/8" iron pin found**, said iron pin being an angle point in said line;
- 3) **Thence, North 80° 25' 45" East**, a distance of **65.98 feet to a 1" iron pipe found**, said iron pipe being the southeasterly corner of said Consolidated Railroad Corporation 5.481 acre tract;

Thence with the northeasterly line of said Consolidated Railroad Corporation 5.481 acre tract, **North 09° 33' 38" West**, a distance of **147.88 feet to a 5/8" iron pin set**, said iron pin being the northwesterly corner of the herein described new division of 95.146 acres;

Thence with a new division line on the following nine (9) courses,

- 1) **Due East**, a distance of **72.92 feet to a 5/8" iron pin set**;
- 2) **Thence, Due North**, a distance of **82.40 feet to a 5/8" iron pin set**;
- 3) **Thence, North 79° 34' 35" East**, a distance of **878.75 feet to a 5/8" iron pin set**;
- 4) **Thence, North 10° 55' 31" West**, a distance of **75.93 feet to a 5/8" iron pin set**;
- 5) **Thence, North 47° 17' 05" West**, a distance of **318.93 feet to a 5/8" iron pin set**;
- 6) **Thence, North 23° 53' 27" East**, a distance of **12.17 feet to a 5/8" iron pin set**;

7) **Thence, North 89° 59' 52" East**, passing a point at 517.95 feet, said point lying in the east line of the Southeast Quarter of Section 36 and the west line of the Southwest Quarter of Section 30, reference a broken concrete monument found, North 05° 16' 42" East, 3724.34 feet, said concrete monument being the northeast corner of Section 36 and the northwest corner of Section 30 by common report, in all a distance of **1767.43 feet to a 5/8" iron pin set**;

8) **Thence, Due South**, a distance of **111.18 feet to a 5/8" iron pin set**;

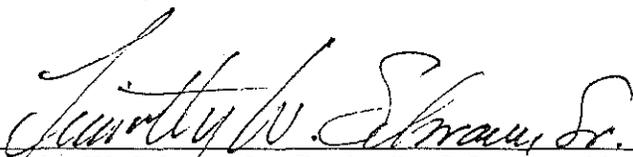
9) **Thence, Due East**, a distance of **62.54 feet to a 5/8" iron pin set**, said iron pin lying in the east line of said United States of America 79.74 acre tract, said iron lying in the west line of a 7.502 acre tract conveyed to Daniel R. Shell, as recorded in Microfiche No. 85-443D02 of the Deed Records of Montgomery County, Ohio, said Shell 7.502 acre tract also being known as Lot Numbered 6130 of the consecutive numbered lots of the City of Miamisburg, Ohio, witness a concrete Department of Defense monument found, North 04° 42' 45" East, 311.82 feet, said monument being the northeast corner of said United States of America 79.74 acre tract;

Thence with the east line of said United States of America 79.74 acre tract and the west line of said Shell 7.502 acre tract, also the west line of a 8.850 acre tract conveyed to Frank C. Dickinson, as recorded in Microfiche No. 93-516A05 of the Deed Records of Montgomery County, Ohio, **South 04° 42' 45" West**, passing a 1" pinched top pipe found at 737.06 feet, said pipe lying 1.49 feet east of the line, said pipe being the common corner of said Shell 7.502 acre tract and Dickinson 8.850 acre tract, in all a distance of **1698.01 feet to a railroad spike in concrete found**, said spike lying in the south line of the Southwest Quarter of Section 30, said spike being the southeast corner of said United States of America 79.74 acre tract, said spike lying in the center line of Benner Road;

Thence with the south line of the Southwest Quarter of Section 30 and the center line of Benner Road, **North 84° 29' 45" West**, a distance of **1333.45 feet to the True Point of Beginning**, containing **94.838 acres**, more or less, of which **52.932 acres lying in the Southwest Quarter of Section 30, 36.224 acres lying in the Southeast Quarter of Section 36 and 5.682 acres lying in the Northeast Quarter of Section 35** and being subject to all easements, highways and right of ways of record..

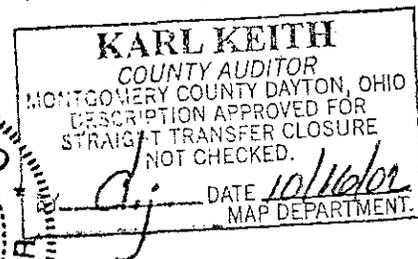
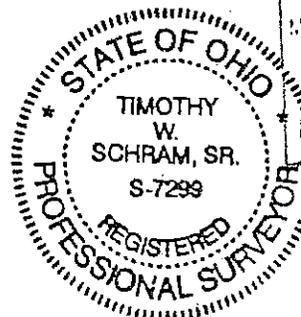
Bearing basis established on State Plane Coordinates South Zone, State of Ohio, per prior survey by Lockwood, Jones and Beals, dated; June 1st, 1982, said survey filed in the Montgomery County Engineer's Record of Land Surveys as survey reference number SUR-83-88.

This description prepared from an actual field survey performed under my direct supervision, Timothy W. Schram, Sr., Registered Professional Surveyor number 7299 of the State of Ohio, and that all monuments referenced herein and placed on the ground represents the boundaries of the herein described tract, and based on a Plat of Survey as recorded in the Montgomery County Engineer's Record of Land Surveys in Record Volume number _____.



Timothy W. Schram, Sr., Regist. Prof. Surveyor No. 7299 of the State of Ohio, August 21, 2000.

F: 2001/01018/01018a.des



**DESCRIPTION OF
4.805 Acres**

located in

Northwest Quarter Section 30

Northeast Quarter Fractional Section 36 DIV/10

Town 2, Range 5, M.Rs.

City of Miamisburg, Montgomery County, Ohio

K46-5-1-12
DIV/13 K46-5-3-28

Situate in the Northwest Quarter of Section 30 and the Northeast Quarter of Fractional Section 36, Town 2, Range 5, M.Rs., City of Miamisburg, County of Montgomery, State of Ohio, *being part of a remainder tract of 7.35 acres as conveyed to the United States of America, as recorded in Deed Book Volume 1246, Page 45, known as Tract No. A-109, of the Deed Records of Montgomery County, Ohio, said 7.35 acre tract also being part of Lot Numbered 2259 of the City of Miamisburg, Ohio, being part of a 1.61 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1256, Page 179, known as Tract No. A-110, of the Deed Records of Montgomery County, Ohio, being part of a 87.28 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1214, Page 12 of the Deed Records of Montgomery County, Ohio, said 87.28 acre tract also being known as part of Lot Numbered 2259 and part of Lot Numbered 2290 of the City of Miamisburg, Ohio, said 1.61 acre tract also being part of Lots Numbered 6 and 7 of the Philip Gebhart plat as recorded in Record Plat Book Volume "A", Page 126 of the Plat Records of Montgomery County, Ohio, said 87.28 acre tract also being part of Lots Numbered 6, 7 and 14 of said Philip Gebhart plat, being a new division from said remainder 7.35 acre tract, 1.61 acre tract and 87.28 acre tract and being more fully bounded and described as follows:*

Commencing at a Broken Concrete Monument found, said monument being the northwest corner of the Northwest Quarter of Section 30 and the northeast corner of the Northeast Quarter of Fractional Section 36, said monument also being the northwest corner of a 9.443 acre tract conveyed to Robert P. Heist, as recorded in Deed Microfiche No. 74-0526C09 of the Deed Records of Montgomery County, Ohio, said 9.443 acre tract being known as Lot Numbered 2258 of the City of Miamisburg, Ohio; thence with the west line of said Heist 9.443 acre tract, South 05° 45' 57" West, a distance of 130.89 feet to a 1" pinched top pipe found, said pipe being the northwest corner of said United States of America 7.35 acre remainder tract, also the northwest corner of Lot Numbered 2259 of the City of Miamisburg, Ohio, said iron pipe also being the northwest corner of a 14.288 acre tract conveyed to the Miamisburg Mound Community Improvement Corporation, as recorded in Deed Microfiche No. 99-0852B11 of the Deed Records of Montgomery County, Ohio, said iron pipe being the **True Point of Beginning** of the hereinafter described 4.805 acre tract;

Thence with the west line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract, South 05° 29' 16" West, a distance of 57.67 feet to a 5/8" iron pin reset, said iron pin found bent, pulled and reset new iron pin;

Thence with a northwesterly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract, South 65° 31' 15" West, a distance of 35.05 feet to a 5/8" iron pin set;

Thence with a southwesterly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract, **South 25° 44' 48" East**, passing a point in the southeasterly line of said United States of America 1.61 acre tract and the north line of said United State of America 87.28 acre tract at 37.08 feet, also passing a point in the west line of the Northwest Quarter of Section 30 and the east line of the Northeast Quarter of Fractional Section 36 at 61.61 feet, in all a distance of **160.76 feet to a 2" mag nail set**;

Thence with a southerly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract, **South 64° 37' 16" East**, passing a point on a southerly line of said United States of America 7.35 acre remainder tract and a northerly line of said United State of America 87.28 acre tract at 52.82 feet, in all a distance of **56.61 feet to a 5/8" iron pin set**;

Thence with a southeasterly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract, **North 64° 01' 25" East**, passing a point on a southeasterly line of said United States of America 7.35 acre remainder tract and a northwesterly line of said United State of America 87.28 acre tract at 2.58 feet, in all a distance of **37.94 feet to a 5/8" iron pin found with an identification cap marked "LeRoy, 7664"**;

Thence with a southwesterly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract, **South 25° 04' 47" East**, passing a point on the south line of said United States of America 7.35 acre remainder tract and the north line of said United State of America 87.28 acre tract at 20.96 feet, in all a distance of **194.43 feet to a 5/8" iron pin found with an identification cap marked "LeRoy, 7664"**, said iron pin being a point of curvature for a curve to the left;

Thence with a southwesterly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract on a curve to the left, having a **delta angle of 28° 31' 32"**, a radius of **360.67 feet**, an arc length of **179.57 feet** and a chord bearing and distance of **South 39° 20' 33" East, 177.72 feet to a 5/8" iron pin set**, said iron pin being the easterly corner of the herein described 4.805 acre tract;

Thence with new division line on the following thirteen (13) courses,

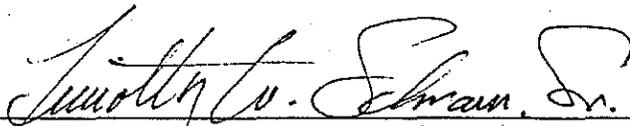
- 1) **South 40° 10' 30" West**, a distance of **91.47 feet to a 5/8" iron pin set**;
- 2) **Thence, South 23° 05' 31" East**, a distance of **17.73 feet to a 5/8" iron pin set**;
- 3) **Thence, South 64° 44' 27" West**, a distance of **98.64 feet to a 5/8" iron pin set**;
- 4) **Thence, North 50° 06' 58" West**, a distance of **22.74 feet to a railroad spike set**;
- 5) **Thence, South 66° 03' 34" West**, a distance of **39.97 feet to a railroad spike set**;
- 6) **Thence, North 23° 47' 05" West**, a distance of **359.64 feet to a railroad spike set**;
- 7) **Thence, North 59° 41' 15" West**, passing a point in the west line of the Northwest Quarter of Section 30 and the east line of the Northeast Quarter of Fractional Section 36 at 2.89 feet, in all a distance of **32.00 feet to a railroad spike set**;
- 8) **Thence, South 65° 05' 15" West**, a distance of **34.64 feet to a railroad spike set**;
- 9) **Thence, South 24° 54' 45" East**, a distance of **59.55 feet to a cross notch set in concrete**;
- 10) **Thence, South 65° 11' 32" West**, a distance of **268.32 feet to a 5/8" iron pin set**;
- 11) **Thence, North 24° 26' 30" West**, a distance of **24.31 feet to a railroad spike set**;
- 12) **Thence, North 65° 33' 30" East**, a distance of **7.67 feet to a 2" mag nail set**;

13) **Thence, North 24° 26' 30" West**, passing a point in the on the south line of said United States of America 1.61 acre remainder tract and the north line of said United State of America 87.28 acre tract at 221.39 feet, a distance of **308.52 feet to a 5/8" iron pin set**, said iron pin lying in the north line of said United States of America 1.61 acre tract;

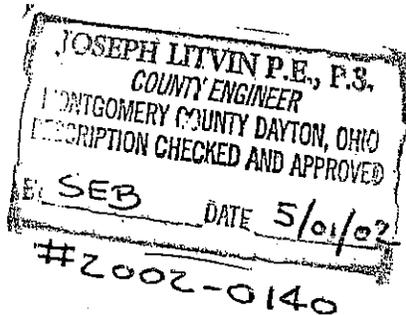
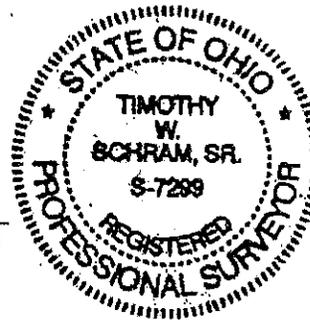
Thence with the north line of said United States of America 1.61 acre tract, **North 65° 36' 29" East**, a distance of **478.50 feet to the True Point of Beginning**, containing **4.805 acres**, more or less, of which **1.952 acres being in the Northwest Quarter of Section 30 and 2.853 acres being in the Northeast Quarter of Fractional Section 36**, subject to all easements and right of ways of record.

Bearing basis established per previous survey by HLS Surveyors & Engineers dated December 9, 1999 and recorded in Records of Land Survey Volume 1999, Page 0325 of the Montgomery County Engineer's Record of Land Surveys and Deed Microfiche No. 99-0852B11 of the Deed Records of Montgomery County, Ohio, along the north line of Parcel "H" as noted on said referenced survey plat, bearing of South 85° 04' 57" East.

This description prepared from an actual field survey performed under my direct supervision, Timothy W. Schram, Sr., Registered Professional Surveyor number 7299 of the State of Ohio, and that all monuments referenced herein and placed on the ground represents the boundaries of the herein described tract.



Timothy W. Schram, Sr., Regist. Prof. Surveyor No. 7299 of the State of Ohio, March 10, 2002.



**Parcels D, H, 3, 4, Phase I (A, B, and C)
Quitclaim Deed From MDC to City**

Type: DEE
Kind: DEED
Recorded: 11/13/2013 12:53:08 PM
Fee Amt: \$44.00 Page 1 of 4
Montgomery County, OH
Willis E. Blackshear County Recorder
File# 2013-00079430

TRANSFER
12:48pm NOVEMBER 13, 2013
KARL L. KEITH, COUNTY AUDITOR
Conv/Tran #: 18650 \$, 00

4

QUIT CLAIM DEED
(Ohio Statutory Form)

MOUND DEVELOPMENT CORPORATION, an Ohio not-for-profit corporation f/k/a Miamisburg Mound Community Improvement Corporation, having an address of 965 Capstone Drive, P.O. Box 232, Miamisburg, Ohio 45343-0232 ("Grantor"), for valuable consideration paid, grants to the **CITY OF MIAMISBURG, OHIO**, an Ohio municipal corporation ("Grantee"), whose tax mailing address is 10 North First Street, Miamisburg, Ohio 45342, the real property described on Exhibit A attached hereto and incorporated herein by reference (collectively referred to in this Deed as the "Lots").

mail

THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL COVENANT DATED NOVEMBER 2, 2011, RECORDED IN THE DEED OR OFFICIAL RECORDS OF THE MONTGOMERY COUNTY RECORDER ON JANUARY 24, 2012 IN DEED INSTRUMENT NO. 2012-00004722. THE ENVIRONMENTAL COVENANT CONTAINS THE FOLLOWING ACTIVITY AND USE LIMITATIONS:

Prohibition against residential use and farming activities; prohibition against use of groundwater; prohibition against removal of soil from Mound property.

Owner or transferee, if applicable, shall notify Ohio EPA within ten (10) days after each conveyance of interest of the Property or any portion thereof. The notice shall include the name, address and telephone number of the Transferee, a copy of the deed or other documentation evidencing the conveyance, and a survey map that shows the boundaries of the property being transferred.

DNK

THE INTEREST CONVEYED HEREBY IS ALSO SUBJECT TO COVENANTS AND RESTRICTIONS FOUND IN THE FOLLOWING DEEDS FROM THE UNITED STATES GOVERNMENT TO GRANTOR:

Deeds recorded in the Montgomery County, Ohio Recorder's Office as follows:

- Deed Recorded December 21, 1999 at Deed 99-141468
- Deed Recorded December 21, 1999 at Deed 99-141469

- Deed Recorded October 17, 2002 at Deed 02-128007
- Deed Recorded October 18, 2002 at Deed 02-128206
- Deed Recorded November 22, 2002 at Deed 02-146503
- Deed Recorded November 22, 2002 at Deed 02-146504
- Deed Recorded February 24, 2009 at Deed 09-116432
- Deed Recorded December 19, 2012 at Deed 12-083743

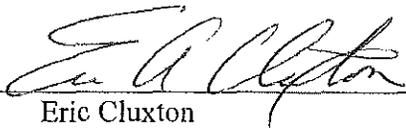
PRIOR DEED REFERENCE:

Plat Book 222, Page 30, Montgomery County, Ohio Plat Records
Mound Advanced Technology Center
Section 1,

all of the Montgomery County, Ohio Deed Records.

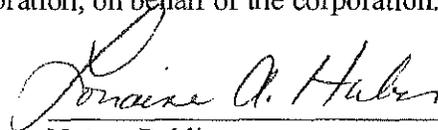
Executed this 7th day of November, 2013.

MOUND DEVELOPMENT CORPORATION

By: 
Eric Cluxton
President

STATE OF OHIO, COUNTY OF MONTGOMERY, SS:

The foregoing instrument was acknowledged before me this 7th day of November, 2013, by Eric Cluxton, the President of Mound Development Corporation, an Ohio not-for-profit corporation, on behalf of the corporation.


Notary Public

LORRAINE A. HUBER, Notary Public
In and for the State of Ohio
My Commission Expires May 22, 2016

This instrument prepared by:
Shannon L. Costello, Esq.
Coolidge Wall Co., L.P.A.
33 West First Street, Suite 600
Dayton, OH 45402

EXHIBIT A

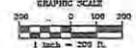
Situate in Sections 30, 35 and 36, Town 2, Range 5 M.Rs, City of Miamisburg, Montgomery County, Ohio and being Lots Numbered 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8002, 8003, 8005, and 8006 of the Mound Advanced Technology Center Record Plan, Section 1, as recorded in Plat Book 222, Page 30 of the Montgomery County, Ohio Records.

K46 01507 0025, 26, 27, 28, 29, 30, 31, 33, 34, 36, 37

RECORD PLAN
MOUND ADVANCED
TECHNOLOGY CENTER
SECTION 1

BEING ALL OF LOTS 4776, 6127 & 6128, PART LOTS
2259, 2290-4777, 4781 & 4782 OF THE CONSECUTIVE
LOT NUMBERS OF THE CITY OF MIAMIUSBURG
SECTION 25, TOWN 1, RANGE 5 N.M.S.
SECTIONS 30, 32, & 35, TOWN-2, RANGE 5 N.M.S.
MONTGOMERY COUNTY, OHIO
169,2297 ACRES IN LOTS
11,5044 ACRES IN STREETS
160,7941 ACRES TOTAL
FEBRUARY 2013

BEARINGS BASED ON THE CENTERLINE
OF BENNER RD. PER #0028-09-0114-2
N 84°25'45" W



- 5/8" IRON PIN FOUND
- 5/8" IRON PIN SET
- MONUMENT FOUND



LINE TABLE

LINE	BEARING	DIST
L1	N 142°04'14" W	65.11
L2	N 74°25'41" E	170.33
L3	N 37°22'23" E	95.50
L4	N 80°25'45" E	65.98
L5	S 84°25'01" E	100.87
L6	N 09°20'36" W	84.47
L7	N 83°39'45" W	105.56
L8	N 08°45'53" E	34.84
L9	N 11°35'14" E	206.77
L10	N 75°37'35" W	22.86
L11	N 141°45'15" W	152.38
L12	N 50°23'13" E	58.44
L13	N 25°13'50" E	88.97
L14	N 50°27'41" E	58.71
L15	N 63°54'44" E	108.77
L16	N 67°28'32" E	195.36
L17	N 32°10'07" E	60.19
L18	N 80°03'24" E	45.92
L19	N 01°07'42" W	10.36
L20	N 82°56'15" W	120.50
L21	S 05°28'44" E	114.21
L22	N 84°20'00" E	56.69
L23	S 27°23'24" E	170.98
L24	S 26°28'49" E	82.78
L25	N 82°42'58" E	158.83
L26	S 84°28'09" E	35.50
L27	N 06°34'05" E	131.23
L28	N 12°38'51" E	144.84
L29	N 25°43'28" E	62.93
L30	N 69°35'41" E	26.88
L31	N 85°25'03" E	16.15
L32	S 85°58'18" E	188.77
L33	N 01°34'24" E	4.60
L34	N 89°51'18" E	68.48
L35	N 08°06'30" E	16.15
L36	S 85°06'10" E	31.91
L37	S 85°35'05" W	124.16
L38	N 88°29'23" W	111.01
L39	S 83°59'15" E	22.08
L40	S 73°18'03" W	108.32
L41	S 84°38'08" E	193.41
L42	S 89°34'18" E	72.86
L43	S 21°26'10" W	46.51
L44	S 80°30'22" W	97.29
L45	S 85°47'11" W	98.67
L46	N 89°27'48" W	224.02
L47	S 24°20'36" E	5.30
L48	S 23°05'11" E	17.73
L49	S 84°44'19" E	188.89
L50	N 50°08'58" W	25.24
L51	N 66°03'24" W	36.97
L52	N 21°41'35" W	20.00
L53	S 85°08'15" W	34.44
L54	S 24°24'45" E	59.55
L55	S 61°13'13" W	268.30
L56	N 24°28'30" W	24.39
L57	S 62°33'30" W	7.87
L58	N 24°28'30" W	208.29
L59	S 84°28'35" W	20.00
L60	S 06°24'03" E	17.87
L61	S 15°50'47" W	190.18
L62	N 83°51'21" W	188.77
L63	N 25°42'32" W	3.00

LINE TABLE

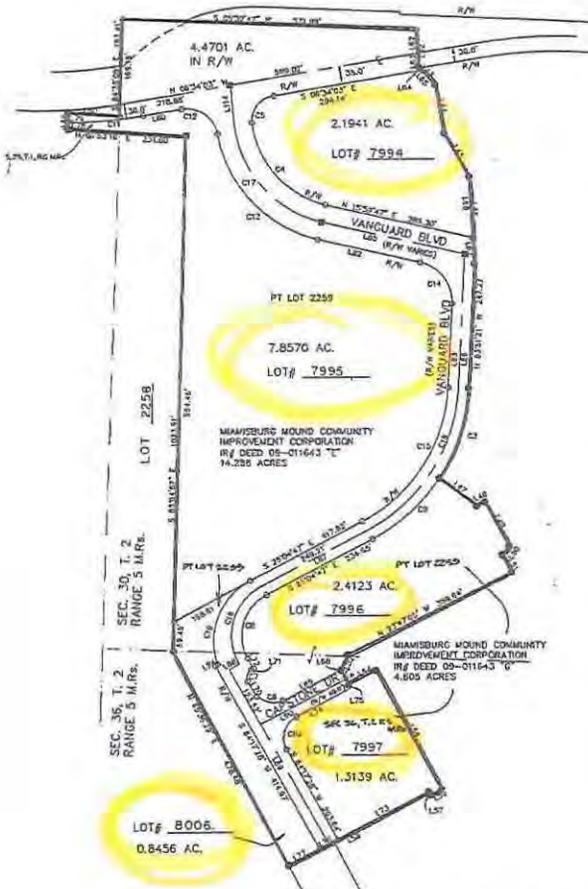
LINE	BEARING	DIST
L64	S 89°50'18" W	45.78
L65	S 83°59'15" E	27.08
L66	S 51°26'20" W	6.50
L67	S 51°26'20" W	36.96
L68	N 89°37'40" W	120.88
L69	N 85°57'40" W	52.16
L70	S 85°09'15" W	2.16
L71	N 24°41'00" W	122.50
L72	N 64°72'28" E	23.46
L73	N 24°28'30" W	188.89
L74	S 24°41'00" E	180.39
L75	N 89°58'23" W	35.50
L76	N 65°05'15" E	7.51
L77	N 24°28'30" W	40.00
L78	S 84°38'35" E	11.77
L79	S 84°38'35" E	68.67
L80	S 84°38'35" E	35.69
L81	S 05°34'11" W	248.03
L82	S 89°50'18" W	268.12
L83	N 25°04'37" W	234.65
L84	N 25°23'37" W	22.21
L85	S 64°17'28" W	395.41
L86	S 24°41'00" E	180.39
L87	N 89°58'23" W	35.50
L88	N 65°05'15" E	7.51
L89	S 05°34'11" W	117.82
L90	S 84°38'35" E	68.67
L91	N 05°19'08" E	489.40
L92	N 05°19'08" E	139.64
L93	N 15°26'38" W	140.97
L94	S 74°22'59" W	124.81
L95	N 05°19'08" E	139.64
L96	N 15°26'38" W	140.97
L97	N 80°44'41" E	3.60
L98	N 30°54'41" W	11.40
L99	N 80°44'41" W	172.22

CURVE TABLE

CURVE	RADIUS	DISTANCE	DELTA	CHORD	CHORD BEARING
C1	136.67	382.71	89°36'26"	N 50°42'31" E	482.79
C2	38.80	32.78	94°48'13"	N 25°30'28" E	30.79
C3	382.67	150.42	37°03'01"	N 64°24'01" E	186.29
C4	189.72	255.99	70°20'00"	N 21°04'30" E	316.68
C5	39.80	36.81	87°01'30"	N 26°02'00" E	68.89
C6	47.80	33.26	86°56'30"	N 26°02'00" E	68.89
C7	16.50	20.51	91°51'30"	S 70°01'43" E	33.61
C8	19.25	143.90	99°01'04"	S 30°33'33" E	141.18
C9	348.09	139.52	36°21'54"	S 30°33'33" E	177.75
C10	47.00	75.46	61°01'31"	N 26°11'46" W	82.77
C11	213.21	112.17	82°03'24"	S 00°36'00" W	119.09
C12	365.50	36.53	26°19'30"	S 25°34'20" W	65.77
C13	352.77	257.60	87°01'30"	S 25°34'20" W	65.77
C14	63.00	111.97	100°33'30"	S 26°04'50" E	100.50
C15	338.17	328.56	33°30'30"	N 34°50'00" W	214.72
C16	126.75	193.86	81°12'30"	N 50°28'28" E	174.86
C17	224.77	284.32	126°40'40"	S 23°37'30" E	283.84
C18	348.09	348.47	180°00'00"	S 23°37'30" E	283.84
C19	113.25	139.20	112°27'25"	N 70°01'33" W	168.87
C20	40.00	85.29	107°01'40"	S 22°45'42" E	56.89
C21	430.00	62.31	82°03'24"	S 22°45'42" E	56.89
C22	189.00	189.00	90°00'00"	S 22°45'42" E	140.81
C23	35.00	125.			

BEARINGS BASED ON THE CENTERLINE OF BEHNER RD. PER REDEED 09-011643 N 84°29'45" W

DETAIL "A"
1"=100'



PLAT BOOK 222 PAGE: 30B

RECORD PLAN
MOUND ADVANCED
TECHNOLOGY CENTER
SECTION 1

BEING ALL OF LOTS 4778, 6127 & 8228, PART LOTS 2259, 2290, 4777, 4781 & 4782 OF THE CONSECUTIVE LOT NUMBERS OF THE CITY OF MIAMSBURG SECTION 05, TOWN 1, RANGE 6 M.R. SECTIONS 30, 32, & 36, TOWN 2, RANGE 5 M.R. MONTGOMERY COUNTY, OHIO 193.2297 ACRES IN LOTS 11,5644 ACRES IN STREETS 180,7941 ACRES TOTAL FEBRUARY 2013

LINE TABLE

LINE	BEARING	DIST
L1	N 14°28'14" W	31.71
L2	N 74°36'41" E	170.32
L3	N 37°22'23" E	96.50
L4	N 82°24'45" E	100.58
L5	S 84°35'01" E	100.51
L6	N 05°26'26" W	66.47
L7	N 35°28'45" W	102.50
L8	N 08°45'45" E	84.54
L9	N 21°00'14" E	205.77
L10	N 25°27'35" W	22.88
L11	N 44°34'42" E	114.21
L12	N 52°25'32" E	58.44
L13	N 25°33'50" E	68.97
L14	N 50°57'41" E	58.71
L15	N 42°34'44" E	106.77
L16	N 67°55'35" E	195.38
L17	N 32°10'07" E	60.19
L18	N 82°53'26" E	45.22
L19	N 01°21'45" W	10.38
L20	N 87°36'15" W	120.53
L21	S 05°28'44" E	114.21
L22	N 84°30'00" E	26.38
L23	S 27°23'24" E	170.96
L24	S 26°26'44" E	85.75
L25	N 82°42'58" E	158.63
L26	S 64°26'00" E	35.50
L27	N 05°34'05" E	131.23
L28	N 10°19'51" E	144.88
L29	N 29°43'26" E	62.93
L30	N 69°33'41" E	26.80
L31	N 85°25'03" E	15.15
L32	S 85°59'34" E	166.77
L33	S 01°34'34" E	4.60
L34	N 89°11'18" E	68.48
L35	N 05°10'02" E	16.15
L36	S 85°06'10" W	31.61
L37	S 85°30'05" W	124.16
L38	N 05°18'23" W	111.01
L39	S 83°50'35" E	34.07
L40	S 73°18'03" W	106.12
L41	S 84°26'08" E	123.41
L42	S 89°30'18" W	72.86
L43	S 51°26'20" W	36.88
L44	S 84°26'08" E	123.41
L45	S 82°30'22" W	87.29
L46	S 82°41'11" W	68.63
L47	S 89°57'45" W	172.02
L48	S 46°19'30" W	91.47
L49	S 23°03'41" E	12.73
L50	S 64°44'27" E	98.64
L51	N 50°09'58" W	22.74
L52	S 66°03'34" W	39.97
L53	N 24°41'15" W	32.00
L54	S 65°05'15" W	34.64
L55	S 24°54'45" E	90.50
L56	S 85°11'10" W	268.19
L57	N 24°28'30" W	24.31
L58	S 62°43'30" W	7.87
L59	N 74°24'30" W	308.53
L60	S 84°30'20" E	30.80
L61	S 08°53'16" W	100.00

LINE TABLE

LINE	BEARING	DIST
L62	S 87°58'18" W	45.78
L63	S 89°58'18" W	27.05
L64	S 91°58'20" W	3.85
L65	S 91°58'20" W	36.88
L66	N 89°57'40" W	120.85
L67	N 89°57'40" W	52.18
L68	S 85°59'15" W	2.15
L69	N 24°41'00" W	122.55
L70	N 84°26'08" E	181.77
L71	S 44°10'46" E	5.50
L72	N 64°12'28" E	23.46
L73	N 24°26'20" W	189.55
L74	S 24°41'10" E	120.29
L75	N 65°09'15" E	7.51
L76	N 24°28'30" W	40.01
L77	N 24°28'30" W	68.55
L78	S 84°32'52" E	11.77
L79	S 84°30'20" E	18.23
L80	S 86°44'03" E	75.67
L81	S 15°59'47" W	188.18
L82	N 83°51'21" W	166.77
L83	N 29°42'53" W	5.00

LINE TABLE

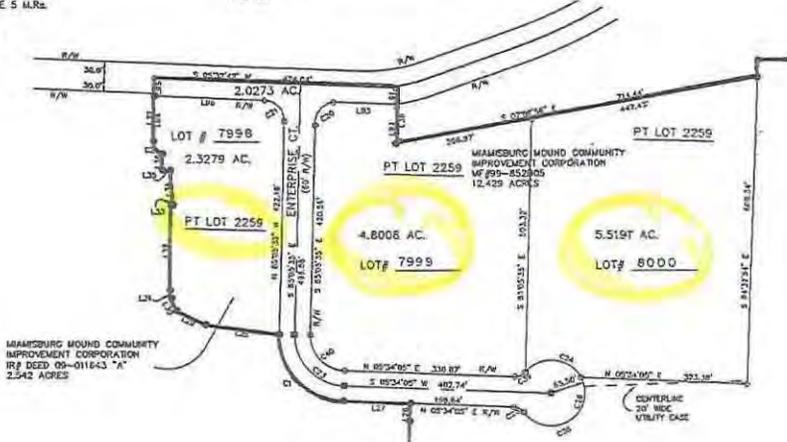
LINE	BEARING	DIST
L84	S 15°59'47" W	280.71
L85	N 83°51'21" W	806.12
L86	N 29°42'53" W	234.65
L87	N 29°42'53" W	52.21
L88	S 84°17'28" E	305.41
L89	S 24°41'00" W	186.52
L90	N 83°28'53" W	35.29
L91	N 80°28'23" W	75.77
L92	S 02°54'11" W	117.83
L93	S 85°30'05" E	85.07
L94	S 80°30'05" E	35.03
L95	S 05°54'11" W	216.03

LINE TABLE

LINE	BEARING	DIST
L96	S 85°30'42" W	11.20
L97	N 10°18'29" W	65.21
L98	S 78°38'33" W	107.40
L99	S 85°30'05" E	489.60
L100	N 12°38'54" W	140.87
L101	S 49°28'04" W	62.99
L102	N 83°51'21" W	154.81
L103	N 83°24'05" E	189.64
L104	N 12°38'54" W	140.87
L105	N 144°05'31" W	351.64
L106	S 24°16'00" W	65.81
L107	N 11°15'18" W	2.40
L108	N 38°04'41" W	11.48
L109	N 87°26'27" W	72.72

222P 30B

DETAIL "B"
1"=100'



CURVE TABLE

CHORD	BEARING	CHORD	BEARING	CHORD	BEARING
C01	130.00'	285.71'	89°20'34"	N 50°42'31" E	160.79'
C02	76.50'	73.78'	64°03'19"	N 53°25'58" E	30.19'
C03	280.63'	190.42'	30°05'09"	N 85°43'51" E	106.22'
C04	189.77'	233.36'	20°09'00"	N 21°09'00" E	248.60'
C05	200.00'	14.00'	87°00'00"	S 20°10'00" E	18.00'
C06	47.00'	73.78'	85°10'00"	N 18°48'10" E	65.87'
C07	16.00'	35.37'	87°10'00"	S 70°00'00" E	33.61'
C08	92.25'	145.82'	80°57'44"	S 75°33'29" E	131.10'
C09	263.67'	176.57'	20°21'24"	S 20°18'34" E	177.79'
C10	47.20'	75.46'	81°18'25"	N 70°14'31" E	47.72'
C11	523.37'	147.17'	81°57'53"	S 83°02'00" E	447.01'
C12	65.56'	29.25'	93°10'00"	S 23°29'24" E	30.17'
C13	258.25'	307.62'	67°43'00"	S 48°51'19" W	269.44'
C14	80.00'	111.21'	88°00"	S 20°58'10" W	100.60'
C15	200.00'	358.84'	25°00'00"	N 54°58'00" E	243.42'
C16	138.29'	133.23'	81°00'00"	N 85°29'28" W	172.80'
C17	248.77'	298.20'	72°24'40"	S 53°10'10" E	315.44'
C18	540.62'	543.47'	55°29'14"	N 84°28'04" W	334.32'
C19	113.25'	178.30'	81°32'00"	S 70°00'10" W	160.87'
C20	44.00'	63.39'	86°20'49"	S 35°24'45" E	54.86'
C21	40.00'	62.37'	89°20'10"	S 50°42'18" W	38.74'
C22	80.00'	124.76'	87°00'00"	S 20°58'10" E	140.87'
C23	25.00'	178.40'	11°10'00"	S 80°29'16" W	168.50'
C24	25.00'	28.84'	37°24'29"	N 21°01'11" E	22.14'
C25	45.00'	248.26'	78°00'00"	N 85°30'05" E	27.83'
C26	83.00'	1243.69'	107°00'00"	S 20°00'00" W	1061.72'
C27	65.00'	105.10'	80°00'00"	S 18°45'30" E	64.63'
C28	444.20'	252.52'	28°51'41"	S 81°01'20" E	221.19'
C29	80.00'	32.28'	04°20'00"	N 72°11'25" E	52.30'
C30	188.90'	189.92'	15°44'44"	N 82°07'22" E	183.32'
C31	244.44'	148.14'	24°26'32"	S 30°48'25" E	143.83'
C32	103.00'	103.00'	90°00'00"	S 90°00'00" E	103.00'
C33	50.00'	197.27'	172°49'37"	S 28°16'12" E	120.24'
C34	140.00'	343.47'	58°08'54"	N 54°29'00" E	212.35'
C35	112.25'	189.44'	87°00'00"	S 71°12'00" E	101.80'
C36	35.00'	72.84'	52°24'29"	N 28°43'00" W	22.14'
C37	70.00'	109.15'	89°26'40"	N 30°42'10" E	88.43'

PREPARED BY:
JUDGE ENGINEERING CO.
1301 E. BAYD ROAD
WETTERING, OHIO 45428
PHONE 637-224-1441 FAX 637-224-6498
SHEET 3 OF 5

TRANSFERRED
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 KAS. L. BOH

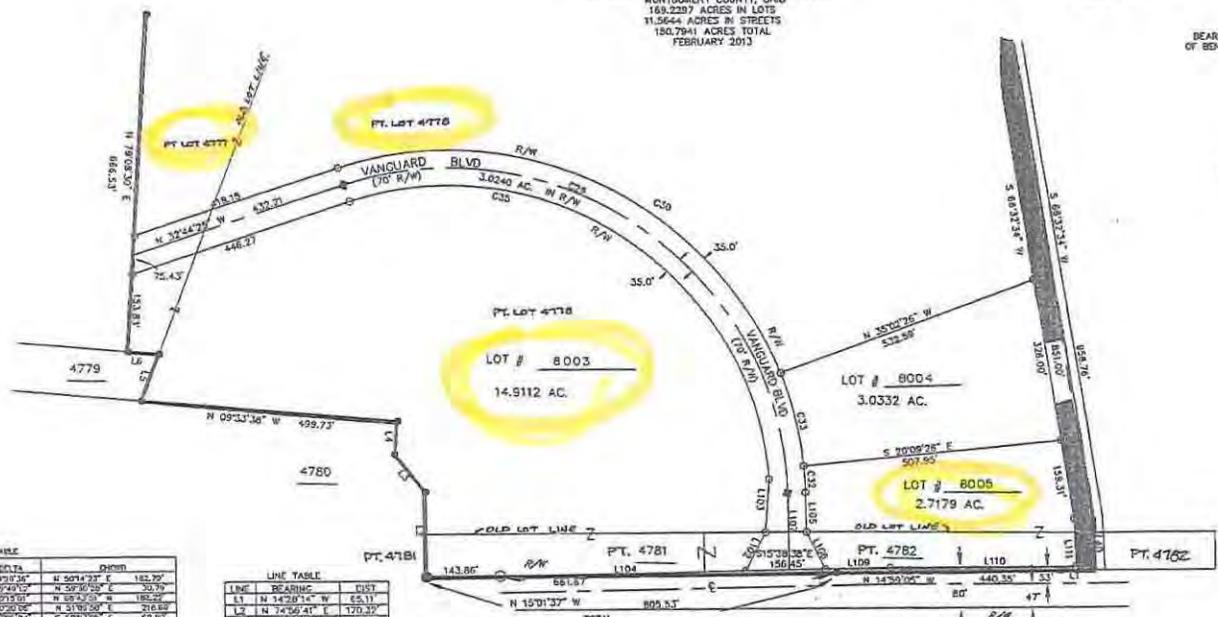
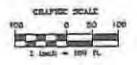
RECORD PLAN
MOUND ADVANCED TECHNOLOGY CENTER SECTION 1

BEING ALL OF LOTS 4778, 4779 & 4782, PART LOTS 2259, 2260, 4777, 4781 & 4782 OF THE CONSECUTIVE LOT ALIASES OF THE CITY OF MARIETTA, SECTION 25, TOWN 1, RANGE 6 M.R.s. SECTIONS 30, 35, & 36, TOWN 2, RANGE 5 M.R.s. MONTGOMERY COUNTY, OHIO 169.2287 ACRES IN LOTS 11.5644 ACRES IN STREETS 150.7941 ACRES TOTAL FEBRUARY 2013

222P30C

TYPE 602
 PLAN FILE
 RECORDED 04/02/2013 10:10 AM
 PREPARED BY: JUDGE ENGINEERING CO.
 1201 E. DAYTON ROAD
 KEYTOWN, OHIO 45429
 PHONE 937.294-1441 FAX 937.294-6505

BEARINGS BASED ON THE CENTERLINE OF SENAWAY RD. PER PLUMBED 09-011643 N 04°29'45" W



CHANG TABLE

LINE	BEGIN	END	BEARING	DIST
C01	130.00	702.71	N 89°13'30" E	182.99
C02	702.71	227.29	N 09°13'30" E	323.79
C03	227.29	100.00	N 89°13'30" E	182.99
C04	100.00	702.71	N 09°13'30" E	323.79
C05	702.71	130.00	N 89°13'30" E	182.99
C06	130.00	702.71	N 09°13'30" E	323.79
C07	702.71	227.29	N 89°13'30" E	182.99
C08	227.29	100.00	N 09°13'30" E	323.79
C09	100.00	702.71	N 89°13'30" E	182.99
C10	702.71	130.00	N 09°13'30" E	323.79
C11	130.00	702.71	N 89°13'30" E	182.99
C12	702.71	227.29	N 89°13'30" E	182.99
C13	227.29	100.00	N 09°13'30" E	323.79
C14	100.00	702.71	N 89°13'30" E	182.99
C15	702.71	130.00	N 09°13'30" E	323.79
C16	130.00	702.71	N 89°13'30" E	182.99
C17	702.71	227.29	N 89°13'30" E	182.99
C18	227.29	100.00	N 09°13'30" E	323.79
C19	100.00	702.71	N 89°13'30" E	182.99
C20	702.71	130.00	N 09°13'30" E	323.79
C21	130.00	702.71	N 89°13'30" E	182.99
C22	702.71	227.29	N 89°13'30" E	182.99
C23	227.29	100.00	N 09°13'30" E	323.79
C24	100.00	702.71	N 89°13'30" E	182.99
C25	702.71	130.00	N 09°13'30" E	323.79
C26	130.00	702.71	N 89°13'30" E	182.99
C27	702.71	227.29	N 89°13'30" E	182.99
C28	227.29	100.00	N 09°13'30" E	323.79
C29	100.00	702.71	N 89°13'30" E	182.99
C30	702.71	130.00	N 09°13'30" E	323.79
C31	130.00	702.71	N 89°13'30" E	182.99
C32	702.71	227.29	N 89°13'30" E	182.99
C33	227.29	100.00	N 09°13'30" E	323.79
C34	100.00	702.71	N 89°13'30" E	182.99
C35	702.71	130.00	N 09°13'30" E	323.79
C36	130.00	702.71	N 89°13'30" E	182.99
C37	702.71	227.29	N 89°13'30" E	182.99
C38	227.29	100.00	N 09°13'30" E	323.79
C39	100.00	702.71	N 89°13'30" E	182.99
C40	702.71	130.00	N 09°13'30" E	323.79

LINE TABLE

LINE	BEARING	DIST
L1	N 14°28'14" W	65.11
L2	N 74°56'41" E	170.37
L3	N 27°42'23" E	46.57
L4	N 89°22'45" E	63.98
L5	S 84°25'01" E	100.51
L6	N 09°28'28" W	60.41
L7	N 83°06'43" W	109.56
L8	N 08°45'53" E	94.84
L9	N 21°55'14" E	208.77
L10	N 79°27'55" W	79.80
L11	N 14°15'45" W	152.26
L12	N 50°25'32" E	58.44
L13	N 25°13'50" E	66.97
L14	N 50°17'41" E	58.71
L15	N 23°34'44" E	106.77
L16	N 67°59'35" E	195.36
L17	N 33°10'07" E	62.19
L18	N 80°13'24" E	45.02
L19	N 01°21'45" W	10.36
L20	N 82°56'15" W	120.55
L21	N 09°28'44" E	114.21
L22	N 84°30'00" E	56.85
L23	S 27°32'24" E	170.96
L24	S 26°28'48" E	63.74
L25	N 85°42'58" E	136.83
L26	S 84°25'02" E	39.20
L27	N 08°34'55" E	131.33
L28	N 10°09'51" E	144.81
L29	N 28°43'26" E	62.63
L30	N 82°53'41" E	28.86

LINE TABLE

LINE	BEARING	DIST
L31	N 85°25'03" E	16.15
L32	S 05°29'27" E	168.72
L33	S 01°34'34" E	4.60
L34	N 88°54'18" E	68.48
L35	N 08°06'00" E	16.15
L36	S 85°08'10" E	31.81
L37	N 85°40'00" W	174.30
L38	N 85°28'23" W	111.01
L39	S 83°29'35" E	34.00
L40	S 73°19'03" E	108.12
L41	S 84°30'08" E	193.41
L42	S 85°58'18" W	72.85
L43	S 31°28'20" W	48.51
L44	S 82°30'27" W	97.29
L45	S 03°47'11" W	58.87
L46	N 65°44'40" W	173.07
L47	S 40°10'35" W	81.47
L48	S 23°02'31" E	17.73
L49	S 64°24'34" W	183.64
L50	N 50°05'58" W	225.74
L51	S 84°25'02" W	39.57
L52	N 89°41'19" W	39.00
L53	S 85°03'13" W	34.84
L54	S 84°36'25" E	39.25
L55	S 85°11'32" W	296.32

LINE TABLE

LINE	BEARING	DIST
L56	N 24°26'30" W	24.31
L57	S 65°33'50" W	7.67
L58	N 24°26'30" W	308.52
L59	S 84°36'25" E	30.00
L60	S 09°53'16" W	100.00
L61	S 89°58'18" W	45.78
L62	S 23°25'18" W	27.68
L63	S 51°25'20" W	9.55
L64	S 51°26'20" W	38.89
L65	N 89°57'40" W	120.86
L66	N 89°57'40" W	50.16
L67	S 65°05'15" W	2.15
L68	N 24°11'00" W	122.82
L69	N 64°17'29" E	39.17
L70	N 24°26'30" W	5.30
L71	N 85°28'23" W	32.31
L72	S 64°17'29" E	23.48
L73	N 24°26'30" W	189.89
L74	S 24°11'00" E	120.37
L75	N 85°28'23" W	75.71
L76	S 65°24'11" W	117.81
L77	N 24°26'30" W	89.67
L78	S 84°36'25" E	31.77
L79	S 84°36'25" E	18.23

LINE TABLE

LINE	BEARING	DIST
L80	S 06°34'03" E	75.87
L81	S 15°29'47" W	189.18
L82	N 83°51'21" W	163.37
L83	N 20°42'22" W	3.00
L84	S 15°29'47" W	280.21
L85	N 83°51'21" W	284.12
L86	N 20°42'22" W	7.34
L87	S 15°29'47" W	32.31
L88	N 85°28'23" W	38.41
L89	S 24°11'00" E	188.87
L90	N 15°29'47" W	140.97
L91	N 14°29'53" W	391.64
L92	N 31°21'03" W	65.81
L93	N 31°21'03" W	4.60
L94	N 30°44'41" W	4.60
L95	N 30°44'41" W	216.03

LINE TABLE

LINE	BEARING	DIST
L96	S 65°32'42" W	11.20
L97	N 77°26'21" W	86.71
L98	S 78°28'33" W	107.40
L99	S 15°28'38" E	482.89
L100	N 7°21'03" E	78.56
L101	S 74°22'20" W	154.31
L102	N 65°24'05" E	193.24
L103	N 15°28'38" W	140.97
L104	N 14°29'53" W	391.64
L105	N 31°21'03" W	65.81
L106	N 31°21'03" W	4.60
L107	N 30°44'41" W	4.60
L108	S 65°24'11" W	117.81
L109	N 24°26'30" W	89.67
L110	S 84°36'25" E	31.77
L111	S 84°36'25" E	18.23

PLAT BOOK 222 PAGE: 30C

PREPARED BY:
JUDGE ENGINEERING CO.
 1201 E. DAYTON ROAD
 KEYTOWN, OHIO 45429
 PHONE 937.294-1441 FAX 937.294-6505

TRANSFERRED
 CASE NO. 103-14-07
 MADE BY JOHN
 MARRAS

EASEMENT PLAN
**MOUND ADVANCED
 TECHNOLOGY CENTER**
 SECTION 1

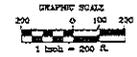
222p30D

BEING ALL OF LOTS 4778, 6127 & 6128; PART LOTS
 2259, 2280, 4777, 4781 & 4782 OF THE CONSECUTIVE
 LOT NUMBERS OF THE CITY OF MAUMSBURG
 SECTION 25, TOWN 1, RANGE 6 N.W.3.
 SECTIONS 30, 35, & 36, TOWN 2, RANGE 5 N.P.2.
 MONTGOMERY COUNTY, OHIO
 169.2297 ACRES IN LOTS
 11.5644 ACRES IN STREETS
 FEBRUARY 2013

TYPE 300
 JUNE 2011
 DRAWING NO. 103-14-07-01
 FILE NO. 103-14-07-01
 MONTGOMERY COUNTY, OHIO
 PLANNING & ZONING DEPARTMENT
 PLAN DIVISION

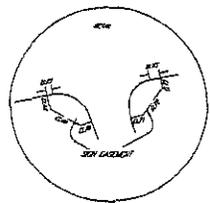
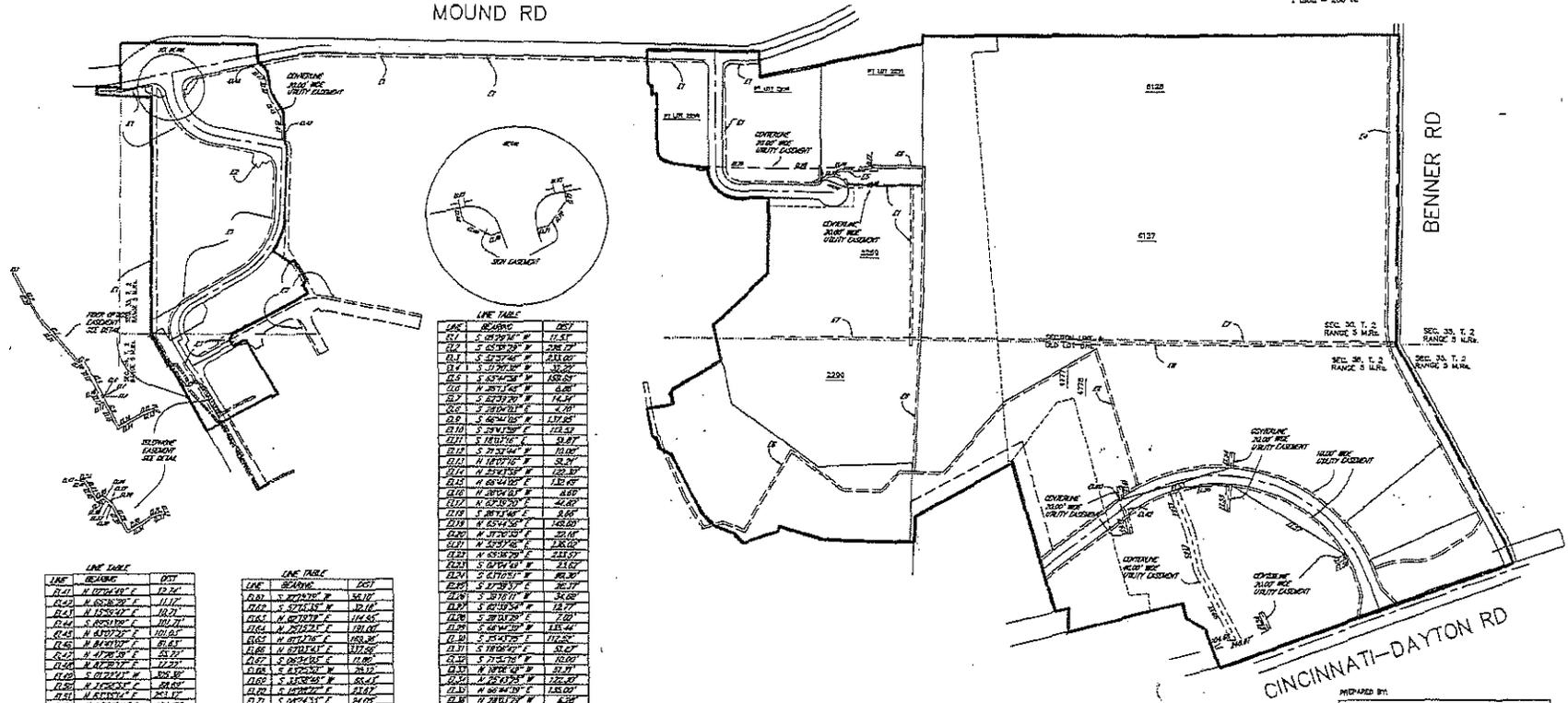
BEARINGS BASED ON THE CENTERLINE
 OF BENNER RD. PER JUDGE 09-011643
 N 84°20'45" W

- 01 WESTERN EASEMENT PLAZED 09-11029
- 02 WESTERN EASEMENT PLAZED 09-11030
- 03 WESTERN EASEMENT PLAZED 09-11031
- 04 WESTERN EASEMENT PLAZED 09-11032
- 05 WESTERN EASEMENT PLAZED 09-11033
- 06 WESTERN EASEMENT PLAZED 09-11034
- 07 WESTERN EASEMENT PLAZED 09-11035
- 08 WESTERN EASEMENT PLAZED 09-11036



MOUND RD

BENNER RD



LINE TABLE

LINE	BEARING	DEPT
011	S 89°20'45" W	11.57
012	S 89°20'45" W	1248.77
013	S 89°20'45" W	1248.77
014	S 89°20'45" W	1248.77
015	S 89°20'45" W	1248.77
016	S 89°20'45" W	1248.77
017	S 89°20'45" W	1248.77
018	S 89°20'45" W	1248.77
019	S 89°20'45" W	1248.77
020	S 89°20'45" W	1248.77
021	S 89°20'45" W	1248.77
022	S 89°20'45" W	1248.77
023	S 89°20'45" W	1248.77
024	S 89°20'45" W	1248.77
025	S 89°20'45" W	1248.77
026	S 89°20'45" W	1248.77
027	S 89°20'45" W	1248.77
028	S 89°20'45" W	1248.77
029	S 89°20'45" W	1248.77
030	S 89°20'45" W	1248.77
031	S 89°20'45" W	1248.77
032	S 89°20'45" W	1248.77
033	S 89°20'45" W	1248.77
034	S 89°20'45" W	1248.77
035	S 89°20'45" W	1248.77
036	S 89°20'45" W	1248.77
037	S 89°20'45" W	1248.77
038	S 89°20'45" W	1248.77
039	S 89°20'45" W	1248.77
040	S 89°20'45" W	1248.77
041	S 89°20'45" W	1248.77
042	S 89°20'45" W	1248.77
043	S 89°20'45" W	1248.77
044	S 89°20'45" W	1248.77
045	S 89°20'45" W	1248.77
046	S 89°20'45" W	1248.77
047	S 89°20'45" W	1248.77
048	S 89°20'45" W	1248.77
049	S 89°20'45" W	1248.77
050	S 89°20'45" W	1248.77
051	S 89°20'45" W	1248.77
052	S 89°20'45" W	1248.77
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054	S 89°20'45" W	1248.77
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058	S 89°20'45" W	1248.77
059	S 89°20'45" W	1248.77
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061	S 89°20'45" W	1248.77
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066	S 89°20'45" W	1248.77
067	S 89°20'45" W	1248.77
068	S 89°20'45" W	1248.77
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073	S 89°20'45" W	1248.77
074	S 89°20'45" W	1248.77
075	S 89°20'45" W	1248.77
076	S 89°20'45" W	1248.77
077	S 89°20'45" W	1248.77
078	S 89°20'45" W	1248.77
079	S 89°20'45" W	1248.77
080	S 89°20'45" W	1248.77
081	S 89°20'45" W	1248.77
082	S 89°20'45" W	1248.77
083	S 89°20'45" W	1248.77
084	S 89°20'45" W	1248.77
085	S 89°20'45" W	1248.77
086	S 89°20'45" W	1248.77
087	S 89°20'45" W	1248.77
088	S 89°20'45" W	1248.77
089	S 89°20'45" W	1248.77
090	S 89°20'45" W	1248.77
091	S 89°20'45" W	1248.77
092	S 89°20'45" W	1248.77
093	S 89°20'45" W	1248.77
094	S 89°20'45" W	1248.77
095	S 89°20'45" W	1248.77
096	S 89°20'45" W	1248.77
097	S 89°20'45" W	1248.77
098	S 89°20'45" W	1248.77
099	S 89°20'45" W	1248.77
100	S 89°20'45" W	1248.77

LINE TABLE

LINE	BEARING	DEPT
011	N 07°20'45" E	12.24
012	N 07°20'45" E	11.12
013	N 07°20'45" E	10.71
014	N 07°20'45" E	10.30
015	N 07°20'45" E	10.00
016	N 07°20'45" E	9.61
017	N 07°20'45" E	9.22
018	N 07°20'45" E	8.83
019	N 07°20'45" E	8.44
020	N 07°20'45" E	8.05
021	N 07°20'45" E	7.66
022	N 07°20'45" E	7.27
023	N 07°20'45" E	6.88
024	N 07°20'45" E	6.49
025	N 07°20'45" E	6.10
026	N 07°20'45" E	5.71
027	N 07°20'45" E	5.32
028	N 07°20'45" E	4.93
029	N 07°20'45" E	4.54
030	N 07°20'45" E	4.15
031	N 07°20'45" E	3.76
032	N 07°20'45" E	3.37
033	N 07°20'45" E	2.98
034	N 07°20'45" E	2.59
035	N 07°20'45" E	2.20
036	N 07°20'45" E	1.81
037	N 07°20'45" E	1.42
038	N 07°20'45" E	1.03
039	N 07°20'45" E	0.64
040	N 07°20'45" E	0.25

LINE TABLE

LINE	BEARING	DEPT
011	S 89°20'45" W	12.24
012	S 89°20'45" W	11.12
013	S 89°20'45" W	10.71
014	S 89°20'45" W	10.30
015	S 89°20'45" W	10.00
016	S 89°20'45" W	9.61
017	S 89°20'45" W	9.22
018	S 89°20'45" W	8.83
019	S 89°20'45" W	8.44
020	S 89°20'45" W	8.05
021	S 89°20'45" W	7.66
022	S 89°20'45" W	7.27
023	S 89°20'45" W	6.88
024	S 89°20'45" W	6.49
025	S 89°20'45" W	6.10
026	S 89°20'45" W	5.71
027	S 89°20'45" W	5.32
028	S 89°20'45" W	4.93
029	S 89°20'45" W	4.54
030	S 89°20'45" W	4.15
031	S 89°20'45" W	3.76
032	S 89°20'45" W	3.37
033	S 89°20'45" W	2.98
034	S 89°20'45" W	2.59
035	S 89°20'45" W	2.20
036	S 89°20'45" W	1.81
037	S 89°20'45" W	1.42
038	S 89°20'45" W	1.03
039	S 89°20'45" W	0.64
040	S 89°20'45" W	0.25

PLAT BOOK 222 PAGE: 30D

PREPARED BY:

JUDGE ENGINEERING CO.
 1201 E. DAVID ROAD
 KETTERING, OHIO 45429
 PHONE (513) 724-1441 FAX (513) 724-6438

**Parcel D (portion of), Building 100, 790 Enterprise Court, Parcel
8000, County ID K46 01507 0031.**

**Parcel transfer from City of Miamisburg to MDC and MDC sale
to Dyrdek Group**

File# 2014-00069586

3

QUIT CLAIM DEED
(Ohio Statutory Form)

CITY OF MIAMISBURG, OHIO, an Ohio municipal corporation ("Grantor"), for valuable consideration paid, grants to **MOUND DEVELOPMENT CORPORATION**, an Ohio not-for-profit corporation f/k/a/ Miamisburg Mound Community Improvement Corporation, having an address of 965 Capstone Drive, P.O. Box 232, Miamisburg, Ohio 45342-0232 "(Grantee)", the real property described on Exhibit A attached hereto and incorporated hereby by reference (referred to in this Deed as the "Lot").

THE INTEREST CONVEYED HEREBY IS SUBJECT TO COVENANTS AND RESTRICTIONS FOUND IN THE DEED FROM THE UNITED STATES GOVERNMENT TO GRANTOR AND RECORDED AS INSTRUMENT NO. 09-011643 OF THE DEED RECORDS OF THE MONTGOMERY COUNTY, OHIO RECORDER'S OFFICE.

PRIOR DEED REFERENCE: Instrument No. 2013-00079430 of the Montgomery County, Ohio Deed Records.

Executed this 17th day of December, 2014.

QBL

CITY OF MIAMISBURG, OHIO
an Ohio municipal corporation

By: 

Printed Name: KEITH JOHNSON

Title: 12/16/14

STATE OF OHIO, COUNTY OF MONTGOMERY, SS:

The foregoing instrument was acknowledged before me this 17th day of December, 2014, by Keith Johnson, the City Manager of the CITY OF MIAMISBURG, OHIO, an Ohio municipal corporation, on behalf of said municipal corporation.



Leslie J. Karacia
Notary Public

LESLIE J. KARACIA, Notary Public
In and for the State of Ohio
My Commission Expires June 16, 2015

This instrument prepared by:
Shannon L. Costello, Esq.
Coolidge Wall Co., L.P.A.
33 West First Street, Suite 600
Dayton, OH 45402
w:\wdox\client\001969\00603\00715179.docx

EXHIBIT A

Situate in Sections 30 and 36, Town 2, Range 5 M.Rs, City of Miamisburg, Montgomery County, Ohio and being Lot Numbered 8000 of the Mound Advanced Technology Center Record Plan, Section 1, as recorded in Plat Book 222, Page 30 of the Montgomery County, Ohio Records.

Parcel Id. No.: K46 01507 0031

CHICAGO TITLE #38140775
1 S. MAIN STREET, SUITE 330
DAYTON, OHIO 45402
ATTN: FALLON DONOVAN

Bot

File# 2014-00069587

3

LIMITED WARRANTY DEED
(Ohio Statutory Form)

MOUND DEVELOPMENT CORPORATION, an Ohio not-for-profit corporation having an address of 965 Capstone Drive, P.O. Box 232, Miamisburg, Ohio 45343-0232 ("Grantor"), for valuable consideration paid, grants, with limited warranty covenants, to **DYRDEK GROUP, INC.**, a Delaware corporation ("Grantee"), whose tax mailing address is c/o Provident Financial Management, 2850 Ocean Park Blvd, Suite 300, Santa Monica, California 90405, Attn: Deana Santana, the real property described on Exhibit A attached hereto and incorporated herein by reference (referred to in this Deed as the "Property").

Subject to all real estate taxes and assessments due and payable in January, 2015, and thereafter; all legal highways and public rights-of-way; building, zoning and other laws, statutes, ordinances and regulations; easements, covenants, conditions and restrictions of record, including without limitation, those provided in the Affidavit recorded at Deed Microfiche No. 90-616D02, those in Environmental Covenants recorded at Instrument No. 2012-00004722 (as further referenced below), those provided in the Quit Claim Deed from the United States of America to Grantor recorded at Instrument No. 09-011643, and those provided in the Mound Advanced Technology Center Declaration of Covenants and Restrictions recorded at Instrument No. 2012-00084258, all in the records of the Montgomery County, Ohio Recorder's office.

THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL COVENANT DATED NOVEMBER 2, 2011, RECORDED IN THE DEED OR OFFICIAL RECORDS OF THE MONTGOMERY COUNTY RECORDER ON JANUARY 24, 2012 IN DEED INSTRUMENT NO. 2012-00004722. THE ENVIRONMENTAL COVENANT CONTAINS THE FOLLOWING ACTIVITY AND USE LIMITATIONS:

Prohibition against residential use and farming activities; prohibition against use of groundwater; prohibition against removal of soil from Mound property.

Owner or transferee, if applicable, shall notify Ohio EPA within ten (10) days after each conveyance of interest of the Property or any portion thereof. The notice shall include the name, address and telephone number of the Transferee, a copy of the deed or other documentation evidencing the conveyance, and a survey map that shows the boundaries of the property being transferred.

QBR

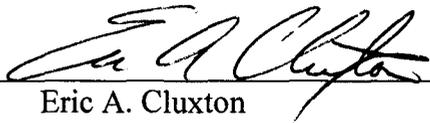
Grantor excepts from the conveyance made by this Deed, and reserves to itself and its successors and assigns forever, a permanent easement on the Property for purposes of access and utilities upon that portion of the Property being fifty (50) feet from the eastern boundary of the Property (this area being referred to as the "Easement Area"). These easements are reserved and created for the purpose of providing pedestrian and/or vehicular ingress and egress to, from and between portions of the surrounding real property held by Grantor or the City of Miamisburg, Ohio and situated within the vicinity of the Property and for the purpose of operating, maintaining, constructing, installing, repairing, replacing and/or removing utility lines, conduits and cables and any replacements thereof and all related equipment and appurtenances thereto. No walls, fences, structures or barriers of any kind and no other impairment of access shall be constructed or maintained on the Easement Area that shall prevent or impair the use of the Easement Area by Grantor. No improvements or structures shall be constructed in the Easement Area that would impair the use of the area for the construction, installation or operation of utilities.

The easements reserved in this Deed shall run with the land and shall be a permanent benefit to the properties held by Grantor and the City of Miamisburg, Ohio as of the date of this Deed and within the vicinity of the Property and a permanent burden to the Property.

PRIOR DEED REFERENCE: Instrument No. 2014-00069586 of the Montgomery County, Ohio Deed Records.

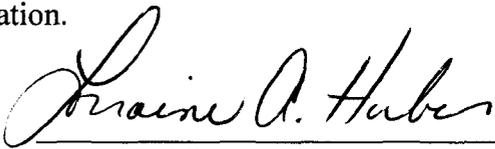
Executed this 16 day of December, 2014.

MOUND DEVELOPMENT CORPORATION

By: 
Eric A. Cluxton
President

STATE OF OHIO, COUNTY OF MONTGOMERY, SS:

The foregoing instrument was acknowledged before me this 16th day of December, 2014, by Eric A. Cluxton, the President of Mound Development Corporation, an Ohio not-for-profit corporation, on behalf of the corporation.


Notary Public

This instrument prepared by:
Shannon L. Costello, Esq.
Coolidge Wall Co., L.P.A.
33 West First Street, Suite 600
Dayton, OH 45402
W:\Wdcox\Client\001969\00637\00724884.Docx

LORRAINE A. HUBER, Notary Public
In and for the State of Ohio
My Commission Expires May 22, 2016

EXHIBIT A

Situate in Sections 30 and 36, Town 2, Range 5 M.Rs, City of Miamisburg, Montgomery County, Ohio and being Lot Numbered 8000 of the Mound Advanced Technology Center Record Plan, Section 1, as recorded in Plat Book 222, Page 30 of the Montgomery County, Ohio Records.

Parcel Id. No.: K46 01507 0031

CHICAGO TITLE # 38140775 bot
1 S. MAIN STREET, SUITE 330
DAYTON, OHIO 45402
ATTN: FALLON DONOVAN

Parcel 6A
Quitclaim Deed and Property Description
From DOE HQ to EMCBC

QUIT CLAIM DEED

3

The UNITED STATES OF AMERICA, acting by and through the Secretary of the Department of Energy (hereinafter sometimes called "Grantor"), under and pursuant to the authority of the Atomic Energy Act of 1954, Section 161(g) (42U.S.C. §2201(g) for other good and valuable consideration, hereby grants to the United States of America, acting by and through the Secretary of the Department of Energy, whose mailing address is for purposes of this Quit Claim Deed: Department of Energy, Environmental Management Consolidated Business Center, 250 E. 5th St., Suite 500, Cincinnati, OH 45202, the real property as described in Exhibit A, commonly referred to as Parcel 6a.

IN WITNESS WHEREOF, the United States of America, acting by and through its Secretary of the Department of Energy, has caused these presents to be executed this 11 day of December, 2012.

UNITED STATES OF AMERICA
Larry Kelly
LARRY KELLY

State of Ohio)
County of Hamilton) SS.

Before me, a Notary Public in and for said State and County, appeared this 11th day of December, 2012, Larry Kelly, who acknowledged that he is the Real Property Officer of the Environmental Management Consolidated Business Center for the United States Department of Energy, with full authority to execute the foregoing on behalf of the United States of America, and who acknowledged the above to be his signature and his free act and deed.

SEAL

Scott D. Lucarelli
Notary Public

Prepared by:
Thomas Aug, Esq.
250 E. 5th Street, Ste 500
Cincinnati, OH 45202
(513) 246-0221
OH Atty. Regis. 61881



SCOTT D. LUCARELLI
NOTARY PUBLIC
STATE OF OHIO
Recorded in
Butler County
My Comm. Exp. 8/10/15

Exhibit "A"
DESCRIPTION OF
2.352 Acres
Parcel 6A

DIV/2

K46-00501-0015

located in
Section 30, Town 2, Range 5, M.Rs.
City of Miamisburg, Montgomery County, Ohio

Situate in Section 30, Town 2, Range 5, M.Rs., City of Miamisburg, County of Montgomery, State of Ohio, *being part of a 87.28 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1214, Page 12* of the Deed Records of Montgomery County, Ohio, said 87.28 acre tract being comprised of a 59.75 acre tract, also a 19.40 acre tract, also a 9.97 acre tract, also a 0.78 acre tract and a 0.78 acre tract all known as Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, *being a new division of 2.352 acres from said 87.28 acre tract* and being more fully bounded and described as follows:

Commencing at a "DOE" concrete monument found disturbed, said monument being the northwest corner of Section 30, said monument being the northeast corner of Section 36, said monument also being the northeasterly corner of a 6.63 acre tract (by deed) conveyed to the City of Miamisburg, Ohio, as recorded in Deed Book Volume 594, Page 410 of the Deed Records of Montgomery County, Ohio; thence with the north line of the Northwest Quarter of Section 30, South 85° 02' 50" East, a distance of 1249.79 feet to a point, witness a 5/8" iron pin found, South 63° 34' 50" East, 0.30 feet, said point being the northeast corner of a 14.288 acre tract conveyed to Miamisburg Mound Community Improvement Corporation, as recorded in Deed Microfiche No. 99-0852B11 of the Deed Records of Montgomery County, Ohio, said 14.288 acre tract known as Parcel "H" of the recorded Mound Surveys, said 14.288 acre tract also known as Part of Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, Ohio, reference previous survey by HLS Surveyors & Engineers as recorded in Montgomery County Engineer's Record of Land Surveys Volume 1999, Page 0326, said point also being the original centerline of Mound Road extended per Road Plat recorded in Record Plat Book "DD", Page 175, said point being established by State Plane Coordinates per previous survey by LJB as recorded in Survey Record number 83-88 as recorded in the Montgomery County Recorder's Records; thence from said point with the original centerline of Mound Road, the easterly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract and the easterly line of said United States of America 87.28 acre tract, South 05° 32' 42" West, a distance of 1120.88 feet to a 2 1/2" mag nail set, said mag nail being the **True Point of Beginning** of the hereinafter described new division of 2.352 acres;

Thence continuing with the centerline of Mound Road and the easterly line of said United States of America 87.28 acre tract, **South 05° 32' 42" West**, a distance of **324.22 feet to a 2 1/2" mag nail set**, said mag nail being the southeasterly corner of the herein described 2.352 acre tract;

Thence with a new division line through said United States of America 87.28 acre tract on the following four (4) courses,

1) **North 84° 27' 18" West**, passing a 5/8" iron pin set at 30.00 feet, said iron pin lying in the current westerly right of way line of Mound Road, in all a distance of **394.05 feet to a 5/8" iron pin**

set, said iron pin being a non-tangential point at the beginning of a curve to the right and having a radial bearing of North 18° 54' 47" East;

2) Thence with a curve to the right having a delta angle of 113° 00' 17", a radius of 24.86 feet, an arc length of 49.04 feet and a chord bearing and distance of North 14° 35' 04" West, 41.47 feet to a 5/8" iron pin set;

3) Thence, North 41° 55' 04" East, a distance of 354.31 feet to a 5/8" iron pin set;

4) Thence, South 84° 27' 18" East, passing a 5/8" iron pin set at 168.21 feet, said iron pin lying in the current westerly right of way line of Mound Road, in all a distance of 198.21 feet to the True Point of Beginning, containing 2.352 acres, more or less, of which 1.006 acres being part of said United States of America 59.75 acre tract, 0.737 acres being part of said United States of America 0.78 acre tract (D.B. Vol. 1214, Pg. 15) and 0.609 acres being part of said United States of America 0.78 acre tract (D.B. Vol. 1214, Pg. 17) and being subject to all easements, highways and right of ways of record.

Bearing basis established as Grid North by GPS observation August 7th & 8th, 2002 at Latitude N39° 38' 25.81", Longitude W084° 17' 28.09" (Coast & Geodetic Survey Monument #G-139, 1947); Ohio State Plane Coordinate system, Ohio South Zone 3402 (NAD 83), True North being 01° 08' 11" east of Grid North.

This description prepared from an actual field survey performed under my direct supervision, Timothy W. Schram, Sr., Registered Professional Surveyor number 7299 of the State of Ohio, and that all monuments referenced herein and placed on the ground represents the boundaries of the herein described tract, and based on a Plat of Survey as recorded in the Montgomery County Engineer's Record of Land Surveys in Record Volume number 2004, Page 0310.

Timothy W. Schram, Sr., Regist. Prof. Surveyor No. 7299 of the State of Ohio, June 1, 2004.

Plat 2004 Mound Parcel 6A

JOSEPH LIVON, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
DAYTON, OHIO

APPROVED
BY ED-A DATE 7/28/04
FILE NO. 2004 0310

KARL KEITH
COUNTY AUDITOR
MONTGOMERY COUNTY, DAYTON, OHIO
DIVISION

BY S. Kelly DATE 12/12/2012
GIS MAPPING DEPARTMENT



Parcel 7
Quitclaim Deed and Property Description
From DOE HQ to EMCBC

Type: DEE
Kind: DEED
Recorded: 12/13/2012 08:56:51 AM
Fee Amt: \$52.00 Page 1 of 5
Montgomery County, OH
Willis E. Blackshear County Recorder
File# 2012-00082087

TRANSFER
08:41am DECEMBER 13, 2012
KARL L. KEITH, COUNTY AUDITOR
Conv/Tran #: 17761 \$.00

QUIT CLAIM DEED

5

The UNITED STATES OF AMERICA, acting by and through the Secretary of the Department of Energy (hereinafter sometimes called "Grantor"), under and pursuant to the authority of the Atomic Energy Act of 1954, Section 161(g) (42U.S.C. §2201(g) for other good and valuable consideration, hereby grants to the United States of America, acting by and through the Secretary of the Department of Energy, whose mailing address is for purposes of this Quit Claim Deed: Department of Energy, Environmental Management Consolidated Business Center, 250 E. 5th St., Suite 500, Cincinnati, OH 45202, the real property as described in Exhibit A, commonly referred to as Parcel 7.

IN WITNESS WHEREOF, the United States of America, acting by and through its Secretary of the Department of Energy, has caused these presents to be executed this 11 day of December, 2012.

UNITED STATES OF AMERICA

Larry Kelly
LARRY KELLY

State of Ohio)
County of Hamilton) SS.

Before me, a Notary Public in and for said State and County, appeared this 11/14 day of December, 2012, Larry Kelly, who acknowledged that he is the Real Property Officer of the Environmental Management Consolidated Business Center for the United States Department of Energy, with full authority to execute the foregoing on behalf of the United States of America, and who acknowledged the above to be his signature and his free act and deed.

SEAL

[Signature]
Notary Public

Prepared by:
Thomas Aug, Esq.
250 E. 5th Street, Ste 500
Cincinnati, OH 45202
(513) 246-0221
OH Atty. Regis. 61881



SCOTT D. LUCARELLI
NOTARY PUBLIC
STATE OF OHIO
Recorded in
Butler County
My Comm. Exp. 8/10/15

DIV/5-1-2
DIV/5-3-13
K46 00501 0016 \$
K44 00503 0030



Description of 42.307 Acres

Situate in the State of Ohio, County of Montgomery, City of Miamisburg, being part of Section 30 and Section 36, Town 2, Range 5, M.Rs., being 40.385 acres out of Section 30, being 1.922 acres out of Section 36, being part of Lot Number 2259 and part of Lot Number 2290 of the consecutive numbers of lots of the City of Miamisburg, being 40.219 acres of land that lie over and across an 87.28 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 12, being 1.782 acres of land that lie over and across a 17.68 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 248, being 0.140 acres of land that lie over and across a 20.46 acre tract of land described in deed to the United States of America of record in Deed Book 1215, Page 347, being 0.144 acres of land that lie over and across a 0.78 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 17, being 0.022 acres of land that lie over and across a 0.78 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 15, being Montgomery County Engineer Reference Survey Record 2006-0269, and being more particularly described as follows:

COMMENCING for reference at a concrete monument found at the northwest corner of said Section 30 and the northeast corner of said Section 36, being the northerly line of said Town 2, Range 5, M.Rs. and being the southerly line of Section 25, Town 1, Range 6, M.Rs.;

Thence South 85°00'57" East with said Town line, the northerly line of City of Miamisburg Lot Number 2258, and the northerly line of said Section 30, a distance of 1249.65 feet to an iron pin set at the northeasterly corner of a 14.288 acre tract of land described in deed to Miamisburg Mound Community Improvement Corporation of record in Instrument Record Deed-09-011643 Exhibit "E";

Thence South 05°32'59" West with the easterly line of said 14.288 acre tract and the easterly line of said City Lot Numbers 2258 and 2259, a distance of 731.91 feet to an iron pin set on the westerly line of a 42.63 acre tract of land and is also now known as Lot 2260 of the consecutive numbers of lots of the City of Miamisburg as described in deed to City of Miamisburg of record in Deed Book 776, Page 581, being on the easterly line of said 87.28 acre tract, and being the **TRUE POINT OF BEGINNING** of the tract to be described;

Thence South 05°32'59" West with the westerly line of said 42.63 acre tract, the easterly line of said City Lot Number 2259, and the easterly line of said 87.28 acre tract, a distance of 389.54 feet (passing a 1 inch iron pin found in Monument box at a distance of 154.54 feet), to a Mag nail found on the centerline of Mound Road;

Thence with a new division line though said 87.28 acre tract, said City Lot Number 2259, and both said 0.78 acre tracts with the following four (4) courses:

- 1.) North 84°28'40" West, a distance of 198.41 feet to an iron pin set;
- 2.) South 41°54'30" West, a distance of 354.02 feet to an iron pin set at a point of curvature;

- 3.) With a curve to the left having a radius of 24.86 feet, a central angle of 113°00'50", a chord bearing of South 14°35'55" East, a chord length of 41.47 feet, and an arc length of 49.04 feet to an iron pin set;
- 4.) South 84°28'09" East, a distance of 394.00 feet to a Mag nail set on the centerline of said Mound Road;

Thence South 05°32'59" West with the westerly line of said 42.63 acre tract, the easterly line of said 87.28 acre tract, the easterly line of said City Lot Number 2259, and the centerline of said Mound Road, a distance of 790.36 feet to a Mag nail set;

Thence with the north and west line of a 2.542 acre tract of land conveyed to Miamisburg Mound Community Improvement Corporation by deed recorded in Instrument Record Deed-09-011643 Exhibit "A" with the following eleven (11) courses:

- 1.) North 85°24'02" West, a distance of 124.08 feet to a 5/8" iron pin found at a point of curvature;
- 2.) With a curve to the left having a radius of 26.90 feet, a central angle of 69°49'29", a chord bearing of South 59°41'14" West, a chord length of 30.79 feet, and an arc length of 32.78 feet to a 5/8" iron pin found;
- 3.) North 85°16'52" West, a distance of 31.54 feet to a 5/8" iron pin found;
- 4.) South 06°33'12" West, a distance of 16.12 feet to a cross notch found;
- 5.) South 88°51'53" West, a distance of 68.54 feet to a Mag nail found;
- 6.) North 00°39'23" West, a distance of 4.38 feet to a railroad spike found;
- 7.) North 85°56'03" West, a distance of 168.86 feet to an iron pin set;
- 8.) South 85°36'28" West, a distance of 16.02 feet to an iron pin set;
- 9.) South 69°32'50" West, a distance of 26.94 feet to an iron pin set;
- 10.) South 29°42'35" West, a distance of 62.82 feet to a 5/8" iron pin found;
- 11.) South 10°37'07" West, a distance of 144.91 feet to a 5/8" iron pin found with a Schram cap on the northerly line of a 12.429 acre tract of land as described in deed to Miamisburg Mound Community Improvement Corporation of record in Instrument Record Deed-09-011643 Exhibit "D" and being the northerly right of way of Mound Parkway (right-of-way to be dedicated by the City of Miamisburg);

Thence with the westerly line of said 12.429 acre tract, the westerly right of way line of said Mound Parkway (Private) (right-of-way to be dedicated by the City of Miamisburg), and crossing said City Lot Number 2259 the following two (2) courses:

- 1.) With a curve to the left having a radius of 130.00 feet, a central angle of 89°18'19", a chord bearing of South 50°16'29" West, a chord length of 182.73 feet, and an arc length of 202.63 feet to an iron pin set;
- 2.) South 05°37'19" West, a distance of 131.44 feet to a 5/8" iron pin found;

Thence North 84°26'17" West with a northerly line of said 12.429 acre tract and crossing said City Lot Number 2259, a distance of 35.16 feet to a 5/8" iron pin found with a Schram cap at the N.E. corner of a 42.882 acre tract conveyed to Miamisburg Mound Community Improvement Corporation by deed recorded in Instrument Record Deed-09-011643 Exhibit "B";

Thence with the north line of said 42.882 acre tract and through said 87.28 acre tract and said City Lot Number 2259 with the following three (3) courses:

- 1.) North 84°29'56" West, a distance of 292.60 feet to a 5/8" iron pin found with a Schram cap;
- 2.) North 39°18'45" West, a distance of 324.29 feet to a 5/8" iron pin found with a Schram cap;
- 3.) South 82°43'27" West, (crossing the west line of the 87.28 acre tract and the east line of the 20.46 acre tract at a distance of 57.13 feet) for a total distance of 158.71 feet to a 5/8" iron pin found with a Schram cap in said 20.46 acre tract;

Thence with the north line of said 42.882 acre tract the following four (4) courses:

- 1.) North 26°29'37" West, a distance of 82.79 feet to a 5/8" iron pin found with a Schram cap;
- 2.) North 27°24'26" West, a distance of 170.84 feet to a 5/8" iron pin found with a Schram cap;
- 3.) South 84°32'08" West, a distance of 56.64 feet to a 5/8" iron pin found with a Schram cap;
- 4.) North 05°27'10" West, a distance of 114.14 feet to a 5/8" iron pin found with a Schram cap at a northern corner of the said 42.882 acres;

Thence with a new division line though said 17.68 acre tract and through said 87.28 acre tract and said City Lot Numbers 2259 and 2290 with the following thirteen (13) courses:

- 1.) North 82°55'39" East, a distance of 80.24 feet to a 5/8" iron pin found with a Schram cap;
- 2.) North 72°43'07" East, a distance of 103.56 feet to a 5/8" iron pin found with a cap no. 7955;
- 3.) North 73°35'51" East, a distance of 45.41 feet to a 5/8" iron pin found;
- 4.) North 61°39'22" East, a distance of 58.74 feet to a 5/8" iron pin found with a cap no. 7955;
- 5.) North 38°11'13" East, (crossing the west line of Lot 2259 and the east line of Lot 2290 at 86.16 feet) for a total distance of 411.35 feet to an iron pin set in said 87.28 acre tract;
- 6.) North 43°20'32" West, a distance of 87.40 feet to a 5/8" iron pin found with a cap no. 7955;

- 7.) North 27°28'02" East, a distance of 147.71 feet to a 5/8" iron pin found with a cap no. 7955;
- 8.) North 18°13'42" East, a distance of 198.86 feet to an iron pin set;
- 9.) North 22°25'51" East, a distance of 273.82 feet to a 5/8" iron pin found with a cap no. 7955;
- 10.) North 27°29'42" East, a distance of 224.29 feet to a 5/8" iron pin found with a cap no. 7955;
- 11.) North 42°10'34" East, a distance of 116.79 feet to a 5/8" iron pin found with a cap no. 7955;
- 12.) North 66°04'39" East, a distance of 86.46 feet to a 5/8" iron pin found;
- 13.) South 89°50'28" East, a distance of 726.51 feet to the **TRUE POINT OF BEGINNING**, containing 42.307 acres of land, more or less.

Subject however to all easements, restrictions and rights-of-way of record, if any.

Basis of Bearing is the section line between Sections 30 and 36 being North 05°16'47" East as determined by GPS measurements between Montgomery County Monuments 1057 and 1058 (NAD 83 - 1995 Adjustment) and the Ohio State Plane Coordinate System, South Zone. All iron pins Set are 5/8" solid iron pins 30" in length with an orange plastic cap stamped "Floyd Browne Group".

The above description is based on and referenced to an exhibit prepared by Floyd Browne Group dated 06-12-06, as recorded in the Montgomery County Engineer's Record of Land Surveys as Volume 2011, Page 0335.

All references are to the records of the Recorder's Office, Montgomery County, Ohio.

Mark Alan Smith 3/07/2012

Mark Alan Smith, P.S. Date
Professional Surveyor No. 8232



PAUL W. GRUNER, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
APPROVED FOR POINT OF BEGINNING,
ACREAGE AND CLOSURE ONLY
DATE 04-17-12 FILE NO. 2011-0335

BY *James Riemer*

NO PLAT REQUIRED
(SEC 711.131 ORC)
MIAMISBURG CITY PLANNING COMMISSION
Julie K... 10/5/12
Secretary

Parcel 6B
Quitclaim Deed and Property Description
from EMCBC to MDC
(6B became Tracts 1 and 2)



COOLIDGE WALL

A Legal Professional Association

Jonas J. Gruenberg
Merle F. Wilberding
Glenn L. Bower
J. Stephen Herbert
R. Scott Blackburn
Richard A. Schwartz
Sam Warwar
Terence L. Fague
John C. Chambers
Richard A. Talda
R. Brent Gambill
C. Mark Kingseed
David C. Korte
Kristin A. Finch
David P. Pierce
Shannon L. Costello
Christopher R. Conard
Michelle D. Bach
Gregory M. Ewers
Daniel J. Gentry
Joshua R. Lounsbury
Marc L. Fleischauer
Edie E. Crump
Allison D. Michael
Patricia J. Friesinger
Michael G. Leesman
Nicholas A. Heppner
Sasha A. M. VanDeGrift
W. Chip Herin III
Anne K. Thompson

William H. Seall
Of Counsel

J. Bradford Coolidge
1886-1965

Hugh E. Wall, Jr.
1912-2001

Suite 600
33 West First Street
Dayton, Ohio 45402-1289
937-223-8177
Fax: 937-223-6705
www.coollaw.com

Direct Dial Number
937-449-5799

E-mail Address:
costello@coollaw.com

RECEIVED

JAN 08 2013

January 2, 2013

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
7011-3500-0000-1351-3864

Michael Grauwelman, President
Mound Development Corp.
965 Capstone Drive
P.O. Box 232
Miamisburg, OH 45343-0232

Re: Department of Energy Quit Claim Deed

Dear Mike:

Enclosed is the original Quit Claim Deed from the Secretary of the Department of Energy to Mound Development Corporation which was recorded with the Montgomery County Recorder on December 19, 2012 as File No: 2012-00083743.

Very truly yours,

Shannon L. Costello

SZC/cml
Enclosure

w:\wdox\client\001969\00603\00610605.docx

Type: DEE
Kind: DEED
Recorded: 12/19/2012 10:39:09 AM
Fee Amt: \$1,140.00 Page 1 of 141
Montgomery County, OH
Willis E. Blackshear County Recorder
File# 2012-00083743

TRANSFER
10:15am DECEMBER 19, 2012
KARL L. KEITH, COUNTY AUDITOR
Conv/Tran #: 18140 \$.00

QUIT CLAIM DEED

K 46-5-3-18
K 46-5-1-17

The UNITED STATES OF AMERICA, acting by and through the Secretary of the Department of Energy (hereinafter sometimes called "Grantor"), under and pursuant to the authority of the Atomic Energy Act of 1954, Section 161 (g) (42U.S.C. §2201(g)), in consideration of the covenants contained herein, and other good and valuable consideration, duly paid by the Mound Development Corporation, a not-for-Profit corporation subsisting under the laws of Ohio and recognized by the Secretary of Energy as the agent for the community wherein the former Mound Facility is located (hereinafter sometimes called "Grantee"), the receipt of which is hereby acknowledged, hereby QUIT CLAIMS unto Grantee its successors and assigns, subject to the reservations, covenants, and conditions hereinafter set forth, all of its right, title and interest, together with all improvements thereon and appurtenances thereto, the real property as described in Exhibit A hereto, commonly referred to as Parcel 6B.

ALSO EXCEPTING THEREFROM an easement hereby granted, upon or across Parcel 6B, in connection with the covenants of Grantor and/or Grantee in paragraphs numbered 1.1-1.3, 3.2 and 3.3 of this Deed and as otherwise needed for purposes of any response action as defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, including but not limited to, environmental investigation or remedial action on Parcel 6B or on property in the vicinity thereof, including the right of access to, and use of, to the extent permitted by applicable law, utilities at reasonable cost, to the State of Ohio, acting by and through the Director of the Ohio Environmental Protection Agency (OEPA) or the Ohio Department of Health (ODH), their successors and assigns. Grantee understands that any such response action will be conducted in a manner so as to attempt to minimize interfering with the ordinary and reasonable use of Parcel 6B;

RESERVING unto Grantor, the United States of America, acting by and through the U.S. Dept. of Energy (DOE) and/or the U.S. Environmental Protection Agency (USEPA), their successors and assigns, an easement to, upon or across the Parcel 6B in connection with the covenants of Grantor and/or Grantee in paragraphs numbered 1.1-1.3, 3.2 and 3.3 of this Deed and as otherwise needed for purposes of any response action as defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, including but not limited to, environmental investigation or remedial action on the Parcel 6B or on property in the vicinity thereof, including the right of access to, and use of, to the extent permitted by applicable law, utilities at reasonable cost to Grantor. Grantee understands that any such response action will be conducted in a manner so as to attempt to minimize interfering with the ordinary and reasonable use of the Parcel 6B.

JRS - Coolidge Wall-Box
1

In connection with this conveyance, Grantor shall hold harmless and indemnify Grantee and any successor, assignee, transferee, lender or lessee of a person or entity that acquires ownership or control of any portion of the Parcel 6B, according to the provisions of 50 USCS § 2811(b) and as limited by the scope, purposes and conditions contained in 50 USCS § 2811 against any claim for injury to a person or property that results from the release or threatened release of a hazardous substance or pollutant or contaminant as a result of Department of Energy activities on the area commonly known as the former Mound Facility including but not limited to the Parcel 6B. This covenant shall run with the land.

This Deed and conveyance is made and accepted without warranty of any kind, either expressed or implied, except for the indemnity of 50 USCS § 2811(b) and the warranty in paragraph 3.3 of this Deed, and is expressly made under and subject to all reservations, restrictions, rights, covenants, easements, licenses, and permits, whether or not of public record, to the extent that the same affect the 6B.

1. The parties hereto intend the following restrictions and covenants to run with the land and to be binding upon the Grantee and its successors, transferees, and assigns or any other person acquiring an interest in Parcel 6B, for the benefit of Grantor, USEPA and the State of Ohio, acting by and through the Director of OEPA or ODH, their successors and assigns.

1.1 Grantee covenants that any soil from Parcel 6B shall not be placed on any property outside the boundaries of that described in instruments recorded at Deed Book 1214, pages 10, 12, 15, 17 and 248; Deed Book 1215, page 347; Deed Book 1246, page 45; Deed Book 1258, pages 56 and 74; Deed Book 1256, page 179; Micro-Fiche 81-376A01; and Micro-Fiche 81-323A11 of the Deed Records of Montgomery County, Ohio (and as illustrated in the "Parcels 6, 7 and 8 Environmental Summary, Notices of Hazardous Substances, Mound Plant, Miamisburg, Ohio dated August 2010", Exhibit B hereto), without prior written approval from ODH, OEPA, and USEPA, or successor agencies.

1.2 Grantee covenants not to use, or allow the use of Parcel 6B for any residential or farming activities, or any other activities which could result in the chronic exposure of children under eighteen years of age to soil or groundwater from Parcel 6B. Restricted uses shall include, but not be limited to:

- (1) single or multi family dwellings or rental units;
- (2) day care facilities;
- (3) schools or other educational facilities for children under eighteen years of age; and
- (4) community centers, playgrounds, or other recreational or religious facilities for children under eighteen years of age.

The United States Department of Energy or its successor agency shall be contacted to resolve any questions which may arise as to whether a particular activity would be considered a restricted use.

- 1.3 Grantee covenants not to extract, consume, expose, or use in any way the groundwater underlying Parcel 6B without the prior written approval of the United States Environmental Protection Agency (Region V) and the OEPA.
2. The Grantor hereby grants to the State of Ohio and reserves and retains for itself, its successors and assigns an irrevocable, permanent, and continuing right to enforce the covenants of this Quitclaim Deed through proceedings at law or in equity, including resort to an action for specific performance, as against and at the expense of Grantee, its successors and assigns, including reasonable legal fees, and to prevent a violation of, or recover damages from a breach of, these covenants, or both. Any delay or forbearance in enforcement of said restrictions and covenants shall not be deemed to be a waiver thereof.
3. Pursuant to Section 120(h)(3) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. §9620(h)(3)), the following is notice of hazardous substances, the description of any remedial action taken, and a covenant concerning Parcel 6B.
 - 3.1 **Notice of Hazardous Substance:** Grantor has made a complete search of its files and records concerning Parcel 6B. Those records indicate that the hazardous substances listed in **Exhibit B** attached hereto and made a part hereof, have been stored for one year or more or disposed of on Parcel 6B and Exhibit B also shows the dates that such storage/disposal took place.
 - 3.2 **Description of Remedial Action Taken:** Institutional Controls are established. The Institutional Controls are set forth as covenants in Sections 1.1, 1.2, and 1.3 of this Deed.
 - 3.3 **Covenant:** Grantor covenants and warrants that all remedial action necessary for the protection of human health and the environment with respect to any hazardous substances remaining on the property has been taken, and any additional remedial action found to be necessary after the date of this Deed regarding hazardous substances existing prior to the date of this Deed shall be conducted by Grantor, provided, however, that the foregoing covenant shall not apply in any case in which the presence of hazardous substances on the property is due to the activities of Grantee, its successors, assigns, employees, invitees, or any other person subject to Grantee's control or direction.
4. Unless otherwise specified, all the covenants, conditions, and restrictions to this Deed shall be binding upon, and shall inure to the benefit of the assigns of Grantor and the successors and assigns of Grantee.

IN WITNESS WHEREOF, the United States of America, acting by and through its Secretary of the Department of Energy, has caused these presents to be executed this 14th day of December, 2012.

UNITED STATES OF AMERICA

Julius

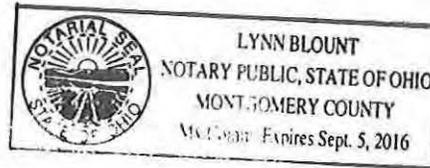
State of Ohio)
County of Hamilton) SS.

Before me, a Notary Public in and for said State and County, appeared this 14th day of December, 2012, Jack Craig, who acknowledged that he is the Real Property Officer of the Environmental Management Consolidated Business Center for the United States Department of Energy, with full authority to execute the foregoing on behalf of the United States of America, and who acknowledged the above to be his signature and his free act and deed.

SEAL

Lynn Blount
Notary Public

Prepared by:
Thomas Aug, Esq.
250 E. 5th Street, Ste 500
Cincinnati, OH 45202
(513) 246-0221
OH Atty. Regis. 61881





Judge Engineering Company

Professional Engineers and Surveyors • Consultants

Exhibit A

TRACT 1

DIV. / 15.16

K46 00501 0017

Description of a 5.350 Acre Tract City of Miamisburg, Montgomery County, Ohio

Situate in Section 30, Town 2, Range 5 M.Rs, and being part of Lot 2259 of the revised and consecutive numbers of lots on the plat of the City of Miamisburg, Montgomery County, Ohio, being part of 2.352 acre tract conveyed to United States of America by deed recorded in IR # Deed 12-082086 of the deed records of said county and part of a 42.037 acre tract conveyed to United States of America by deed recorded in IR # Deed 12-082087 of the deed records of said county and being a 5.350 acre tract more particularly described as follows:

Commencing for reference at a limestone monument found at the northwest corner of said Section 30;

thence S 85° 02' 50" E with the north line of Lot 2258 a distance of 1249.98 feet to a 5/8" iron pin found ("Floyd Browne Group") at the northeast corner of a 14.288 acre tract conveyed to Miamisburg Mound Community Improvement Corporation as recorded in IR # Deed 09-011643 of the deed records of said county, said pin being S 85° 02' 50" E a distance of 1249.98 feet from a concrete monument found at the northwest corner of said Section 30;

thence S 05° 32' 42" W with the east line of said 14.288 acre tract and the centerline of Mound Road a distance of 1145.72 feet (passing a 1" iron pin in a monument box at 886.40 feet) to a MAG nail set;

thence N 84° 09' 44" W a distance of 35.00 feet to a 5/8" iron pin set at the true point of beginning of the herein described tract;

thence on a new division line the following 4 courses:

1. S 05°32' 42" W for a distance of 336.76 feet to a 5/8" iron pin set;
2. N 84° 09' 44" W a distance of 804.84 feet to a 5/8" iron pin set;
3. N 39° 27' 25" E a distance of 404.40 feet to a 5/8" iron pin set;
4. S 84° 09' 44" E a distance of 579.22 feet to the true point of beginning containing 5.350 acres more or less, (1.994 acres from 2.352 acre tract and 3.356 acres from 42.037 acre tract), subject, however, to all legal highways, easements and restrictions of record.

Further subject to the following portion being reserved for utility easement;

Beginning at the southeast corner of the above described 5.350 acre tract;

thence N 84° 09' 44" W a distance of 25.00 feet;

thence N 05° 32' 42" E a distance of 8.50 feet;

thence S 84° 09' 44" E a distance of 25.00 feet;

thence S 05° 32' 42" W a distance of 8.50 feet to the terminus of the herein described easement.

Prior Deed Reference :

IR # Deed 09-011643

Bearings based on the centerline of Mound Road per ID# Deed 09-011643 S 05° 32' 42" W

The above description is a result of a field survey prepared by Raymond B. Mefford Registered Surveyor N. 7367 and Judge Engineering Company dated October 1, 2012, as recorded in the Montgomery County Engineer's Record of Land Surveys in Volume 2012, Page 0269.

PAUL W. GRUNER, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
APPROVED FOR POINT OF BEGINNING,
ACREAGE AND CLOSURE ONLY
DATE 12-14-12 FILE NO. 2012-0269

BY James Kuemping

Raymond B. Mefford

Raymond B. Mefford,
Registered Surveyor No. 7367



KARL KEITH
COUNTY AUDITOR
MONTGOMERY COUNTY, DAYTON, OHIO
DIVISION

BY S. Kelly DATE 12/18/12

GIS MAPPING DEPARTMENT
5315-3 TR 1

NO PLAT REQUIRED
(SEC 711.131 ORC)
MIAMISBURG CITY PLANNING COMMISSION
Chris P...
Secretary



Judge Engineering Company

Professional Engineers and Surveyors • Consultants

DIV. / 15 . 16

K-16-005-030018

TRACT 2

Description of a 0.271 Acre Tract for Roadway Purposes City of Miamisburg, Montgomery County, Ohio

Situate in Section 30, Town 2, Range 5 M.Rs, and being part of Lot 2259 of the revised and consecutive numbers of lots on the plat of the City of Miamisburg, Montgomery County, Ohio, being part of 2.352 acre tract conveyed to United States of America by deed recorded in IR # Deed 12-082086 of the deed records of said county and part of a 42.037 acre tract conveyed to United States of America by deed recorded in IR # Deed 12-082087 of the deed records of said county and being a 0.271 acre tract for roadway purposes more particularly described as follows:

Commencing for reference at a limestone monument found at the northwest corner of said Section 30:

thence S 85° 02' 50" E with the north line of Lot 2258 a distance of 1249.98 feet to a 5/8" iron pin found ("Floyd Browne Group") at the northeast corner of a 14.288 acre tract conveyed to Miamisburg Mound Community Improvement Corporation as recorded in IR # Deed 09-011643 of the deed records of said county, said pin being S 85° 02' 50" E a distance of 1249.98 feet from a concrete monument found at the northwest corner of said Section 30;

thence S 05° 32' 42" W with the east line of said 14.288 acre tract and the centerline of Mound Road a distance of 1145.72 feet (passing a 1" iron pin in a monument box at 886.40 feet) to a MAG nail set at the true point of beginning of the herein described tract;

thence from said true point of beginning S 05° 32' 42" W with the centerline of said Mound Road a distance of 336.76 feet to a MAG nail set;

thence on a new division line the following 3 courses:

1. N 84° 09' 44" W a distance of 35.00 feet to a 5/8" iron pin set;
2. N 05° 32' 42" E a distance of 336.76 feet to a 5/8" iron pin set;
3. S 84° 09' 44" E a distance of 35.00 feet to the true point of beginning containing 0.271 acres more or less, 0.241 acres from a 2.352 acre tract and 0.030 acres from a 42.037 acre tract, subject, however, to all legal highways, easements and restrictions of record.

1201 East David Road • Kettering, Ohio 45429 • (937) 294-1441 • FAX (937) 294-6498
5315-3Tr 2 E-Mail: judge@judgeengr.com • Web Site <http://www.judgeengr.com>

Prior Deed Reference :
IR # Deed 09-011643

Bearings based on the centerline of Mound Road per ID# Deed 09-011643 S 05° 32' 42" W

The above description is a result of a field survey prepared by Raymond B. Mefford Registered Surveyor N. 7367 and Judge Engineering Company dated October 1, 2012, as recorded in the Montgomery County Engineer's Record of Land Surveys in Volume 2012, Page 0269.

PAUL W. GRUNER, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
APPROVED FOR POINT OF BEGINNING,
ACREAGE AND CLOSURE ONLY
DATE 12-14-12 FILE NO. 2012-0269

BY James Ricemphal


Raymond B. Mefford,
Registered Surveyor No. 7367



NO PLAT REQUIRED
(SEC 711.131 ORC)
MIAMISBURG CITY PLANNING COMMISSION
Chris F...
Secretary

5315-3Tr 2

KARL KEITH
COUNTY AUDITOR
MONTGOMERY COUNTY, DAYTON, OHIO
DIVISION

BY S. Kelly DATE 12/18/2012

GIS MAPPING DEPARTMENT

Tracts 1 and 2
MDC sale to BOI Solutions, Inc.

Type: Deeds
Kind: DEED
Recorded: 12/20/2012 3:53:33 PM
Fee Amt: \$68.00 Page 1 of 7
Montgomery County, OH
Willis E. Blackshear Recorder

TRANSFER
03:29pm DECEMBER 20, 2012
KARL L. KEITH, COUNTY AUDITOR
Conv/Tran #: 18267 \$2,085.00

File# 2012-00084260

7
LIMITED WARRANTY DEED
(Ohio Statutory Form)

K46 00501 0017
K46 00501 0018

MOUND DEVELOPMENT CORPORATION, an Ohio not-for-profit corporation having an address of 965 Capstone Drive, P.O. Box 232, Miamisburg, Ohio 45343-0232 ("Grantor"), for valuable consideration paid, grants, with limited warranty covenants, to **BOI SOLUTIONS, INC.**, an Ohio corporation ("Grantee"), whose tax mailing address is 955 Mound Road, Miamisburg, Ohio 45343-0232, the real property described on Exhibit A attached hereto and incorporated herein by reference (referred to in this Deed as the "Parcel").

Subject to all real estate taxes and assessments due and payable in January, 2013, and thereafter; all legal highways and public rights-of-way; building, zoning and other laws, statutes, ordinances and regulations; easements, covenants, conditions and restrictions of record, including without limitation, those provided in the Environmental Covenants recorded at Instrument No. 2012-00004722 (as further referenced below), those in the Affidavit recorded at Deed Microfiche No. 90-616D02, and those provided in the Quit Claim Deeds from the United States of America to Grantor recorded at Instrument No. 2012-00083743, all in the records of the Montgomery County, Ohio Recorder's office.

THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL COVENANT DATED NOVEMBER 2, 2011, RECORDED IN THE DEED OR OFFICIAL RECORDS OF THE MONTGOMERY COUNTY RECORDER ON JANUARY 24, 2012 IN DEED INSTRUMENT NO. 2012-00004722. THE ENVIRONMENTAL COVENANT CONTAINS THE FOLLOWING ACTIVITY AND USE LIMITATIONS:

Prohibition against residential use and farming activities; prohibition against use of groundwater; prohibition against removal of soil from Mound property.

Owner or transferee, if applicable, shall notify Ohio EPA within ten (10) days after each conveyance of interest of the Property or any portion thereof. The notice shall include the name, address and telephone number of the Transferee, a copy of the deed or other documentation evidencing the conveyance, and a survey map that shows the boundaries of the property being transferred.

JA

Grantor shall have a right of first refusal to purchase the Parcel on the terms of this paragraph. If Grantee receives a bona fide written offer or contract from a third party ("Offer") for the purchase of all or any part of the Parcel, which Grantee intends to accept, Grantee shall give Grantor written notice of the Offer accompanied by a full and complete copy of the Offer. For a period of thirty (30) days after Grantor's receipt of such notice and the Offer, Grantor shall have the exclusive right, exercisable by written notice to Grantee, to purchase the Parcel or the portion of the Parcel covered by the Offer on the same terms and conditions as the Offer (except that all time frames for the purchaser's performance will be extended for thirty (30) days). If Grantor does not elect to purchase the Parcel or portion of the Parcel, as applicable, then Grantee shall have the right to sell to the prospective purchaser, provided that the sale is on the terms of the Offer. If the sale to the prospective purchaser, or a sale to any subsequent prospective purchaser offering the same terms stated in the Offer, is not completed within one (1) year after the date the Offer is submitted to Grantor, then Grantor's right of first refusal shall be reinstated with respect to the next Offer received by Grantee, and the parties shall proceed as provided in this paragraph with respect to the next Offer. Grantor's right of first refusal to purchase the Parcel or a portion of the Parcel shall not apply if the transfer is to an entity a majority of which is owned by Grantee or current principals of Grantee or which is controlled by Grantee or current principals of Grantee. If Grantor elects not to purchase the Parcel or portion of the Parcel, and Grantee is proceeding with the sale to the purchaser submitting the Offer or a subsequent purchaser offering the same terms stated in the Offer, then upon Grantee's request, Grantor shall execute a recordable instrument confirming Grantor's waiver of its right of first refusal, which shall be delivered at the closing of Grantee's sale. All notices required or given under this paragraph shall be in writing and delivered by personal delivery, certified mail, return receipt or nationally recognized mail carrier service to the parties' addresses stated above.

PRIOR DEED REFERENCE: Instrument No. 2012-00083743 of the
Montgomery County, Ohio Deed Records.

Executed this 14th day of December, 2012.

MOUND DEVELOPMENT CORPORATION

By: Michael J. Grauwelman
Michael J. Grauwelman
President

STATE OF OHIO, COUNTY OF Warren, SS:

The foregoing instrument was acknowledged before me this 14th day of December, 2012 by Michael J. Grauwelman, the President of Mound Development Corporation, an Ohio not-for-profit corporation, on behalf of the corporation.

[Signature]
Notary Public



LISA R. TERRY, Notary Public
In and for the State of Ohio
My Commission Expires Jan. 1, 2013

This instrument prepared by:
Shannon L. Costello, Esq.
Coolidge Wall Co., L.P.A.
33 West First Street, Suite 600
Dayton, OH 45402
W:\Wdax\Client\001969\00600\00608214.Docx-3



Judge Engineering Company

Professional Engineers and Surveyors • Consultants

Exhibit A

TRACT 1

DIV. / 15.16

K46 00501 0017

Description of a 5.350 Acre Tract City of Miamisburg, Montgomery County, Ohio

Situate in Section 30, Town 2, Range 5 M.Rs, and being part of Lot 2259 of the revised and consecutive numbers of lots on the plat of the City of Miamisburg, Montgomery County, Ohio, being part of 2.352 acre tract conveyed to United States of America by deed recorded in IR # Deed 12-082086 of the deed records of said county and part of a 42.037 acre tract conveyed to United States of America by deed recorded in IR # Deed 12-082087 of the deed records of said county and being a 5.350 acre tract more particularly described as follows:

Commencing for reference at a limestone monument found at the northwest corner of said Section 30:

thence S 85° 02' 50" E with the north line of Lot 2258 a distance of 1249.98 feet to a 5/8" iron pin found ("Floyd Browne Group") at the northeast corner of a 14.288 acre tract conveyed to Miamisburg Mound Community Improvement Corporation as recorded in IR # Deed 09-011643 of the deed records of said county, said pin being S 85° 02' 50" E a distance of 1249.98 feet from a concrete monument found at the northwest corner of said Section 30;

thence S 05° 32' 42" W with the east line of said 14.288 acre tract and the centerline of Mound Road a distance of 1145.72 feet (passing a 1" iron pin in a monument box at 886.40 feet) to a MAG nail set;

thence N 84° 09' 44" W a distance of 35.00 feet to a 5/8" iron pin set at the true point of beginning of the herein described tract;

thence on a new division line the following 4 courses:

1. S 05°32' 42" W for a distance of 336.76 feet to a 5/8" iron pin set;
2. N 84° 09' 44" W a distance of 804.84 feet to a 5/8" iron pin set;
3. N 39° 27' 25" E a distance of 404.40 feet to a 5/8" iron pin set;
4. S 84° 09' 44" E a distance of 579.22 feet to the true point of beginning containing 5.350 acres more or less, (1.994 acres from 2.352 acre tract and 3.356 acres from 42.037 acre tract), subject, however, to all legal highways, easements and restrictions of record.

1201 East David Road • Kettering, Ohio 45429 • (937) 294-1441 • FAX (937) 294-6498
5315-3 TRMail: judge@judgeengr.com • Web Site <http://www.judgeengr.com>

201708

KARL KEITH
COUNTY AUDITOR
 MONTGOMERY COUNTY DAYTON, OHIO
 DESCRIPTION APPROVED FOR
 STRAIGHT TRANSFER CLOSURE
 NOT CHECKED
 BY [Signature] DATE 12-20-12
 MAP DEPARTMENT

Further subject to the following portion being reserved for utility easement;

Beginning at the southeast corner of the above described 5.350 acre tract;

thence N 84° 09' 44" W a distance of 25.00 feet;

thence N 05° 32' 42" E a distance of 8.50 feet;

thence S 84° 09' 44" E a distance of 25.00 feet;

thence S 05° 32' 42" W a distance of 8.50 feet to the terminus of the herein described easement.

Prior Deed Reference :

IR # Deed 09-011643

Bearings based on the centerline of Mound Road per ID# Deed 09-011643 S 05° 32' 42" W

The above description is a result of a field survey prepared by Raymond B. Mefford Registered Surveyor N. 7367 and Judge Engineering Company dated October 1, 2012, as recorded in the Montgomery County Engineer's Record of Land Surveys in Volume 2012, Page 0269.

PAUL W. GRUNER, P.E., P.S.
 MONTGOMERY COUNTY ENGINEER
 APPROVED FOR POINT OF BEGINNING,
 ACREAGE AND CLOSURE ONLY
 DATE 12-14-12 FILE NO. 2012-0269

BY [Signature]

[Signature]
 Raymond B. Mefford,
 Registered Surveyor No. 7367



KARL KEITH
 COUNTY AUDITOR
 MONTGOMERY COUNTY, DAYTON, OHIO
 DIVISION

DATE 12/14/12
 GIS MAPPING DEPARTMENT
 BY S. Kelly

5315-3 TR 1

NO PLAT REQUIRED
 (SEC 711.131 ORC)
 MIAMISBURG CITY PLANNING COMMISSION
[Signature]
 Secretary



Judge Engineering Company

Professional Engineers and Surveyors • Consultants

DIV. / 15 . 16

K416-005-01-0018

TRACT 2

**Description of a 0.271 Acre Tract for Roadway Purposes
City of Miamisburg, Montgomery County, Ohio**

Situate in Section 30, Town 2, Range 5 M.Rs, and being part of Lot 2259 of the revised and consecutive numbers of lots on the plat of the City of Miamisburg, Montgomery County, Ohio, being part of 2.352 acre tract conveyed to United States of America by deed recorded in IR # Deed 12-082086 of the deed records of said county and part of a 42.037 acre tract conveyed to United States of America by deed recorded in IR # Deed 12-082087 of the deed records of said county and being a 0.271 acre tract for roadway purposes more particularly described as follows:

Commencing for reference at a limestone monument found at the northwest corner of said Section 30:

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thence S 05° 32' 42" W with the east line of said 14.288 acre tract and the centerline of Mound Road a distance of 1145.72 feet (passing a 1" iron pin in a monument box at 886.40 feet) to a MAG nail set at the true point of beginning of the herein described tract;

thence from said true point of beginning S 05° 32' 42" W with the centerline of said Mound Road a distance of 336.76 feet to a MAG nail set;

thence on a new division line the following 3 courses:

1. N 84° 09' 44" W a distance of 35.00 feet to a 5/8" iron pin set;
2. N 05° 32' 42" E a distance of 336.76 feet to a 5/8" iron pin set;
3. S 84° 09' 44" E a distance of 35.00 feet to the true point of beginning containing 0.271 acres more or less, 0.241 acres from a 2.352 acre tract and 0.030 acres from a 42.037 acre tract, subject, however, to all legal highways, easements and restrictions of record.

1201 East David Road • Kettering, Ohio 45429 • (937) 294-1441 • FAX (937) 294-6498
E-Mail: judge@judgeengr.com • Web Site <http://www.judgeengr.com>
5315-3Tr 2

Prior Deed Reference :
IR # Deed 09-011643

Bearings based on the centerline of Mound Road per ID# Deed 09-011643 S 05° 32' 42" W

The above description is a result of a field survey prepared by Raymond B. Mefford Registered Surveyor N. 7367 and Judge Engineering Company dated October 1, 2012, as recorded in the Montgomery County Engineer's Record of Land Surveys in Volume 2012, Page 0269.

PAUL W. GRUNER, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
APPROVED FOR POINT OF BEGINNING,
ACREAGE AND CLOSURE ONLY
DATE 12-14-12 FILE NO. 2012-0269

BY James Reumfing

Raymond B. Mefford
Raymond B. Mefford,
Registered Surveyor No. 7367



NO PLAT REQUIRED
(SEC 711.131 ORC)
MIAMISBURG CITY PLANNING COMMISSION
Chris F.
Secretary

KARL KEITH
COUNTY AUDITOR
MONTGOMERY COUNTY DAYTON, OHIO
DESCRIPTION APPROVED FOR
STRAIGHT TRANSFER CLOSURE
NOT CHECKED.
BY MM DATE 12-20-12
MAP DEPARTMENT

5315-3Tr 2

Home Services Title, LLC.
4060 Executive Drive
Dayton, OH 45430
(937) 435-2580

KARL KEITH
COUNTY AUDITOR
MONTGOMERY COUNTY, DAYTON, OHIO
DIVISION
BY S. Kelly DATE 12/18/2012
GIS MAPPING DEPARTMENT

**Parcels 6 and 8
Property Descriptions**

Exhibit "A"
DESCRIPTION OF
13.636 Acres
Parcel 6
located in
Section 30 and 36, Town 2, Range 5, M.Rs.
City of Miamisburg, Montgomery County, Ohio

Situate in Section 30 and 36, Town 2, Range 5, M.Rs., City of Miamisburg, County of Montgomery, State of Ohio, *being part of a 87.28 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1214, Page 12* of the Deed Records of Montgomery County, Ohio, said 87.28 acre tract being comprised of a 59.75 acre tract, also a 19.40 acre tract, also a 9.97 acre tract, also a 0.78 acre tract and a 0.78 acre tract all known as Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, *also being part of a 33.11 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1246, Page 45* of the Deed Records of Montgomery County, Ohio, said 33.11 acre tract being known as Lot Numbered 2290 of the consecutive numbered lots of the City of Miamisburg, *also being part of a 1.61 acre tract conveyed to the United States of America, as recorded in Deed Book Volume 1256, Page 179*, of the Deed Records of Montgomery County, Ohio, said 1.61 acre tract being known as Lot Numbered 2290 of the consecutive numbered lots of the City of Miamisburg, *being a new division of 13.635 acres from said 87.28 acre tract, 33.11 acre tract, and all the remainder of said 1.61 acre tract* and being more fully bounded and described as follows:

Commencing at a "DOE" concrete monument found disturbed, said monument being the northwest corner of Section 30, said monument being the northeast corner of Section 36, said monument also being the northeasterly corner of a 6.63 acre tract (by deed) conveyed to the City of Miamisburg, Ohio, as recorded in Deed Book Volume 594, Page 410 of the Deed Records of Montgomery County, Ohio; thence with the east line of said City of Miamisburg 6.63 acre tract, the east line of Section 36 and the west line of Section 30, South 05° 16' 42" West, a distance of 130.25 feet to a point, witness a 1" pinched top pipe found, South 65° 36' 29" West, 1.28 feet, said pipe being the northwest corner of a 14.288 acre tract conveyed to Miamisburg Mound Community Improvement Corporation, as recorded in Deed Microfiche No. 99-0852B11 of the Deed Records of Montgomery County, Ohio, said 14.288 acre tract known as Parcel "H" of the recorded Mound Surveys, said 14.288 acre tract also known as Part of Lot Numbered 2259 of the consecutive numbered lots of the City of Miamisburg, Ohio, reference previous survey by HLS Surveyors & Engineers as recorded in Montgomery County Engineer's Record of Land Surveys Volume 1999, Page 0326, said pipe also being the northeasterly corner of a 4.805 acre tract conveyed to Miamisburg Mound Community Improvement Corporation, as recorded in Deed Microfiche No. _____ of the Deed Records of Montgomery County, Ohio, said 4.805 acre tract known as Parcel 3 of the recorded Mound Surveys, said 4.805 acre tract also known as Part of Lot Numbered 2259 and 2290 of the consecutive numbered lots of the City of Miamisburg, Ohio, reference previous survey by HLS Surveyors & Engineers as recorded in the Montgomery County Engineer's Record of Land Surveys, Volume 1999, Page 140; thence from said point with the northwesterly line of said 4.805 acre tract known as Parcel 3 and the southeasterly line of said City of Miamisburg 6.63 acre tract, South 65° 36' 29" West, a distance of 479.79 feet to a 5/8" capped "Schram" iron pin found, said pin set per previous survey reference, said iron pin being a westerly corner of said 4.805 acre tract known as Parcel 3, said iron pin being the **True Point of Beginning** of the hereinafter described new division of 13.636 acres;

Thence with a common boundary with said 4.805 acre tract known as Parcel 3 on the following thirteen (13) courses,

- 1) **South 24° 26' 30" East**, passing a point on the common boundary line of said United States of America 1.61 acre tract and said United States of America 87.28 acre tract at 87.13 feet, in all a distance of **308.52 feet to a 2-1/2" mag nail set**;
- 2) **Thence, South 65° 33' 30" West**, a distance of **7.67 feet to a railroad spike found**, said spike set per previous survey reference;
- 3) **Thence, South 24° 26' 30" East**, a distance of **24.31 feet to a 5/8" capped "LeRoy" iron pin found**, said iron pin per previous survey reference;
- 4) **Thence, North 65° 11' 32" East**, a distance of **268.32 feet to a cross notch found**, said cross notch set per previous survey reference;
- 5) **Thence, North 24° 54' 45" West**, a distance of **59.55 feet to a railroad spike found**, said spike set per previous survey reference;
- 6) **Thence, North 65° 05' 15" East**, a distance of **34.64 feet to a railroad spike found**, said spike set per previous survey reference;
- 7) **Thence, South 59° 41' 15" East**, passing a point on the east line of Section 36 and the west line of Section 30 at 29.11 feet, in all a distance of **32.00 feet to a railroad spike found**, said spike set per previous survey reference;
- 8) **Thence, South 23° 47' 05" East**, a distance of **359.64 feet to a railroad spike found**, said spike set per previous survey reference;
- 9) **Thence, North 66° 03' 34" East**, a distance of **39.97 feet to a railroad spike found**, said spike set per previous survey reference;
- 10) **Thence, South 50° 06' 58" East**, a distance of **22.74 feet to a 5/8" capped "Schram" iron pin found**, said iron pin per previous survey reference;
- 11) **Thence, North 64° 44' 27" East**, a distance of **98.64 feet to a 5/8" capped "Schram" iron pin found**, said iron pin per previous survey reference;
- 12) **Thence, North 23° 05' 32" West**, a distance of **17.73 feet to a 5/8" capped "Schram" iron pin found**, said iron pin per previous survey reference;
- 13) **Thence, North 40° 10' 30" East**, a distance of **91.47 feet to a 5/8" capped "LeRoy" iron pin found**, said iron pin per previous survey reference, said iron pin lying in the southwesterly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract, said iron pin lying in a radial line having a radius to the left and a radial bearing of North 36° 23' 40" East;

Thence with the southwesterly and southerly line of said Miamisburg Mound Community Improvement Corporation 14.288 acre tract on the following two (2) courses,

- 1) with a curve to the left having a **delta angle of 30° 15' 10"**, a **radius of 360.67 feet**, an **arc length of 190.44 feet** and a **chord bearing and distance of South 68° 43' 56" East, 188.23 feet to a 5/8" capped "LeRoy" iron pin found**, said iron pin per previous survey reference, said iron pin being the point of tangency of said curve;
- 2) **Thence, South 83° 51' 21" East**, a distance of **25.00 feet to a 5/8" iron pin set**, said iron pin being the northeasterly corner of the herein described new division;

Thence with a new division line through said United States of America 87.28 acre tract and said United States of America 33.11 acre tract on the following eighteen (18) courses,

- 1) **South 40° 32' 20" West**, a distance of **86.35 feet to a 5/8" iron pin set**, said iron pin being a non-tangential point at the beginning of a curve to the left and having a radial bearing of South 10° 26' 59" East;
- 2) **Thence with a curve to the left having a delta angle of 42° 00' 18"**, a radius of **223.57 feet**, an arc length of **163.90 feet** and a chord bearing and distance of **South 58° 32' 52" West, 160.26 feet to a 5/8" iron pin set**;
- 3) **Thence, South 37° 32' 43" West**, a distance of **70.00 feet to a 5/8" iron pin set**;
- 4) **Thence, South 31° 32' 43" West**, a distance of **65.00 feet to a 5/8" iron pin set**;
- 5) **Thence, South 27° 32' 43" West**, a distance of **60.00 feet to a 5/8" iron pin set at a point of curvature to the right**;
- 6) **Thence with a curve to the right having a delta angle of 20° 18' 39"**, a radius of **349.79 feet**, an arc length of **124.00 feet** and a chord bearing and distance of **South 37° 42' 02" West, 123.35 feet to a 5/8" iron pin set**;
- 7) **Thence, South 47° 51' 21" West**, a distance of **162.02 feet to a 5/8" iron pin set**;
- 8) **Thence, North 88° 48' 49" West**, a distance of **34.05 feet to a cross notch set in a concrete walk**;
- 9) **Thence, North 52° 01' 06" West**, a distance of **45.26 feet to a 5/8" iron pin set**;
- 10) **Thence, North 15° 43' 55" East**, a distance of **99.81 feet to a 5/8" iron pin set**;
- 11) **Thence, North 23° 23' 40" West**, passing a point on the east line of Section 36 and the west line of Section 30 at 143.57 feet, reference from said point a railroad spike found, South 05° 16' 42" West, 4400.37 feet, said spike being the south section corner of Section 30 and 36, also a concrete monument found, disturbed, North 05° 16' 42" East, 1006.61 feet, said concrete monument being the north corner of Section 30 and 36, in all a distance of **349.18 feet to a 5/8" iron pin set**;
- 12) **Thence, South 65° 40' 00" West**, a distance of **328.05 feet to a 5/8" iron pin set**;
- 13) **Thence, South 65° 00' 16" West**, passing a point on the common boundary line of said United States of America 33.11 acre tract and said United States of America 87.28 acre tract at 137.10 feet, in all a distance of **186.04 feet to a 5/8" iron pin set**;
- 14) **Thence, North 24° 22' 42" West**, passing a point on the common boundary line of said United States of America 33.11 acre tract and said United States of America 87.28 acre tract at 26.80 feet, in all a distance of **206.00 feet to a 5/8" iron pin set**;
- 15) **Thence, South 65° 37' 18" West**, passing a point on the common boundary line of said United States of America 33.11 acre tract and said United States of America 87.28 acre tract at 69.30 feet, in all a distance of **123.40 feet to a 5/8" iron pin set**;
- 16) **Thence, North 24° 17' 30" West**, a distance of **124.98 feet to a 5/8" iron pin set**;
- 17) **Thence, South 65° 44' 19" West**, a distance of **138.10 feet to a 5/8" iron pin set**;
- 18) **Thence, North 24° 15' 41" West**, a distance of **127.04 feet to a 5/8" iron pin set**, said iron pin lying in the northwesterly line of said United States of America 33.11 acre tract, said iron pin lying in the southeasterly line of the Consolidated Rail Corporation lands as conveyed in Deed Microfiche No. 78-502A01 of the Deed Records of Montgomery County, Ohio, said common boundary line being an curve to the right having a radial bearing of South 60° 51' 35" East;

Thence with the northwesterly line of said United States of America 33.11 acre tract and the southeasterly line of said Consolidated Rail Corporation lands with a curve to the right having a delta angle of 06° 49' 51", a radius of **3519.83 feet**, an arc length of **419.64 feet** and a chord bearing and distance of **North 32° 33' 20" East, 419.39 feet to a "DOE" concrete monument found**, said monument being the northwest corner of said United States of America 33.11 acre tract;

Thence with the north line of said United States of America 33.11 acre tract, **South 84° 14' 50" East**, a distance of **102.31 feet to a "DOE" concrete monument found**, said monument being the northeast corner of said United States of America 33.11 acre tract, said monument lying in the west line of said City of Miamisburg 6.63 acre tract;

Thence with the east line of said United States of America 33.11 acre tract and the west line of said City of Miamisburg 6.63 acre tract, **South 05° 37' 45" West**, a distance of **90.34 feet to a "DOE" concrete monument found**, said monument being the northwest corner of said United States of America 1.61 acre tract, said monument being the southwest corner of said City of Miamisburg 6.63 acre tract;

Thence with the northwesterly line of said United States of America 1.61 acre tract and the southeasterly line of said City of Miamisburg 6.63 acre tract, **North 65° 36' 29" East**, a distance of **330.66 feet to the True Point of Beginning**, containing **13.636 acres**, more or less, of which **4.173 acres lying in Section 30, 9.463 acres lying in Section 36**, of which **4.173 acres being part of Lot Numbered 2259, 9.463 acres being part of Lot Numbered 2290, 6.431 acres being part of said United States of America 87.28 acre tract, 2.320 acres being part of said United States of America 33.11 acre tract and 0.712 acres being part of said United States of America 1.61 acre tract**, all of the consecutive numbered lots of the City of Miamisburg, Ohio, and being subject to all easements, highways and right of ways of record.

Bearing basis established as Grid North by GPS observation August 7th & 8th, 2002 at Latitude N39° 38' 25.81", Longitude W084° 17' 28.09" (Coast & Geodetic Survey Monument #G-139, 1947); Ohio State Plane Coordinate system, Ohio South Zone 3402 (NAD 83), True North being 01° 08' 11" east of Grid North.

This description prepared from an actual field survey performed under my direct supervision, Timothy W. Schram, Sr., Registered Professional Surveyor number 7299 of the State of Ohio, and that all monuments referenced herein and placed on the ground represents the boundaries of the herein described tract, and based on a Plat of Survey as recorded in the Montgomery County Engineer's Record of Land Surveys in Record Volume number 2004, Page 0309.



Timothy W. Schram, Sr., Regist. Prof. Surveyor No. 7299 of the State of Ohio, June 1, 2004.

Ex 040012 Mound Parcel 6

JOSEPH LITVIN, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
DAYTON, OHIO
APPROVED

BY EDM DATE 7/28/04
FILE NO. 2004 0309





Description of 45.256 Acres

Situate in the State of Ohio, County of Montgomery, City of Miamisburg, being part of Section 30 and Section 36, Town 2, Range 5, M.Rs., being 5.297 acres out of Section 30, being 39.959 acres out of Section 36, being part of Lot Numbers 2259 and 2290 of the consecutive numbers of lots of the City of Miamisburg and being Lots 21 and 22 and part of Lots Numbered 13, 14, 15, 16, 20 and 23 of the Philip Gebhart Plat of record in Plat Book Volume "A", Page 126 (The Philip Gebhart plat was vacated as per Ordinance No. 6280 dated 9-20-2011), being 7.002 acres of land that lie over and across an 87.28 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 12, being 7.878 acres of land that lie over and across a 17.68 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 248, being 30.376 acres of land that lie over and across a 33.11 acre tract of land described in deed to the United States of America of record in Deed Book 1246, Page 45, being Montgomery County Engineer Reference Survey Record 2006-0269, and being more particularly described as follows:

COMMENCING for reference at a concrete monument found at the northwest corner of said Section 30 and the northeast corner of said Section 36, being the northerly line of said Town 2, Range 5, M.Rs., and being the southerly line Section 25 of Town 1, Range 6, M.Rs.;

Thence South 85°00'57" East with said Town line, the northerly line of City of Miamisburg Lot Number 2258, and the northerly line of said Section 30, a distance of 1249.65 feet to an iron pin set at the northeasterly corner of a 14.288 acre tract of land described in deed to Miamisburg Mound Community Improvement Corporation of record in Instrument Record Deed-09-011643 Exhibit "E";

Thence South 05°32'59" West with the easterly line of said 14.288 acre tract and the easterly line of said City Lot Numbers 2258 and 2259, a distance of 572.24 feet to an iron pin set on the westerly line of a 42.63 acre tract of land and is also now known as Lot 2260 of the consecutive numbers of lots of the City of Miamisburg, as described in deed to City of Miamisburg of record in Deed Book 776, Page 581, being the southeasterly corner of said 14.288 acre tract, and being the **TRUE POINT OF BEGINNING** of the tract to be described;

Thence South 05°32'59" West with the westerly line of said 42.63 acre tract, the easterly line of said City Lot Number 2259, and the easterly line of said 87.28 acre tract, a distance of 159.67 feet to an iron pin set;

Thence with a new division line through said 87.28 acre tract and said City Lot Number 2259 and Lot 2290 with the following thirteen (13) courses:

- 1.) North 89°50'28" West, a distance of 726.51 feet to a 5/8" iron pin found;
- 2.) South 66°04'39" West, a distance of 86.46 feet to a 5/8" iron pin found;
- 3.) South 42°10'34" West, a distance of 116.79 feet to a 5/8" iron pin found with a cap no. 7955;

- 4.) South 27°29'42" West, a distance of 224.29 feet to a 5/8" iron pin found with a cap no. 7955;
- 5.) South 22°25'51" West, a distance of 273.82 feet to an iron pin set;
- 6.) South 18°13'42" West, a distance of 198.86 feet to a 5/8" iron pin found with a cap no. 7955;
- 7.) South 27°28'02" West, a distance of 147.71 feet to a 5/8" iron pin found with a cap no. 7955;
- 8.) South 43°20'32" East, a distance of 87.40 feet to an iron pin set;
- 9.) South 38°11'13" West, (crossing the west line of Lot 2259 and the east line of Lot 2290 at 325.19 feet) for a total distance of 411.35 feet to a 5/8" iron pin found with a cap no. 7955 in said 17.68 acre tract;
- 10.) South 61°39'22" West, a distance of 58.74 feet to a 5/8" iron pin found;
- 11.) South 73°35'51" West , a distance of 45.41 feet to a 5/8" iron pin found with a cap no. 7955;
- 12.) South 72°43'07" West, a distance of 103.56 feet to a 5/8" iron pin found with a Schram cap;
- 13.) South 82°55'39" West, a distance of 80.24 feet to a 5/8" iron pin found with a Schram cap at a northerly corner of Miamisburg Mound Community Improvement Corporation's 42.882 acre tract as described in Instrument Record Deed-09-011643 Exhibit "B";

Thence, with the north line of said 42.882 acre tract the following three (3) courses;

- 1.) South 82°58'13" West, a distance of 120.59 feet to a 5/8" iron pin found with a Schram cap;
- 2.) South 01°37'13" East, a distance of 10.31 feet to a 5/8" iron pin found with a Schram cap;
- 3.) South 80°04'06" West, a distance of 45.82 feet to a 5/8" iron pin found in concrete with a Schram cap;

Thence, with a new division line through said 17.68 acre tract the following twenty-seven (27) courses;

- 1.) North 04°41'32" East, a distance of 53.96 feet to an iron pin set;
- 2.) North 46°26'35" East, a distance of 201.86 feet to an iron pin set;
- 3.) North 01°39'10" West, a distance of 41.56 feet to an iron pin set;
- 4.) South 89°28'55" West, a distance of 397.71 feet to an iron pin set;
- 5.) South 83°13'43" West, a distance of 387.72 feet to an iron pin set;
- 6.) South 07°27'35" East, a distance of 227.31 feet to an iron pin set;

- 7.) South 05°28'40" East, a distance of 44.09 feet to an iron pin set;
- 8.) South 07°58'24" East, a distance of 93.66 feet to an iron pin set;
- 9.) North 75°54'00" East, a distance of 78.91 feet to an iron pin set;
- 10.) North 24°27'29" West, a distance of 99.13 feet to an iron pin set;
- 11.) North 79°49'02" East, a distance of 75.88 feet to an iron pin set;
- 12.) North 82°54'26" East, a distance of 197.88 feet to an iron pin set;
- 13.) South 57°54'36" East, a distance of 29.12 feet to an iron pin set;
- 14.) North 81°50'07" East, a distance of 28.32 feet to an iron pin set;
- 15.) North 09°29'45" East, a distance of 17.42 feet to an iron pin set;
- 16.) North 77°13'35" East, a distance of 89.22 feet to an iron pin set;
- 17.) North 69°49'16" East, a distance of 84.57 feet to an iron pin set;
- 18.) South 06°55'42" West, a distance of 33.94 feet to a Mag nail set;
- 19.) South 19°27'18" West, a distance of 13.71 feet to an iron pin set;
- 20.) South 57°23'02" West, a distance of 36.99 feet to an iron pin set;
- 21.) South 67°15'25" West, a distance of 240.29 feet to an iron pin set;
- 22.) South 54°03'57" West, a distance of 63.19 feet to an iron pin set;
- 23.) South 29°43'09" West, a distance of 122.02 feet to an iron pin set;
- 24.) South 63°02'39" West, a distance of 31.36 feet to an iron pin set;
- 25.) South 76°52'04" West, a distance of 79.92 feet to an iron pin set;
- 26.) South 83°59'02" West, (crossing the west tract line described in Deed Book 1214, Page 248 and the east tract line described in Deed Book 1246, Page 45 at a distance of 262.32 feet) for a total distance of 347.69 feet to an iron pin set in said 33.11 acre tract;
- 27.) Thence South 79°29'02" West crossing said 33.11 acre tract and said City Lot Number 2290, a distance of 98.70 feet to an iron pin set on the easterly right of way line of the Consolidated Rail Corporation tract as described in deed of record in Deed Microfiche No. 78-502A01;

Thence with the easterly right of way line of said Consolidated Rail Corporation tract, the westerly line of said City Lot Number 2290, and the westerly line of said 33.11 acre tract the following three (3) courses:

- 1.) With a curve to the right having a radius of 3669.83 feet, a central angle of 11°37'50", a chord bearing of North 03°16'21" East, a chord length of 743.66 feet, and an arc length of 744.94 feet to a 5/8" iron pin found;

- 2.) South $84^{\circ}41'06''$ East, a distance of 150.20 feet to a 5/8" iron pin found;
- 3.) With a curve to the right having a radius of 3519.83 feet, a central angle of $19^{\circ}52'58''$, a chord bearing of North $19^{\circ}11'37''$ East, a chord length of 1215.34 feet, and an arc length of 1221.46 feet to a 5/8" iron pin found on the westerly line of said 87.28 acre tract;

Thence with a new division line through said 87.28 acre tract with the following five (5) courses:

- 1.) South $24^{\circ}15'41''$ East, a distance of 127.04 feet to a 5/8" iron pin found;
- 2.) North $65^{\circ}44'19''$ East, a distance of 138.10 feet to a 5/8" iron pin found;
- 3.) South $24^{\circ}17'30''$ East, a distance of 124.98 feet to a 5/8" iron pin found;
- 4.) North $65^{\circ}37'18''$ East, a distance of 123.40 feet to a 5/8" iron pin found;
- 5.) South $24^{\circ}22'42''$ East, (crossing the south line of the 87.28 acre tract and the north line of the 33.11 acre tract at 176.66 feet) for a total distance of 206.00 feet to a 5/8" iron pin found with a Schram cap in said 33.11 acre tract;

Thence with a new division line through said 87.28 acre tract and said City Lot Number 2259 with the following thirteen (13) courses:

- 1.) North $65^{\circ}00'16''$ East, (crossing the south line of the 87.28 acre tract and the north line of the 33.11 acre tract at 50.51 feet) for a total a distance of 186.04 feet to an iron pin set;
- 2.) North $65^{\circ}40'00''$ East, a distance of 328.05 feet, to an iron pin set;
- 3.) South $23^{\circ}23'40''$ East, a distance of 349.18 feet to a 5/8" iron pin found with a Schram cap;
- 4.) South $15^{\circ}43'55''$ West, a distance of 99.81 feet to a 5/8" iron pin found with a Schram cap;
- 5.) South $52^{\circ}01'06''$ East, a distance of 45.26 feet to an iron pin set;
- 6.) South $88^{\circ}48'49''$ East, a distance of 34.05 feet to a 5/8" iron pin found with a Schram cap;
- 7.) North $47^{\circ}51'21''$ East, a distance of 162.02 feet to a 5/8" iron pin found with a Schram cap at a point of curvature;
- 8.) With a curve to the left having a radius of 349.79 feet, a central angle of $20^{\circ}18'39''$, a chord bearing of North $37^{\circ}42'02''$ East, a chord length of 123.35 feet, and an arc length of 124.00 feet to a 5/8" iron pin found;
- 9.) North $27^{\circ}32'43''$ East, a distance of 60.00 feet to an iron pin set;
- 10.) North $31^{\circ}32'43''$ East, a distance of 65.00 feet to an iron pin set;
- 11.) North $37^{\circ}32'43''$ East, a distance of 70.00 feet to an iron pin set at a point of curvature;

- 12.) With a curve to the right having a radius of 223.57 feet, a central angle of 42°00'18", a chord bearing of North 58°32'52" East, a chord length of 160.26 feet, and an arc length of 163.90 feet to a 5/8" iron pin found;
- 13.) North 40°32'20" East, a distance of 86.35 feet to an iron pin set on the southerly line of said 14.288 acre tract;

Thence with the southerly line of said 14.288 acre tract the following six (6) courses:

- 1.) South 83°55'13" East, a distance of 222.55 feet to a 5/8" iron pin found;
- 2.) North 89°59'43" East, a distance of 173.01 feet to a 5/8" iron pin found;
- 3.) North 63°47'11" East, a distance of 98.26 feet to an iron pin set;
- 4.) North 83°30'22" East, a distance of 97.43 feet to a 5/8" iron pin found;
- 5.) North 51°47'30" East, a distance of 48.88 feet to a 5/8" iron pin found;
- 6.) South 89°59'28" East, a distance of 72.24 feet to the **TRUE POINT OF BEGINNING**, containing 45.256 acres of land, more or less.

Subject however to all easements, restrictions and rights-of-way of record, if any.

Basis of Bearing is the section line between Sections 30 and 36 being North 05°16'47" East as determined by GPS measurements between Montgomery County Monuments 1057 and 1058 (NAD 83 - 1995 Adjustment) and the Ohio State Plane Coordinate System, South Zone. All iron pins Set are 5/8" solid iron pins 30" in length with an orange plastic cap stamped "Floyd Browne Group".

The 45.256 acre tract of land shall be subject to an ingress/egress easement over and across said tract of land to provide access to/from Mound Road for the 23.148 acre tract and the remainder of said 87.28 acres and 33.11 acres (Future Parcel 6). Easement shall remain in effect until such time said 23.148 acre tract and remainder parcels obtain approved frontage to a public roadway.

This description prepared from an actual field survey performed under my direct supervision, Michael O. Wanchick, Registered Professional Surveyor number 7854 of the State of Ohio, and that all monuments referenced herein and placed on the ground represents the boundaries of the herein described tract, and based on a Plat of Survey as recorded in the Montgomery County Engineer's Record of Land Surveys in Record Volume number 2011, Page 0335.

All references are to the records of the Recorder's Office, Montgomery County, Ohio.

Michael O. Wanchick 12/12/12
 Michael O. Wanchick, P.S. Date
 Professional Surveyor No. 7854



PAUL W. GRUNER, P.E., P.S.
 MONTGOMERY COUNTY ENGINEER
 APPROVED FOR POINT OF BEGINNING,
 ACREAGE AND CLOSURE ONLY
 DATE 12-13-12 FILE NO. 2011-0335

BY *James R. ...*

Parcel 9
Property Description and Environmental Covenant



Description of 23.148 Acres

Situate in the State of Ohio, County of Montgomery, City of Miamisburg, being part of Section 36, Town 2, Range 5, M.Rs., being 23.148 acres out of Section 36, being all of Lot No. 4779 and being part of Lot Numbers 4777, and part 2290 of the consecutive numbers of lots of the City of Miamisburg, being 7.545 acres of land that lie over and across a 79.74 acre tract of land described in deed to the United States of America of record in Deed Microfiche No. 81-376A01, being 4.658 acres of land that lie over and across a 17.68 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 248, being 0.030 acres of land that lie over and across a 33.11 acre tract of land described in deed to the United States of America of record in Deed Book 1246, Page 45, being 2.295 acres of land that lie over and across a 20.46 acre tract of land described in deed to the United States of America of record in Deed Book 1215, Page 347, being all of a 6.66 acre tract (6.547 acres (calculated)) of land described in deed to the United States of America of record in Deed Book 1258, Page 56, being all of a 0.54 acre tract of land (0.529 acres (calculated)) described in deed to the United States of America of record in Deed Book 1215, Page 347, being all of a 1.6 acre tract of land (1.544 acres (calculated)) described in deed to the United States of America of record in Deed Book 1258, Page 74, being Montgomery County Engineer Reference Survey Record 2006-0269, and being more particularly described as follows:

COMMENCING for reference at a railroad spike found at the southeast corner of said Section 36 and the southwest corner of Section 30, Town 2, Range 5, M.Rs. and being an angle point in the southerly line of a 94.838 acre tract of land as described in deed to Miamisburg Mound Community Improvement Corporation of record in Instrument Record Deed-09-011643 Exhibit "F";

Thence North 05°16'47" East with the section line between Section 30 and Section 36, with the lot line between City of Miamisburg Lot Numbers 4778 and 6127, and crossing said 94.838 acre tract, a distance of 1353.00 feet to an iron pin set at the northeasterly corner of Lot 4778 of the consecutive numbers of lots of the City of Miamisburg;

Thence North 83°53'43" West with the northerly line of said Lot 4778, the southerly line of said Lot 4777, and with the lot line between said City Lot Numbers 4778 and 4777, a distance of 1146.00 feet to a 5/8" iron pin found with a Schram cap at the southeasterly corner of said 1.6 acre tract, being the southwesterly corner of said Lot 4777 and also at the S.E. corner of Lot 4779 of the consecutive numbers of lots of the City of Miamisburg, and being the **TRUE POINT OF BEGINNING** of the tract to be described;

Thence North 84°16'50" West with the southerly line of said 1.6 acre tract, the southerly line of said City Lot Number 4779, and the northerly line of said Lot 4778, a distance of 100.33 feet to a 5/8" iron pin found with an illegible aluminum cap at the southwesterly corner of said 1.6 acre tract and being on the easterly right of way line of the Consolidated Rail Corporation tract described in deed of record in Deed Microfiche No. 78-502A01;

Thence North 09°25'27" West with said easterly right of way line, the westerly line of said City Lot Number 4779, and the westerly line of said 1.6 acre tract, a distance of 696.73 feet to a 5/8" iron pin found with a Beal cap at the northwesterly corner of said

1.6 acre tract and said City Lot Number 4779 and the southwesterly corner of said 0.54 acre tract and said City Lot Number 2290;

Thence North 00°48'14" West with said easterly right of way line and the westerly line of said 0.54 acre tract, a distance of 616.70 feet to an 8" by 8" concrete monument found;

Thence North 84°55'06" East with said right of way line and the northerly line of said 0.54 acre tract, a distance of 74.92 feet to an iron pin set at the northeasterly corner of said 0.54 acre tract, being the northwesterly corner of said 6.66 acre tract, and being the southwesterly corner of said 33.11 acre tract;

Thence with a new division line through said 17.68 acre tract, said 33.11 acre tract and said City Lot Number 2290 with the following twenty-seven (27) courses:

- 1.) North 79°29'02" East, a distance of 98.70 feet to an iron pin set;
- 2.) North 83°59'02" East, a distance of 347.69 feet (crossing the east line of the 33.11 acre tract and the west line of the 17.68 acre tract at a distance of 85.37 feet), to an iron pin set;
- 3.) North 76°52'04" East, a distance of 79.92 feet to an iron pin set;
- 4.) North 63°02'39" East, a distance of 31.36 feet to an iron pin set;
- 5.) North 29°43'09" East, a distance of 122.02 feet to an iron pin set;
- 6.) North 54°03'57" East, a distance of 63.19 feet to an iron pin set;
- 7.) North 67°15'25" East, a distance of 240.29 feet to an iron pin set;
- 8.) North 57°23'02" East, a distance of 36.99 feet to an iron pin set;
- 9.) North 19°27'18" East, a distance of 13.71 feet to a Mag nail set;
- 10.) North 06°55'42" East, a distance of 33.94 feet to an iron pin set;
- 11.) South 69°49'16" West, a distance of 84.57 feet to an iron pin set;
- 12.) South 77°13'35" West, a distance of 89.22 feet to an iron pin set;
- 13.) South 09°29'45" West, a distance of 17.42 feet to an iron pin set;
- 14.) South 81°50'07" West, a distance of 28.32 feet to an iron pin set;
- 15.) North 57°54'36" West, a distance of 29.12 feet to an iron pin set;
- 16.) South 82°54'26" West, a distance of 197.88 feet to an iron pin set;
- 17.) South 79°49'02" West, a distance of 75.88 feet to an iron pin set;
- 18.) South 24°27'29" East, a distance of 99.13 feet to an iron pin set;
- 19.) South 75°54'00" West, a distance of 78.91 feet to an iron pin set;
- 20.) North 07°58'24" West, a distance of 93.66 feet to an iron pin set;

- 21.) North 05°28'40" West, a distance of 44.09 feet to an iron pin set;
- 22.) North 07°27'35" West, a distance of 227.31 feet to an iron pin set;
- 23.) North 83°13'43" East, a distance of 387.72 feet to an iron pin set;
- 24.) North 89°28'55" East, a distance of 397.71 feet to an iron pin set;
- 25.) South 01°39'10" East, a distance of 41.56 feet to an iron pin set;
- 26.) South 46°26'35" West, a distance of 201.86 feet to an iron pin set;
- 27.) South 04°41'32" West, a distance of 53.96 feet to a 5/8" iron pin found in concrete with a Schram cap at N.W. corner of Miamisburg Mound Community Improvement Corporation's 42.882 acre tract as described in Instrument Record Deed-09-011643 Exhibit "B";

Thence with the west line of said 42.882 acre tract the following eleven (11) courses:

1. South 32°10'12" West, a distance of 60.23 feet to a railroad spike found;
2. South 67°54'44" West, a distance of 195.34 feet to a railroad spike found;
3. South 63°34'09" West, a distance of 106.73 feet to a 5/8" iron pin found with a Schram cap;
4. South 51°02'43" West, a distance of 58.56 feet to a 5/8" iron pin found with a Schram cap;
5. South 25°16'22" West, a distance of 89.08 feet to a 5/8" iron pin found with a Schram cap;
6. South 50°24'09" West, a distance of 58.42 feet to a 5/8" iron pin found;
7. South 14°15'31" East, a distance of 152.25 feet to a 5/8" iron pin found with a Schram cap;
8. South 75°40'33" East, a distance of 22.83 feet to a 5/8" iron pin found with a Schram cap;
9. South 21°04'56" West, a distance of 206.76 feet to a 5/8" iron pin found with a Schram cap;
10. South 08°49'20" West, a distance of 94.67 feet to a 5/8" iron pin found with a Schram cap;
11. South 05°38'00" West, a distance of 283.96 feet to an iron pin set on the southerly line of said Lot 2290 and the northerly line of said Lot 4777;

Thence South 83°58'45" East with said line and with the lot line between said City Lot Numbers 2290 and 4777, a distance of 109.48 feet to a 5/8" iron pin found;

Thence crossing said Lot 4777 with the following three (3) courses:

- 1.) South 24°18'00" East, a distance of 459.08 feet to a 5/8" iron pin found with a Schram cap at the S.W. corner of Miamisburg Mound Community Improvement Corporation's 42.882 acre tract;
- 2.) South 24°26'31" East, a distance of 23.00 feet to a 5/8" iron pin found with a Schram cap;
- 3.) South 79°07'51" West, a distance of 666.49 feet to a 5/8" iron pin found with a Schram cap on the westerly line of said 79.74 acre tract and said City Lot Number 4777 and the easterly line of said 1.6 acre tract and said City Lot 4779;

Thence South 09°23'41" East with said line and with the lot line between said City Lot Numbers 4777 and 4779, a distance of 60.41 feet to the **TRUE POINT OF BEGINNING**, containing 23.148 acres of land, more or less.

Subject however to all easements, restrictions and rights-of-way of record, if any.

Basis of Bearing is the section line between Sections 30 and 36 being North 05°16'47" East as determined by GPS measurements between Montgomery County Monuments 1057 and 1058 (NAD 83-1995 Adjustment) and the Ohio State Plane Coordinate System, South Zone. All iron pins Set are 5/8" solid iron pins 30" in length with an orange plastic cap stamped "Floyd Browne Group".

The above description is based on and referenced to an exhibit prepared by Floyd Browne Group dated 06-12-06, as recorded in the Montgomery County Engineer's Record of Land Surveys as Volume 2011, Page 0335.

Ingress and egress easement for the 23.148 acre tract of land shall be provided over and across that 45.256 acre tract of land that is contiguous and adjacent to this tract and has access to Mound Road. Easement shall remain in effect until such time said 23.148 acre tract obtains approved frontage to a public roadway.

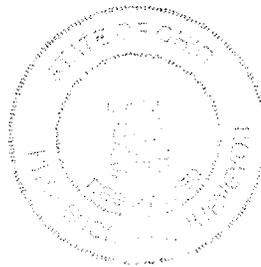
All references are to the records of the Recorder's Office, Montgomery County, Ohio.

Mark Alan Smith 3/07/2012

Mark Alan Smith, P.S. Date
Professional Surveyor No. 8232

PAUL W. GRUNER, P.E., P.S.
MONTGOMERY COUNTY ENGINEER
APPROVED FOR POINT OF BEGINNING,
ACREAGE AND CLOSURE ONLY
DATE 04-17-12 FILE NO. 2011-0335

BY James R. Ruffing



ENVIRONMENTAL COVENANT

This Environmental Covenant is entered into by the United States of America, acting through the United States Department of Energy (USDOE), the United States Environmental Protection Agency (US EPA) and the Ohio Environmental Protection Agency (Ohio EPA) pursuant to Ohio Revised Code (ORC) §5301.80 to 5301.92, and the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), as amended, 42 U.S.C. §§ 9601-9675, for the purpose of subjecting the Property to the activity and use limitations set forth herein.

Whereas USDOE and US EPA entered into a federal facility agreement (FFA) under Section 120(e) of CERCLA, 42 U.S.C. 9620(e) in June 1990 for the completion by USDOE of all necessary remedial action at USDOE's Mound, Ohio facility; and

Whereas Ohio EPA became a party with USDOE and US EPA to a revised FFA on July 15, 1993; and

Whereas, in accordance with the FFA, a Record of Decision ("ROD") selecting a remedy to address contaminated soil and ground water at Parcel 9 of the Mound facility was issued in June 1995;

Whereas, a Record of Decision Amendment of the Operable Unit 1 ("OU-1") ROD was completed in September 2011; OU-1 is located within Parcel 9 of the Mound property; and

Whereas, the remedy for Parcel 9 requires certain restrictions on the use of the Property.

Now therefore, US DOE, US EPA and Ohio EPA agree to the following:

1. Environmental Covenant. This instrument is an environmental covenant developed and executed pursuant to ORC §5301.80 to 5301.92.

2. Property. This Environmental Covenant concerns an approximately 23 acre tract of real property identified as Parcel 9, owned by USDOE, located in Miamisburg, Montgomery County, Ohio, and more particularly described in Exhibit A attached hereto and hereby incorporated by reference herein (Property). The larger Mound property within which Parcel 9 is located is approximately 306 acres in size and is more particularly described in Exhibit B attached hereto. The environmental condition of said property is described in the Parcel 9, CERCLA 120(h) Summary attached hereto as Exhibit C.

3. Environmental Response Project. The response actions performed or to be performed to implement the remedy selected in the Record of Decision dated June 1995 and the Record of Decision Amendment dated September 2011 for Parcel 9 of the Mound facility are an Environmental Response Project as defined in ORC § 5301.80(E). An administrative record for the Record of Decision for Parcel 9 is maintained by USDOE at the DOE-Legacy Management Business Center, 99 Research Park Road, Morgantown, WV 26505 and at www.lm.doe.gov/mound.

4. Owner. The United States of America, acting through the United States Department of Energy, is the current owner of the Property.

5. Holder. The United States Department of Energy, headquartered at 1000 Independence Avenue SW, Washington, DC 20585 is the holder of this Environmental Covenant.

6. Agency. US EPA and any successor agency and its respective officer, agents, contractors and other invitees is the "Agency" as defined in ORC § 5301.80(B) and the "Applicable Agency" as that term is used in ORC §§ 5301.80 to 5301.92 because US EPA determines or approves the Environmental Response Project pursuant to which this covenant was created.

7. Activity and Use Limitations. As part of the remedial action described in the Record of Decision dated June 1995 and Record of Decision Amendment dated September 2011 for Parcel 9, Owner hereby imposes and agrees to comply with the following activity and use limitations:

- a. Limitation on movement of soil. No soil from the Property shall be placed on any property outside the boundaries of the Mound property, described in Exhibit B, without prior written approval from Ohio Department of Health (ODH), Ohio EPA and US EPA, or successor agencies.
- b. Prohibition against residential use or farming activities. The Property shall not be used for any residential or farming activities, or any other activities which result in the chronic exposure of children under eighteen years of age to soil or ground water from the Property. Prohibited uses shall include, but not be limited to:

- (1) Single or multi-family dwellings or rental units;

- (2) Day care facilities;
- (3) Schools or other educational facilities for children under eighteen years of age; and
- (4) Community centers, playgrounds or other recreational or religious facilities for children under eighteen years of age.

c. Prohibition against use of ground water. Ground water under the Property shall not be extracted, consumed, exposed or used in any way without prior written approval of US EPA and Ohio EPA.

8. Running with the Land. This Environmental Covenant shall be binding upon the Owner and all assigns and successors in interest, including any Transferee, and shall run with the land, pursuant to ORC §5301.85, subject to amendment or termination as set forth herein. The term "Transferee," as used in this Environmental Covenant, shall mean any future owner of any interest in the Property or any portion thereof, including, but not limited to, owners of an interest in fee simple, mortgagees, easement holders, and/or lessees.

9. Compliance Enforcement. Compliance with this Environmental Covenant may be enforced pursuant to ORC §5301.91. Failure to timely enforce compliance with this Environmental Covenant or the activity and use limitations contained herein by any party shall not bar subsequent enforcement by such party and shall not be deemed a waiver of the party's right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall restrict US DOE, US EPA or the Director of Ohio EPA from exercising any authority under applicable law.

10. Rights of Access. Owner hereby grants to US EPA, Ohio EPA and ODH, their agents, contractors, and employees the right of access to the Property for implementation or enforcement of this Environmental Covenant. Any Transferee shall grant to US EPA, Ohio EPA, ODH, US DOE, its agents, contractors and employees the right of access to the Property for implementation or enforcement of this Environmental Covenant.

11. Compliance Reporting. US DOE, or its successors or assigns, shall submit to US EPA, Ohio EPA and ODH on an annual basis written documentation, in accordance with the Record of Decision for Parcel 9 dated June 1995 and the Record of Decision Amendment dated September 2011 for Parcel 9, verifying that the activity and use limitations are being complied with and remain in place.

12. Notice upon Conveyance. Each instrument hereafter conveying any interest in the Property or any portion of the Property shall contain a notice of the activity and use limitations set forth in this Environmental Covenant, and provide the recorded location of this Environmental Covenant. The notice shall be substantially in the following form:

“THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL COVENANT, DATED _____, 20__, RECORDED IN THE DEED OR OFFICIAL RECORDS OF THE MONTGOMERY COUNTY RECORDER ON _____, 20__, IN [DOCUMENT _____, or BOOK ____, PAGE _____]. THE ENVIRONMENTAL COVENANT CONTAINS THE FOLLOWING ACTIVITY AND USE LIMITATIONS:

Prohibition against residential use and farming activities; prohibition against use of groundwater; prohibition against removal of soil from Mound property.

Owner or transferee, if applicable, shall notify Ohio EPA within ten (10) days after each conveyance of an interest of the Property or any portion thereof. The notice shall include the name, address, and telephone number of the Transferee, a copy of the deed or other documentation evidencing the conveyance, and a survey map that shows the boundaries of the property being transferred.”

13. Representations and Warranties. US DOE hereby represents and warrants to the other signatories hereto:

- A. that the US DOE is the sole owner of the Property;
- B. that the US DOE holds fee simple title to the Property which is free, clear and unencumbered;
- C. that the US DOE has the power and authority to enter into this Environmental Covenant, to grant the rights and interests herein provided and to carry out all obligations hereunder;
- D. that the US DOE has identified all other persons that own an interest in or hold an encumbrance on the Property and notified such persons of the Owner's intention to enter into this Environmental Covenant; and

- E. that this Environmental Covenant will not materially violate or contravene or constitute a material default under any other agreement, document or instrument to which US DOE is a party or by which US DOE may be bound or affected.

14. Amendment or Termination. This Environmental Covenant may be amended or terminated by consent of all of the following: US DOE, any Transferee, US EPA, and Ohio EPA, pursuant to ORC §5301.90 and other applicable law. The term, "Amendment," as used in this Environmental Covenant, shall mean any changes to the Environmental Covenant, including the activity and use limitations set forth herein, or the elimination of one or more activity and use limitations when there is at least one limitation remaining. The term, "Termination," as used in this Environmental Covenant, shall mean the elimination of all activity and use limitations set forth herein and all other obligations under this Environmental Covenant.

This Environmental Covenant may be amended or terminated only by a written instrument duly executed by the US DOE, US EPA, the Director of Ohio EPA and the Transferee, if any, of the Property or portion thereof, as applicable. Within thirty (30) days of signature by all requisite parties on any amendment or termination of this Environmental Covenant, the Owner or Transferee shall file such instrument for recording with the Montgomery County Recorder's Office, and shall provide a file- and date-stamped copy of the recorded instrument to Ohio EPA.

15. Severability. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

16. Governing Law. This Environmental Covenant shall be governed by and interpreted in accordance with the laws of the State of Ohio.

17. Recordation. Within thirty (30) days after the date of the final required signature upon this Environmental Covenant, US DOE shall file this Environmental Covenant for recording, in the same manner as a deed to the Property, with the Montgomery County Recorder's Office.

18. Effective Date. The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded as a deed record for the Property with the Montgomery County Recorder.

19. Distribution of Environmental Covenant. US DOE shall distribute a file- and date-stamped copy of the recorded Environmental Covenant to: US EPA, Ohio EPA, ODH and the City of Miamisburg.

20. Notice. Unless otherwise notified in writing by or on behalf of the current owner or US DOE, any document or communication required by this Environmental Covenant shall be submitted to:

Regional Project Manager, Mound Site
US EPA, Region V – SR-6J
77 West Jackson Boulevard
Chicago, IL 60604

Site Coordinator, Mound Site
Division of Environmental Response and Revitalization
Ohio EPA-Southwest District Office
401 East 5th Street
Dayton, OH 45402

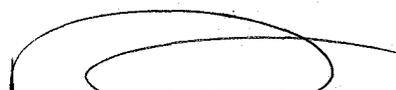
LM Site Manager
10995 Hamilton-Cleves Road
Harrison, OH 45030

U.S. DOE/LM-2012
11025 Dover Street, Suite 1000
Westminster, CO 80021-5573

The undersigned representative of Owner represents and certifies that he is authorized to execute this Environmental Covenant.

IT IS SO AGREED:

United States Department of Energy



Bud Sokolovich, Realty Officer

11/2/11

Date

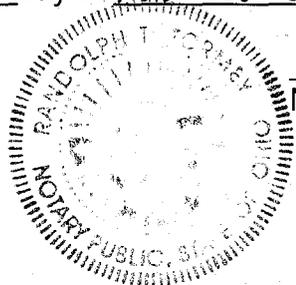
OU-1 in Parcel 9
USDOE Mound Facility
Page 7

State of OHIO)
County of HAMILTON)

ss:

Before me, a notary public, in and for said county and state, personally appeared Bud Sokolovich, a duly authorized representative of the US Department of Energy (DOE), who acknowledged to me that he did execute the foregoing instrument on behalf of DOE

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this 2 day of November, 2011.



Randolph Torney
Notary Public

RANDOLPH T. TORMEY
NOTARY PUBLIC-STATE OF OHIO
My Commission Has No Expiration Date
(O.R.C. Section 147.03)

OHIO ENVIRONMENTAL PROTECTION AGENCY

Scott J. Nally, Director

Date

State of Ohio)
County of Franklin)
ss:

Before me, a notary public, in and for said county and state, personally appeared Scott J. Nally, the Director of Ohio EPA, who acknowledged to me that he did execute the foregoing instrument on behalf of Ohio EPA.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this ____ day of _____, 20__.

Notary Public

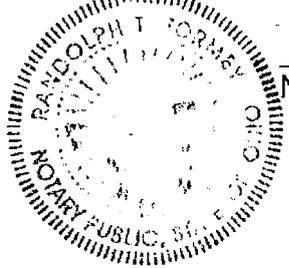
OU-1 in Parcel 9
USDOE Mound Facility
Page 7

State of OHIO)
County of HAMILTON)

ss:

Before me, a notary public, in and for said county and state, personally appeared Bud Sokolovich, a duly authorized representative of the US Department of Energy (DOE), who acknowledged to me that he did execute the foregoing instrument on behalf of DOE

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this 2 day of November, 2011.



Randolph Torney
Notary Public

RANDOLPH T. TORNEY
NOTARY PUBLIC-STATE OF OHIO
My Commission Has No Expiration Date
(O.R.C. Section 147.03)

OHIO ENVIRONMENTAL PROTECTION AGENCY

[Signature]
Scott J. Nally, Director

11/17/11
Date

State of Ohio)
County of Franklin)
ss:

Before me, a notary public, in and for said county and state, personally appeared Scott J. Nally, the Director of Ohio EPA, who acknowledged to me that he did execute the foregoing instrument on behalf of Ohio EPA.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this 17 day of November 2011

Brian C. Cook
Notary Public

BRIAN C. COOK, Attorney-At-Law
NOTARY PUBLIC - STATE OF OHIO
My commission has no expiration date.
Section 147.03 O.R.C.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Richard C Karl

Richard C. Karl
Director, Superfund Division, Region 5

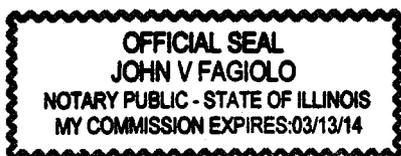
12-22-11

Date

State of Illinois)
)
County of Cook) ss:

Before me, a notary public, in and for said county and state, personally appeared RICHARD C. KARL, the Director, Superfund Division, of Region 5, US EPA, who acknowledged to me that he did execute the foregoing instrument on behalf of US EPA.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this 22nd day of DECEMBER 2011.



John V Fagiolo
Notary Public



Description of 23.148 Acres

Situated in the State of Ohio, County of Montgomery, City of Miamisburg, being part of Section 36, Fractional Township 2, Range 5, Miami Rivers Survey, being 23.148 acres out of Section 36, being part of City of Miamisburg Lot No. 4777 and Lot No. 2290, being 7.545 acres of land that lie over and across a 79.74 acre tract of land described in deed to the United States of America of record in Deed Microfiche No. 81-376A01, being 4.658 acres of land that lie over and across a 17.68 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 248, being 0.030 acres of land that lie over and across a 33.11 acre tract of land described in deed to the United States of America of record in Deed Book 1246, Page 45, being 2.295 acres of land that lie over and across a 20.46 acre tract of land described in deed to the United States of America of record in Deed Book 1215, Page 347, being 6.547 acres of land that lie over and across a 6.66 acre tract of land described in deed to the United States of America of record in Deed Book 1258, Page 56, being 0.529 acres of land that lie over and across a 0.54 acre tract of land described in deed to the United States of America of record in Deed Book 1215, Page 347, being 1.544 acres of land that lie over and across a 1.6 acre tract of land described in deed to the United States of America of record in Deed Book 1258, Page 74, and being more particularly described as follows:

COMMENCING for reference at a railroad spike found at the southeast corner of said Section 36 and the southwest corner of Section 30, Fractional Township 2, Range 5, Miami Rivers Survey and being an angle point in the southerly line of a 94.838 acre tract of land as described in deed to Miamisburg Mound Community Improvement Corporation of record in Deed Microfiche No. 02-128007-0040;

Thence North 05°16'47" East with the section line between Section 30 and Section 36 and crossing said 94.838 acre tract, a distance of 1353.00 feet to a point at the northeasterly corner of a 42.56 acre tract of land described in deed to the United States of America of record in Deed Microfiche No. 81-323A11;

Thence North 83°53'43" West with the northerly line of said 42.56 acre tract and the southerly line of said 79.74 acre tract, a distance of 1146.00 feet to an iron pin found at the southeasterly corner of said 1.6 acre tract, being the southwesterly corner of said 79.74 acre tract, and being the **TRUE POINT OF BEGINNING** of the tract to be described;

Thence North 84°16'50" West with the southerly line of said 1.6 acre tract and the northerly line of said 42.56 acre tract, a distance of 100.33 feet to an iron pin found at the southwesterly corner of said 1.6 acre tract and being on the easterly right of way line of the Consolidated Rail Corporation tract;

Thence North 09°25'27" West with said easterly right of way line and the westerly line of said 1.6 acre tract, a distance of 696.73 feet to an iron pin found at the northwesterly corner of said 1.6 acre tract and the southwesterly corner of said 0.54 acre tract;

Thence North 00°48'14" West with said easterly right of way line and the westerly line of said 0.54 acre tract, a distance of 616.70 feet to a concrete monument found;

Thence North 84°55'06" East with said right of way line and the northerly line of said 0.54 acre tract, a distance of 74.92 feet to an iron pin set at the northeasterly corner of said 0.54 acre tract, being the northwesterly corner of said 6.66 acre tract, and being the southwesterly corner of said 33.11 acre tract;

Thence North 79°29'02" East crossing said 33 11 acre tract, a distance of 98.70 feet to an iron pin set;

Thence crossing into and through said 17.68 acre tract with the following thirty-two courses and distances:

- 1.) North 83°59'02" East, a distance of 347.69 feet to an iron pin set;
- 2.) North 76°52'04" East, a distance of 79.92 feet to an iron pin set;
- 3.) North 63°02'39" East, a distance of 31.36 feet to an iron pin set;
- 4.) North 29°43'09" East, a distance of 122.02 feet to an iron pin set;
- 5.) North 54°03'57" East, a distance of 63.19 feet to an iron pin set;
- 6.) North 67°15'25" East, a distance of 240.29 feet to an iron pin set;
- 7.) North 57°23'02" East, a distance of 36.99 feet to an iron pin set;
- 8.) North 19°27'18" East, a distance of 13.71 feet to a surveyor's nail set;
- 9.) North 06°55'42" East, a distance of 33.94 feet to an iron pin set;
- 10.) South 69°49'16" West, a distance of 84.57 feet to an iron pin set;
- 11.) South 77°13'35" West, a distance of 89.22 feet to an iron pin set;
- 12.) South 09°29'45" West, a distance of 17.42 feet to an iron pin set;
- 13.) South 81°50'07" West, a distance of 28.32 feet to an iron pin set;
- 14.) North 57°54'36" West, a distance of 29.12 feet to an iron pin set;
- 15.) South 82°54'26" West, a distance of 197.88 feet to an iron pin set;
- 16.) South 79°49'02" West, a distance of 75.88 feet to an iron pin set;
- 17.) South 24°27'29" East, a distance of 99.13 feet to an iron pin set;
- 18.) South 75°54'00" West, a distance of 78.91 feet to an iron pin set;
- 19.) North 07°58'24" West, a distance of 93.66 feet to an iron pin set;
- 20.) North 05°28'40" West, a distance of 44.09 feet to an iron pin set;
- 21.) North 07°27'35" West, a distance of 227.31 feet to an iron pin set;
- 22.) North 83°13'43" East, a distance of 387.72 feet to an iron pin set;
- 23.) North 89°28'55" East, a distance of 397.71 feet to an iron pin set;
- 24.) South 01°39'10" East, a distance of 41.56 feet to an iron pin set;
- 25.) South 46°26'35" West, a distance of 201.86 feet to an iron pin set;

- 26.) South 04°41'32" West, a distance of 53.96 feet to an iron pin found;
- 27.) South 32°10'12" West, a distance of 60.23 feet to a railroad spike found;
- 28.) South 67°54'44" West, a distance of 195.34 feet to a railroad spike found;
- 29.) South 63°34'09" West, a distance of 106.73 feet to an iron pin found;
- 30.) South 51°02'43" West, a distance of 58.56 feet to an iron pin found;
- 31.) South 25°16'22" West, a distance of 89.08 feet to an iron pin found;
- 32.) South 50°24'09" West, a distance of 58.42 feet to an iron pin found in said 20.46 acre tract;

Thence crossing said 20.46 acre tract with the following five (5) courses and distances:

- 1.) South 14°15'31" East, a distance of 152.25 feet to an iron pin found;
- 2.) South 75°40'33" East, a distance of 22.83 feet to an iron pin found;
- 3.) South 21°04'56" West, a distance of 206.76 feet to an iron pin found;
- 4.) South 08°49'20" West, a distance of 94.67 feet to an iron pin found;
- 5.) South 05°38'00" West, a distance of 283.96 feet to an iron pin set on the southerly line of said 20.46 acre tract and the northerly line of said 79.74 acre tract;

Thence South 83°58'45" East with said line, a distance of 109.48 feet to an iron pin found;

Thence crossing said 79.74 acre tract with the following three (3) courses and distances:

- 1.) South 24°18'00" East, a distance of 459.08 feet to an iron pin found;
- 2.) South 24°26'31" East, a distance of 23.00 feet to an iron pin found;
- 3.) South 79°07'51" West, a distance of 666.49 feet to an iron pin found on the westerly line of said 79.74 acre tract and the easterly line of said 1.6 acre tract;

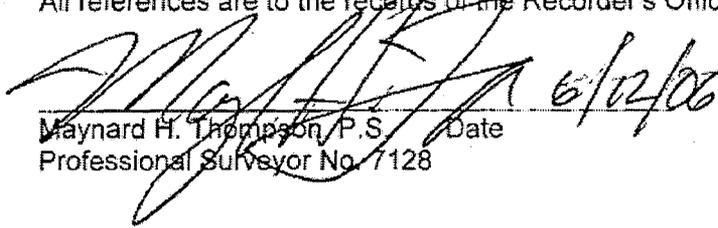
Thence South 09°23'41" East with said line, a distance of 60.41 feet to the **TRUE POINT OF BEGINNING**, containing 23.148 acres of land, more or less.

Subject however to all easements, restrictions and rights-of-way of record, if any.

Basis of Bearing is the section line between Sections 30 and 36 being North 05°16'47" East as determined by GPS measurements between Montgomery County Monuments 1057 and 1058 and the Ohio State Plane Coordinate System, South Zone. All iron pins Set are 5/8" solid iron pins 30" in length with an orange plastic cap stamped "Floyd Browne Group".

The above description is based on and referenced to an exhibit prepared by Floyd Browne Group dated 06-12-06, attached hereto and made a part hereof.

All references are to the records of the Recorder's Office, Montgomery County, Ohio.

 6/12/06

Maynard H. Thompson, P.S. Date
Professional Surveyor No. 7128



EXHIBIT B

1) LEGAL DESCRIPTION

Situate in the State of Ohio, County of Montgomery, in the City of Miamisburg, being a part of section 30 and fractional sections 35 and 36, Town 2, Range 5, Miami Rivers Survey (M.R.S.), and being all of city lots numbered 2259, 2290, 4777, 4778, 4779, 6127 and 6128, and part of out lot 6 lying within the corporation limits of the City of Miamisburg, being all of the tracts of land conveyed to the United States of America by instruments as recorded in Deed Book 1214 pages 10, 12, 15, and 17, Deed Book 1215, page 347, Deed Book 1214 page 248, Deed Book 1246 page 45, Deed Book 1258 page 74, Deed Book 1258 page 56, Deed Book 1256 page 179, Micro-Fiche 81-376A01, and Micro-Fiche 81-323A11 of the Deed Records of said County; and being more particularly bounded and described with bearings referenced to the Ohio State Plane Coordinate System, South Zone, as follows:

Beginning at a spike found (0.5' deep) and reset in concrete, being the Southwest corner of said section 30 and the Southeast corner of fractional section 36, said point being in the center of Benner Road (40 feet R/W) and being referenced North 84° 28' 10" West 3102.92 feet from a spike found (0.5' deep) at the intersection of the centerline of Mound Road (60 feet R/W) with the centerline of said Benner Road in said Miami Township, and being the true point of beginning for the land herein described; thence along the centerline of Benner road South 66° 32' 35" West 958.79 feet to a railroad spike found and reset in concrete; thence continuing along said centerline of Benner Road South 73° 18' 20" West 31.01 feet to a railroad spike found and reset in concrete, being a point in the East right-of-way line of the abandoned Miami and Erie Canal; thence leaving Benner Road and with said East right-of-way line for the following four courses: North 14° 05' 35" West 62.14 feet to an iron pin found; thence north 14° 11' 50" West 440.75 feet to an iron pin found; thence North 14° 47' 30" West 259.93 feet to an iron pin found; thence North 14° 45' 50" West 546.20 feet to an iron pin found and reset in concrete in the East right-of-way line of the Consolidated Railway Corporation; thence with said Conrail right-of-way line for the following 10 courses: North 75° 00' 55" East 85.04 feet to an iron pin found and reset in concrete; thence North 37° 16' 35" East 96.65 feet to an iron pin set in concrete; thence North 80° 28' 05" East 66.00 feet to an iron pin found and reset in concrete; thence North 09° 31' 55" West 499.80 feet to a concrete monument found; thence North 09° 26' 35" West 696.85 feet to an iron pin set in concrete; thence North 0° 48' 25" West 616.81 feet to a concrete monument found; thence North 84° 43' 35" East 75.08 feet to an iron pin set in concrete; thence along the arc of a curve to the right having a radius of 3669.83 feet, being concentric with and 150 feet distant, measured Eastwardly at right angles, from the centerline between main tracks of said railroad; for a distance of 744.94 feet to a concrete monument set, the chord of said curve bears North 03° 17' 05" East 743.66 feet; thence South 84° 39' 20" East 150.34 feet to a concrete monument set; thence along the arc of a curve to the right having a radius of 3519.83 feet, being concentric with and 300 feet distant, measured Eastwardly at right angles, from the centerline between main tracks of said railroad, for a distance of 1640.97 feet to a

concrete monument found, the chord of said curve bears North 22° 36' 55" East 1626.15 feet; thence leaving said railroad right-of-way line South 84° 14' 50" East 102.31 feet to a concrete monument found; thence South 05° 37' 45" West 90.03 feet to a concrete monument found; thence North 65° 35' 50" East 809.36 feet to an iron pipe found and being referenced South 05° 47' 45" West 130.89 feet from a concrete monument found at the Northwest corner of said section 30 and the Northeast corner of fractional section 36; thence South 85° 04' 55" East 1023.90 feet to a concrete monument found; thence North 06° 53' 15" East 231.00 feet to a concrete monument found on the West right-of-way line of Mound Road (60 feet R/W); thence South 84° 38' 15" East 30.00 feet to an iron pin set in the centerline of Mound Road; thence South 06° 53' 15" West 100.00 feet to an iron pin set; thence South 84° 38' 15" East 193.40 feet to a concrete monument set; thence along the centerline of Mound Road South 05° 32' 40" West 2709.36 feet to a railroad spike found; thence leaving said Mound Road North 85° 28' 20" West 111.00 feet to an iron pipe found; thence South 07° 06' 55" East 714.44 feet to a concrete monument found; thence South 83° 59' 35" East 34.19 feet to a concrete monument found; thence South 04° 42' 45" West 2010.06 feet to a railroad spike found (0.2' deep) and reset in concrete located in the center of Benner Road; thence along the centerline of Benner Road North 84° 29' 45" West 1333.66 feet to the true point of beginning containing 305.116 acres more or less, and subject to all legal highways and easements of record.

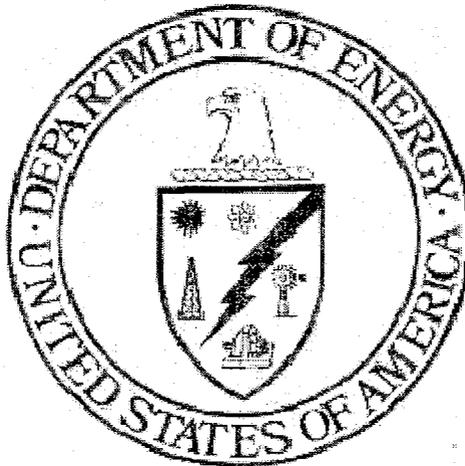
(This description based upon an actual field survey of the described land conducted May, 1982. The description was prepared by Lockwood, Jones & Beals, Dayton, Ohio)

Parcel 9

Environmental Summary

**CERCLA 120(h) SUMMARY
NOTICE OF HAZARDOUS SUBSTANCES**

Final
August 2011



Miamisburg Closure Project

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Acronyms

CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
COPC	Constituent of Potential Concern
DOE	Department of Energy
EA	Environmental Assessment
FA	Further Action
FONSI	Finding of No Significant Impact
HI	Hazard Index
HQ	Hazard Quotient
MDC	Mound Development Corporation
MMCIC	Miamisburg Mound Community Improvement Corporation
NA	Not Applicable
NCP	National Contingency Plan
NFA	No Further Assessment
O&M	Operations & Maintenance
OEPA	Ohio Environmental Protection Agency
OU1	Operable Unit 1
OSC	On-Scene Coordinator
PCB	Polychlorinated biphenyl
PRS	Potential Release Site
RA	Removal Action
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RRE	Residual Risk Evaluation
RREM	Residual Risk Evaluation Methodology
TPC	Total petroleum hydrocarbons
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Chemical
WH	Well House
WTS	Waste Transfer System

1.0 PURPOSE

The information contained in this notice is required under the authority of regulations promulgated under section 120 (h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This summary is intended to support a transfer by deed to new ownership for economic development by documenting that the Department of Energy's (DOE) Mound Plant has met the requirements of CERCLA 120 (h) for Parcel 9. A copy shall be provided to all future owners.

2.0 PROPERTY DESCRIPTION

2.1 Description of Property Suitable for Transfer

This Environmental Summary addresses Parcel 9, which is located on the Mound Site. The legal description for Parcel 9 is included as Appendix C of this Environmental Summary.

2.2 Regional Context of the Mound Plant and Transferred Property

The Mound Site is in Montgomery County within the City of Miamisburg, Ohio as shown in Figure 1. At one time, the Mound Site occupied approximately 306 acres. Prior to the transfer of Parcel 4, Benner Road formed the southern boundary of the site. The Norfolk Southern Railroad roughly parallels the western boundary with Mound Road forming the eastern boundary. Since 1999, approximately 178 acres of the original 306 acres have been transferred to the Mound Development Corporation (MDC), formally the Miamisburg Mound Community Improvement Corporation (MMCIC). Parcel 9 occupies approximately 23.2 of the remaining 128 acres.

2.3 Historical Uses of Parcel 9

Parcel 9 occupies approximately 23.2 acres of the Mound Plant (Figure 2). There were 20 buildings in Parcel 9 (Figure 3). There were 40 Potential Release Sites (PRSs) in the Parcel (Figure 4). All buildings and PRSs in Parcel 9 were dispositioned using the Mound 2000 Process. Any residual risks associated with remaining contamination in Parcel 9 have been evaluated and are presented in the Parcel 9 Residual Risk Evaluation (RRE).

There are no buildings remaining within Parcel 9. There are 3 temporary structures consisting of 2 trailers used as offices and 1 metal storage building that houses the pump and treat system. Eighteen sites of former buildings are included in the parcel. Details of historic buildings are provided in Appendix D. All PRSs have been

addressed, details are provided in Appendix E.

Activities that once took place in Parcel 9 include the development and production of energetic materials, process and blend explosives, drinking water treatment, pump house for fuel oil and brine water, deep water wells, air sparging/soil vapor extraction process, pump and treat system using an air stripper for Volatile Organic Chemicals (VOCs) and storage of drums, solvents and explosives. The northern section of Parcel 9 was used to stage radioactively contaminated soils for offsite shipment via railcars which were loaded at the site rail spur. A settling pond, sanitary waste landfill and buried radiological waste trenches were located in the southern section of Parcel 9; all of which have been removed.

3.0 ENVIRONMENTAL FINDINGS

3.1 Methodology

In accordance with Section 120 (h)(3) of CERCLA, to the extent that information is available based on a complete search of DOE files, the following shall be placed in deeds: (1) a notice of the type and quantity of hazardous substances stored, disposed of, or released; (2) a notice of the time at which such storage, disposal, or release took place; and (3) a description of any remedial action taken. Information sources reviewed to obtain the information include:

- Federal Government records;
- Recorded chain of title documents;
- Reasonably obtainable aerial photographs;
- Visual inspection of the property and adjacent properties;
- Reasonably obtainable records of releases on adjacent properties;
- Interviews with current or former employees; and
- Sampling, if appropriate under the circumstances.

Parcel 9 included 40 PRSs. PRSs at Mound were identified based on either knowledge of historical land use that was considered potentially detrimental, or an actual sampling result showing elevated concentrations of contaminants. The locations of the PRSs in Parcel 9 are shown on Figure 3 and detailed in Appendix E. Before transfer of a parcel can be completed, all buildings and PRSs must be dispositioned through the Mound 2000 process. Residual risks associated with remaining contamination in Parcel 9 have been determined to be protective of human health and the environment.

A Core Team with representatives from the DOE, US Environmental Protection Agency (USEPA), and Ohio Environmental Protection Agency (OEPA) performs a joint agency

evaluation of each PRS. The Core Team uses process knowledge, site visits, and existing data to determine whether any action is warranted concerning the PRS and recommends the appropriate response(s).

Information in the following documents was used to support this Environmental Summary.

3.1.1 Record of Decision (ROD) for Operable Unit 1 (OU1) (Reference 1)

The ROD documents the remedial action plan for the parcel and serves the following three functions: (1) certifies the remedy selection process was carried out in accordance with CERCLA; (2) describes the technical parameters of the remedy by specifying the treatment, engineering, and institutional components as well as cleanup levels; and (3) provides the public with a consolidated summary of information about the parcel and the chosen remedy, including the rationale behind the selection.

3.1.2 Amendment of the OU1 ROD (Reference 2)

The Amendment of the OU1 ROD documents the changes that have occurred since 1995 in OU1. The source removal activity, geographical expansion, and the addition of Institutional Controls are the major changes.

3.1.3 Parcel 9 Residual Risk Evaluation (RRE) (Reference 3)

The RRE provides the evaluation of human health risks associated with any residual contamination that may remain in the parcel after all remedies within a parcel have been addressed. The evaluation, used in conjunction with the Proposed Plan, ensures that future users of the land will not be exposed to contamination levels that would pose unacceptable health risks.

3.1.4 Building and PRS Documents

Documents for those buildings and PRSs located within Parcel 9 and the Core Team conclusion for each are listed in Appendix D and E. These PRSs were identified on the basis of potential radiological and/or chemical (non-radioactive) contamination using knowledge of historical land use or actual sample data. Building and PRS Data provide a summary of information sufficient for the Core Team to make recommendations or change the status of the PRS or building. Action Memoranda provide a plan for addressing removal actions. On-Scene Coordinator (OSC) Reports document completion of the removal action.

3.2 Building Analysis Summary

There are no buildings remaining within Parcel 9 (see Figure 3). The former buildings were demolished and closed out by a building data package approved by the Core Team. There are 3 temporary structures consisting of 2 trailers used as offices and 1 metal storage building that houses the pump and treat system.

3.2.1 Asbestos

No buildings remain.

3.2.2 Lead

No buildings remain.

3.2.3 Radon

No buildings remain.

3.2.4 Radiological Surveys

No buildings remain.

3.2.5 PCBs

There are no areas within Parcel 9 requiring polychlorinated biphenyl (PCB) cleanup. There may be PCB containing ballasts in the fluorescent lights in the temporary structures in Parcel 9. Appropriate management practices may be required in the future for these to remain protective.

3.3 PRS Summary

The DOE, USEPA, and OEPA have jointly decided that no additional remedial action for the PRSs in Parcel 9 is necessary with the placement of Institutional Controls in the form of deed restrictions on future land use.

3.4 RRE Summary

Pursuant to the Residual Risk Evaluation Methodology (RREM) (Reference 4), risks are quantified for both carcinogenic (cancer-causing) and non-carcinogenic (non-cancer-causing) contaminants. The risk associated with the intake of a known or suspected

carcinogen is reported in terms of the incremental lifetime cancer risk presented by those constituents of potential concern (COPC), as estimated using the appropriate slope factor and the amount of material available for uptake. The acceptable risk range as defined by CERCLA and the National Contingency Plan (NCP) is 10^{-4} to 10^{-6} (one human in ten-thousand to one human in one-million incremental cancer incidence). Potential human health hazards from exposure to non-carcinogenic contaminants are evaluated by using a Hazard Quotient (HQ). The HQ is determined by the ratio of the intake of a COPC to a reference dose or concentration for the contaminant of concern that is believed to represent a no-observable effect level. The contaminants of concern-specific HQs are then summed to provide an overall Hazard Index (HI). USEPA guidance sets a limit of 1.0 for the Comprehensive HI. The incremental carcinogenic risks and hazards associated with residual concentrations of COPCs in Parcel 9 are shown in Table 1 of Appendix B.

All analytes (carcinogenic and non-carcinogenic) detected at least once in soil in Parcel 9 were identified as COPCs. The maximum concentration of each COPC for soil was compared to and screened against criteria established in the RREM and presented in the Parcel 9 Residual Risk Evaluation. COPC tables for soil are presented in Tables 2 and 3 of Appendix B. COPCs that were carried through the RRE process are identified in those tables.

The soils within Parcel 9 have not been evaluated for any use other than onsite industrial/commercial use and thus reuse of this area is restricted to prevent an unacceptable risk to offsite receptors. Evaluation of residual soil contaminants within Parcel 9 has resulted in a determination that future users of the land will not be exposed to contaminant levels that would pose unacceptable risks as long as compliance with the deed restrictions described in the Amendment of the OU1 ROD, are maintained.

3.5 Other Factors Considered

DOE developed a generic checklist of the issues to be considered in evaluating property to be transferred. The checklist was modified from that used by the Department of Defense in releasing property for sale. The checklist includes environmental problems from Mound Site that are likely to concern a potential purchaser as well as items relating to the operational concerns from ongoing and future remedial actions. Results of only those factors which affect Parcel 9 are presented as follows:

3.5.1 Monitoring Equipment

There are several monitoring and extraction wells within Parcel 9. Since continued groundwater monitoring is part of the selected remedy for Parcel 9, DOE will continue to have access to these locations.

3.5.2 National Environmental Policy Act

Parcel 9 lies within the boundaries of the Mound Site described in the Environmental Assessment (EA) for Commercialization of the Mound Plant (Reference 5) and the resulting Finding of No Significant Impact (FONSI) issued on October 27, 1994 (Reference 6). The land use described in the EA is consistent with the institutional controls in the ROD as Amended for OU1.

3.5.3 Clean Air Act

OEPA placed the roads and parking lots at Mound on permanent registration status with air permit F001. The roads and parking lots in Parcel 9 were included under that permit during remediation. The permit was terminated on August 19, 2010.

4.0 FINDINGS OF SUITABILITY TO TRANSFER

In accordance with the provisions of CERCLA Section 120 (h), contaminated property can only be transferred if one of the following applies:

- (1) A decision has been made that no remedial action is necessary;
- (2) All remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of transfer and any such remedy has been demonstrated to the Administrator to be operating properly and successfully; or
- (3) Early Transfer Authority, which allows for transfer before all necessary action is complete, has been granted by USEPA with concurrence from the Governor of the State of Ohio pursuant to CERCLA Section 120(h)(3)(C).

The future industrial use of the Mound Site has been determined based upon agreement among DOE, USEPA, and OEPA, and interested stakeholders. This land use is reflected in the MMCIC Mound Comprehensive Reuse Plan (Reference 7) and is currently codified in the City of Miamisburg Zoning Ordinance for industrial/commercial use.

A joint agency decision among the DOE, USEPA, and OEPA has been made that a remedial action has been taken that protects human health and the environment. USEPA deems this condition to be satisfied if the institutional controls are implemented and operating successfully. Institutional controls in the form of deed restrictions on future land use will be placed on Parcel 9 upon transfer as part of the remedy. The

objective of these institutional controls is to prevent an unacceptable risk to human health and the environment by restricting the use of Parcel 9, including Parcel 9 soils and groundwater, to that which is consistent with assumptions in the Parcel 9 RRE. DOE or its successors or assigns has the responsibility to implement, report on, monitor, maintain, and enforce these institutional controls both before and after the transfer. The following property deed restrictions and requirements will be imposed on the property to maintain protection of human health and the environment in the future:

- Maintenance of industrial or commercial land use;
- Prohibition against residential land use;
- Prohibition against the use of groundwater without prior approval from the USEPA and OEPA;
- Site access for federal and state agencies for the purpose of sampling and monitoring;
- Prohibition against the removal of soil from within the site boundary to offsite locations without prior approval from USEPA and OEPA; and
- Operation of the pump and treat groundwater system in the southwestern portion of Parcel 9.

The specifics of the monitoring were established in the Rebound Test Document Plan approved by USEPA and OEPA. This is part of the Operations & Maintenance (O&M) Plan required by the ROD. Key elements of the monitoring were outlined in Section 2.9.3 of the ROD. Groundwater monitoring provides assurance that the concentration of VOCs observed in Parcel 9 is decreasing and is not impacting the buried valley aquifer.

5.0 ENVIRONMENTAL COVENANTS

DOE is committed to include a covenant in accordance with Section 120 (h)(3) of CERCLA in the deed for the sale or transfer of the property that warrants that:

- A. All remedial action necessary to protect human health and the environment has been taken as long as the deed restrictions limiting land and groundwater use are in effect and enforced.
- B. Any additional response action or corrective action found to be necessary after the date of sale or transfer shall be conducted by the United States [Section 120(h)(4)(D)(i)]. The requirements of the covenant shall not apply in any case in which the person or entity to whom the property is transferred is a potentially responsible party with respect to the property.

- C. A clause granting the United States access to the property in any case in which a response action or corrective action is found to be necessary or such access is necessary to carry out a response action or corrective action on the adjoining property [Section 120 (h)(4)(D)(ii)].

6.0 NOTIFICATION / PUBLIC PARTICIPATION

The community has been an active participant in this process to date. Comments from the public on the PRS recommendation have been incorporated as part of the remedy evaluation. DOE believes all comments have been resolved with the commenter and the documents, comments, and responses have been placed in the CERCLA Public Reading Room.

7.0 REFERENCES

- Reference 1 Operable Unit 1 Record of Decision, Final, 1995.
- Reference 2 Amendment Of The OU1 ROD, Final, August 2011.
- Reference 3 Parcel 9 Residual Risk Evaluation (RRE), Final, June 2011.
- Reference 4 Residual Risk Evaluation Methodology (RREM), Final, Revision 0, January 6, 1997.
- Reference 5 Environmental Assessment for Commercialization of the Mound Plant, October 1994.
- Reference 6 Finding of No Significant Impact (FONSI), October 27, 1994.
- Reference 7 MMCIC Mound Comprehensive Reuse Plan Update, December 31, 2003.

APPENDIX A

Figures

- Figure 1 Regional Context of the Mound Plant
- Figure 2 Location of Parcel 9
- Figure 3 Parcel 9 Buildings
- Figure 4 Parcel 9 PRSs

Figure 1 Regional Context of the Mound Plant

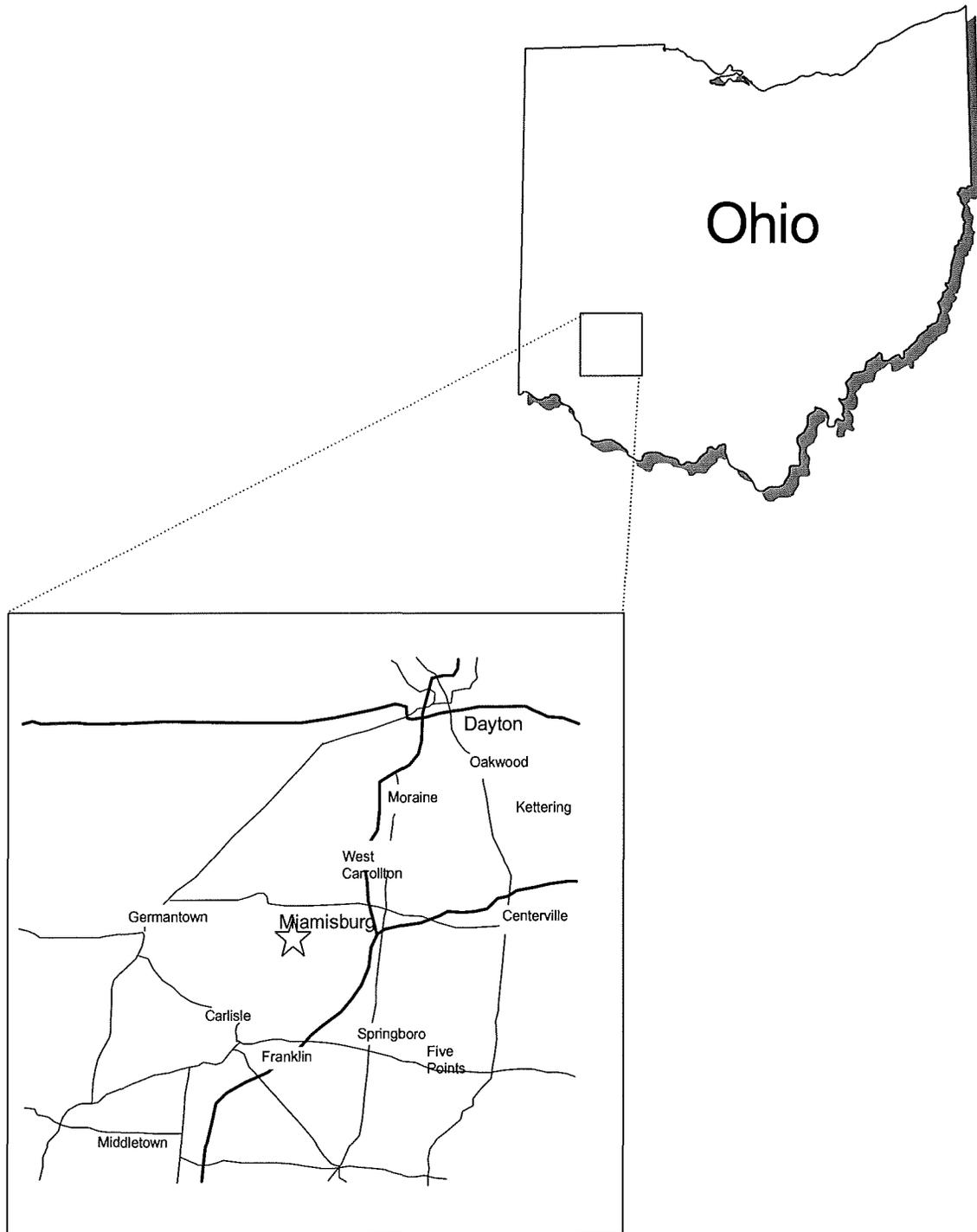


Figure 2 Location of Parcel 9

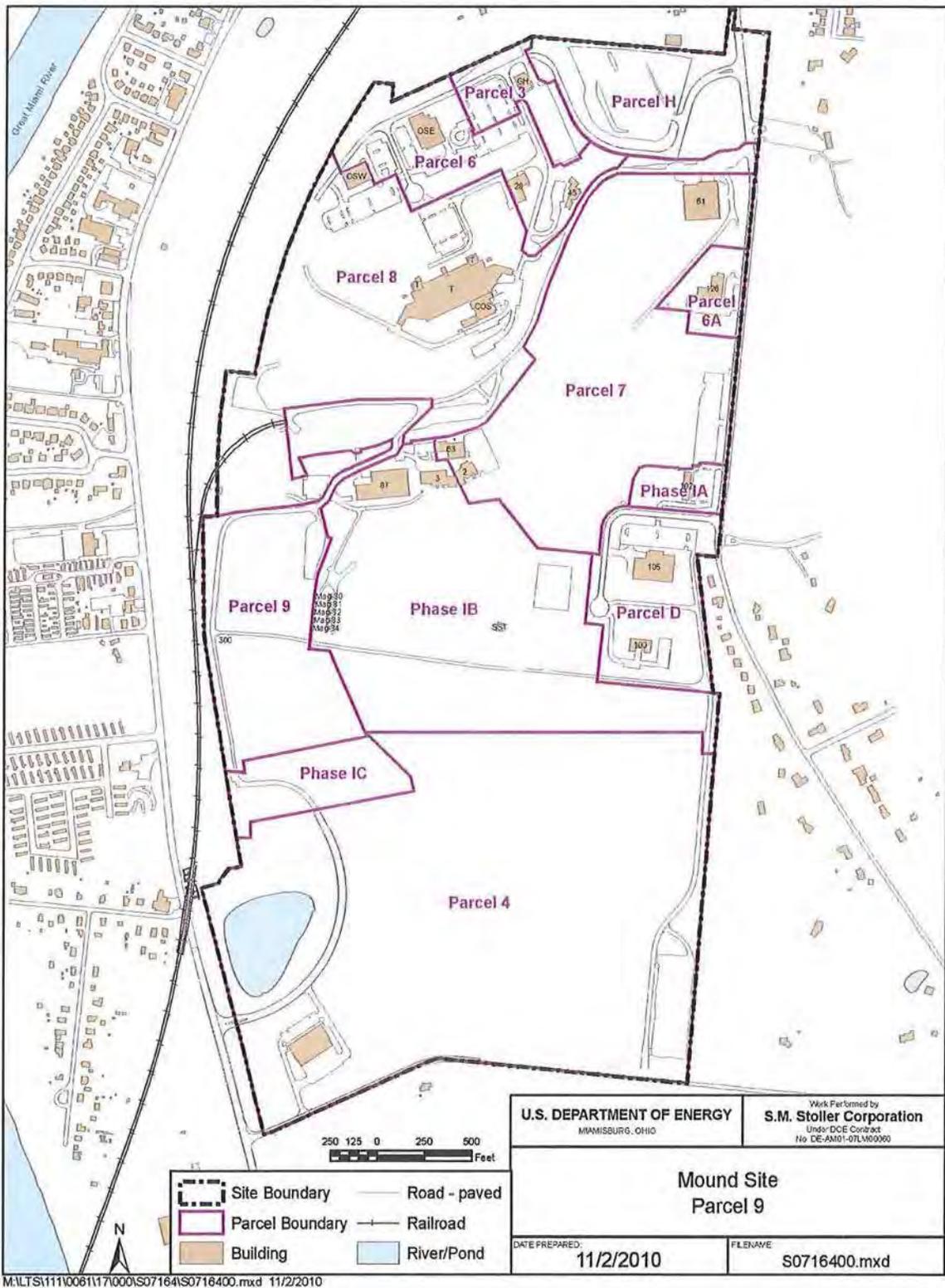


Figure 4 Parcel 9 PRSs



APPENDIX B

Tables

- Table 1 Parcel 9 Risk Summary
- Table 2 Identification of Constituents of Potential Concern for the Construction Worker Exposed to Surface and Subsurface Soil in Parcel 9
- Table 3 Identification of Constituents of Potential Concern for a Site Employee Exposed to Surface Soil in Parcel 9

Table 1 – Overall Summary of Risks and Hazards at Parcel 9

Exposure Scenario	Risk Type	Excess Lifetime Cancer Risk (ELCR) for Carcinogenic Effects	Hazard Index (HI) for Non-Carcinogenic Effects
Construction Worker	Total Residual	1.3×10^{-5}	0.49
	Background	7.3×10^{-7}	0.0
	Incremental	1.3×10^{-5}	0.49
Site Worker	Total Residual	1.7×10^{-5}	0.039
	Background	5.0×10^{-7}	0.0
	Incremental	1.6×10^{-5}	0.039

Table 2 - Identification of Constituents of Potential Concern for the Construction Worker Exposed to Surface and Subsurface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
<i>Inorganics (mg/kg)</i>									
Aluminum	7429-90-5	1.10E+03	3.20E+04	85/89	9.62E+03	9.63E+03	1.90E+04	2.08E+04	No:1
Antimony	7440-36-0	1.00E+00	4.46E+01	40/77	1.25E+01	1.25E+01	–	8.52E+00	Yes
Arsenic	7440-38-2	1.20E+00	3.70E+01	95/107	5.08E+00	5.08E+00	8.80E+00	1.85E+00	No:1
Barium	7440-39-3	1.02E+01	3.20E+02	85/93	4.77E+01	4.77E+01	1.80E+02	1.47E+03	No:1
Beryllium	7440-41-7	1.10E-01	1.70E+00	71/88	6.48E-01	6.48E-01	1.30E+00	4.21E+01	No:1
Bismuth	07440-89-9	5.40E-01	7.70E+01	18/65	1.93E+01	1.93E+01	3.80E+01	–	No:1
Cadmium	7440-43-9	2.20E-01	9.30E+00	48/100	1.96E+00	1.96E+00	2.10E+00	5.48E+00	No:1
Calcium	7440-70-2	1.45E+04	3.45E+05	88/90	1.13E+05	1.13E+05	3.10E+05	–	No:1
Cerium	07440-45-1	1.59E+01	1.59E+01	1/5	1.18E+01 ^c	1.18E+01	–	3.85E+04	No:2
Chromium	7440-47-3	1.20E+00	1.12E+02	89/94	2.29E+01	2.29E+01	3.00E+01	3.19E+04 ^d	No:2
Cobalt	7440-48-4	1.00E+00	2.07E+01	89/95	9.19E+00	9.19E+00	1.90E+01	3.83E+02	No:1
Copper	7440-50-8	3.90E+00	4.46E+02	93/99	4.85E+01	4.85E+01	2.60E+01	8.52E+02	No:2
Gadolinium	7440-54-2	9.00E+01	9.00E+01	1/1	–	9.00E+01	–	–	Yes
Iron	7439-89-6	1.05E+01	3.60E+04	98/103	1.89E+04	1.89E+04	3.50E+04	–	No:1
Lanthanum	7439-91-0	4.60E+00	9.10E+00	4/5	6.02E+00^e	6.02E+00	–	–	Yes
Lead	7439-92-1	2.90E+00	9.61E+01	93/107	1.33E+01	1.33E+01	4.80E+01	–	No:1
Lithium	7439-93-2	1.70E+00	3.95E+01	44/58	1.53E+01	1.53E+01	2.60E+01	–	No:1
Magnesium	7439-95-4	7.18E+03	8.23E+04	88/90	3.25E+04	3.25E+04	4.00E+04	–	No:1
Manganese	7439-96-5	2.97E-01	1.32E+03	97/103	4.19E+02	4.19E+02	1.40E+03	4.85E+02	No:1
Mercury	7439-97-8	7.00E-02	1.20E+00	19/99	1.63E-01	1.63E-01	1.50E-01	5.78E+04	No:2
Molybdenum	7439-98-7	9.00E-01	2.46E+01	13/36	1.07E+01	1.07E+01	2.72E+01	1.06E+02	No:1
Nickel	7440-02-0	3.20E+00	5.08E+01	85/100	1.96E+01	1.96E+01	3.20E+01	4.28E+02	No:1
Potassium	7440-09-7	1.95E+02	1.30E+04	92/98	2.35E+03	2.35E+03	1.90E+03	–	No:4
Praseodymium	7440-10-0	1.07E+01	1.07E+01	1/5	7.36E+00^f	7.36E+00	–	–	Yes
Samarium	7440-19-9	5.31E+01	5.31E+01	1/5	1.88E+01^g	1.88E+01	–	–	Yes
Selenium	07782-49-2	4.70E-01	7.10E+01	11/104	1.00E+00 ^h	1.00E+00	5.90E-01	1.06E+02	No:2
Silver	7440-22-4	1.80E+00	2.15E+01	54/100	7.24E+00	7.24E+00	1.70E+00	1.06E+02	No:2
Sodium	7440-23-5	9.34E+01	1.55E+03	84/100	4.35E+02	4.35E+02	2.40E+02	–	No:4
Tantalum	7440-25-7	1.90E+02	4.02E+02	8/12	2.87E+02	2.87E+02	–	–	Yes
Thallium	07440-28-0	2.40E-01	7.60E-01	13/99	1.40E+00 ⁱ	7.60E-01	4.80E-01	1.41E+03	No:2

Table 2 - Identification of Constituents of Potential Concern for the Construction Worker Exposed to Surface and Subsurface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
Tin	07440-31-5	1.80E+00	1.81E+01	8/36	9.80E+00 ^f	8.80E+00	2.09E+01	1.28E+04	No:1
Total Cyanide	00057-12-5	1.40E-01	6.10E-01	12/52	6.10E-01 ^g	6.10E-01	--	4.26E+02	No:2
Vanadium	7440-82-2	4.80E+00	5.50E+01	9/185	2.07E+01	2.07E+01	2.50E+01	2.13E+01	No:1
Zinc	7440-86-8	9.40E+00	2.74E+02	88/100	7.46E+01	7.46E+01	1.40E+02	8.39E+03	No:1
<i>Dioxins (ug/kg)</i>									
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	2.20E-04	6.30E-03	4/13	4.30E-04 ^h	4.30E-04	--	--	Yes
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	1.70E-03	1.70E-03	1/13	5.32E-04 ^h	5.32E-04	--	--	Yes
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	8.90E-04	1.80E-03	2/13	5.66E-04 ^h	5.66E-04	--	--	Yes
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	4.20E-04	1.10E-03	2/13	4.09E-04 ^h	4.09E-04	--	3.97E-02	No:2
1234678-HpCDD	35822-46-9	5.20E-04	3.03E-02	5/13	1.46E-03 ^h	1.46E-03	--	--	Yes
1234789-HpCDF	55673-89-7	6.20E-04	6.20E-04	1/13	4.00E-04 ^h	4.00E-04	--	--	Yes
123478-HxCDD	39227-28-6	6.50E-04	6.50E-04	1/13	5.82E-04 ^h	5.82E-04	--	--	Yes
123478-HxCDF	70648-26-9	1.80E-04	2.20E-03	3/13	3.98E-04 ^h	3.98E-04	--	--	Yes
123879-HxCDF	57117-44-9	5.80E-04	1.20E-03	2/13	2.89E-04 ^h	2.89E-04	--	1.99E-01	No:2
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	1.50E-04	1.00E-03	3/13	5.52E-04 ^h	5.52E-04	--	--	Yes
2,3,7,8-Tetrachlorodibenzofuran	051207-31-9	3.90E-04	2.90E-03	2/13	5.80E-04 ^h	5.80E-04	--	1.99E-01	No:2
2,3,7,8-Tetrachlorodibenzo-p-dioxin	001746-01-8	1.50E-03	3.00E-03	3/13	1.09E-03 ^h	1.09E-03	--	1.99E-02	No:2
23478-PeCDF	57117-31-4	2.40E-04	1.50E-03	3/13	5.04E-04 ^h	5.04E-04	--	3.97E-01	No:2
Octachlorodibenzofuran	36001-02-0	2.20E-04	1.03E-02	7/13	9.08E-04 ^h	9.08E-04	--	1.99E+01	No:2
Octachlorodibenzo-p-dioxin	003269-87-9	2.73E-01	2.73E-01	1/13	1.72E-02 ^h	1.72E-02	--	1.99E+01	No:2
<i>Explosives (ug/kg)</i>									
1,3-Dinitrobenzene	000099-85-0	2.00E+02	2.00E+02	1/57	1.50E+03 ^f	2.00E+02	--	2.13E+03	No:2
1,3,5-Trinitrobenzene	000099-35-4	3.10E+02	3.10E+02	1/57	1.50E+03 ^f	3.10E+02	--	8.39E+05	No:2
2,4-Dinitrotoluene	000121-14-2	2.00E+02	2.00E+02	1/163	5.94E+02 ^f	2.00E+02	--	3.54E+03	No:2
2,6-Dinitrotoluene	000608-20-2	2.90E+02	2.90E+02	1/163	1.30E+03 ^f	2.90E+02	--	3.54E+03	No:2
HMX	002691-41-0	4.10E+02	6.80E+02	2/62	2.87E+03 ^f	6.80E+02	--	1.06E+06	No:2
RDX	000121-92-4	7.10E+02	6.95E+03	4/62	2.41E+03 ^f	2.41E+03	--	2.71E+04	No:2
<i>Pesticides and PCBs (ug/kg)</i>									
4,4'-DDD	000072-54-8	9.20E-01	2.80E+00	5/100	9.33E+00 ^f	2.80E+00	4.20E+03	1.24E+04	No:1
4,4'-DDE	000072-55-9	2.40E-01	1.80E+00	10/100	3.79E+00 ^f	1.80E+00	4.30E+03	8.77E+03	No:1
4,4'-DDT	000050-29-3	2.20E-01	3.10E+00	9/100	9.13E+00 ^f	3.10E+00	1.30E+04	8.12E+03	No:1
Aldrin	000308-00-3	1.20E-01	2.58E+00	8/100	3.13E+00 ^f	2.50E+00	--	1.42E+02	No:2

Table 2 - Identification of Constituents of Potential Concern for the Construction Worker Exposed to Surface and Subsurface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
alpha-BHC	000319-84-6	2.10E-01	1.10E+01	13/100	2.33E+00 ^c	2.33E+00	--	4.73E+02	No:2
alpha-Chlordane	005103-71-9	1.00E-01	4.80E+00	10/99	1.07E+01 ^c	4.90E+00	--	7.61E+03	No:2
Aroclor-1242	053499-21-9	3.70E+01	1.00E+03	3/610	4.00E+01 ^c	4.00E+01	--	--	No:3
Aroclor-1248	12672-29-6	7.10E+00	3.80E+04	307/610	9.60E+02	9.60E+02	--	--	Yes
Aroclor-1254	011097-89-1	4.24E+01	2.00E+02	7/285	7.09E+01 ^c	7.09E+01	6.80E+04	3.20E+02	No:1
Aroclor-1260	011098-82-5	2.54E+01	9.90E+01	4/285	7.28E+01 ^c	7.28E+01	--	--	No:3
Aroclor-1262	037324-23-5	4.10E+00	1.30E+03	32/325	4.00E+01^c	4.00E+01	--	--	Yes
Aroclor-1268	011100-14-4	5.60E+01	1.80E+02	5/325	3.90E+01 ^c	3.90E+01	--	--	No:3
delta-BHC	000319-86-8	1.90E-01	1.90E-01	1/100	6.83E+00 ^c	1.90E-01	--	--	No:3
Dieldrin	000060-57-1	9.20E-02	6.40E+00	10/100	3.73E+00 ^c	3.73E+00	--	1.86E+02	No:2
Endosulfan II	033213-86-9	2.00E-01	3.50E+00	3/100	3.80E+00 ^c	3.50E+00	--	--	No:3
Endosulfan sulfate	001031-07-8	1.30E-01	2.00E+00	6/100	1.83E+01 ^c	2.00E+00	--	--	No:3
Endrin	000072-20-8	1.20E-01	1.80E+00	5/100	4.73E+00 ^c	1.80E+00	--	6.39E+03	No:3
Endrin aldehyde	007421-93-4	7.10E-01	4.70E+00	8/96	1.72E+01^c	4.70E+00	--	--	Yes
Endrin ketone	053494-70-5	1.50E-01	2.00E+00	5/100	1.83E+01 ^c	2.00E+00	--	--	No:3
gamma-BHC (Lindane)	000059-99-6	3.30E-02	3.30E-02	1/100	9.20E+00 ^c	3.30E-02	--	2.26E+03	No:2
gamma-Chlordane	005103-74-2	2.90E-01	3.50E+00	7/100	1.08E+01 ^c	3.50E+00	--	7.61E+03	No:2
Heptachlor	000079-44-9	3.60E-02	2.80E-01	2/100	2.40E+00 ^c	2.80E-01	--	6.62E+02	No:2
Heptachlor epoxide	001024-57-3	1.00E-01	1.10E+01	6/100	9.23E+00 ^c	9.23E+00	--	2.77E+02	No:2
Methoxychlor	00072-43-5	3.10E-01	1.80E+01	7/100	9.12E+01 ^c	1.80E+01	3.00E+04	1.08E+05	No:1
Semi-Volatile Organic Compounds (ug/kg)									
1,2,4-Trichlorobenzene	000120-82-1	3.00E-01	2.20E+00	17/678	5.80E+00 ^c	2.20E+00	--	1.72E+05	No:2
2-Methylnaphthalene	000091-57-6	8.80E+01	1.90E+02	3/108	7.69E+02 ^c	1.90E+02	--	8.52E+04	No:2
4-Methylphenol	000108-44-5	2.60E+02	2.90E+02	2/108	7.70E+02 ^c	2.90E+02	--	1.06E+05	No:2
Acenaphthene	000083-32-9	2.10E+01	1.30E+03	9/108	7.49E+02 ^c	7.49E+02	--	9.76E+05	No:2
Acenaphthylene	000209-96-8	2.30E+02	2.30E+02	1/108	7.59E+02 ^c	2.30E+02	--	--	No:3
Anthracene	000120-12-7	3.10E+01	8.00E+02	12/109	7.40E+02 ^c	7.40E+02	--	4.88E+06	No:2
Benz(a)anthracene	000058-55-3	2.90E+01	2.50E+03	26/108	3.24E+02	3.24E+02	--	3.12E+03	No:2
Benzo(a)pyrene	000050-32-8	3.10E+01	2.30E+03	28/108	2.95E+02	2.95E+02	--	3.12E+02	Yes
Benzo(b)fluoranthene	000205-99-2	3.80E+01	4.90E+03	26/108	4.54E+02	4.54E+02	--	3.12E+03	Yes
Benzo(g,h,i)perylene	000191-24-2	1.00E+02	1.10E+03	16/108	7.20E+02^c	7.20E+02	--	--	Yes
Benzo(k)fluoranthene	000207-08-9	3.70E+01	4.50E+03	20/108	7.70E+02 ^c	7.70E+03	--	3.12E+04	No:2

Table 2 - Identification of Constituents of Potential Concern for the Construction Worker Exposed to Surface and Subsurface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
Benzoic acid	000065-85-0	3.90E+01	7.70E+02	12/80	3.60E+03 ^c	7.70E+02	--	6.88E+07	No:2
Bis(2-ethylhexyl) phthalate	00117-81-7	4.80E+01	2.00E+03	44/106	4.43E+02	4.43E+02	--	1.72E+05	No:2
Butyl benzyl phthalate	000085-98-7	2.50E+01	6.70E+02	6/108	7.55E+02 ^c	6.70E+02	--	3.44E+08	No:2
Carbazole	000086-74-8	1.80E+01	3.00E+02	4/88	3.90E+02 ^c	3.00E+02	--	1.20E+05	No:2
Chrysene	000218-01-9	2.90E+01	4.00E+03	31/106	3.84E+02	3.84E+02	--	3.12E+05	No:2
Dibenz(a,h)anthracene	000053-70-3	2.40E+01	1.00E+03	8/108	7.49E+02 ^c	7.49E+02	--	3.12E+02	Yes
Dibenzofuran	000132-84-8	4.00E+01	2.40E+02	4/108	7.55E+02 ^c	2.40E+02	--	3.44E+04	No:2
Diethyl phthalate	000084-86-2	8.00E+00	1.10E+02	4/108	7.55E+02 ^c	1.10E+02	--	1.38E+07	No:2
Dimethyl phthalate	000131-11-3	1.00E+02	1.10E+02	2/108	7.65E+02 ^c	1.10E+02	--	2.13E+08	No:2
Di-n-butyl phthalate	000084-74-2	3.90E+01	6.70E+02	17/106	7.45E+02 ^c	6.70E+02	--	1.72E+08	No:2
Di-n-octyl phthalate	000117-84-0	8.00E+00	3.00E+02	7/108	7.65E+02 ^c	3.00E+02	--	8.52E+05	No:2
Fluoranthene	00206-44-0	6.00E+00	5.80E+03	34/108	4.97E+02	4.97E+02	--	6.51E+05	No:2
Fluorene	000086-73-7	6.40E+01	3.90E+02	4/108	7.59E+02 ^c	3.90E+02	--	6.51E+05	No:2
Indeno(1,2,3-cd)pyrene	000193-39-5	4.80E+01	1.30E+03	16/108	7.19E+02 ^c	7.19E+02	--	3.12E+03	No:2
N-Nitrosodi-n-propylamine	000821-84-7	5.10E+01	5.10E+01	1/108	7.70E+02 ^c	5.10E+01	--	3.44E+02	No:2
N-Nitrosodiphenylamine	000086-30-6	6.60E+01	1.10E+02	2/108	7.55E+02 ^c	1.10E+02	--	3.44E+05	No:2
Phenanthrene	000085-01-8	2.70E+01	3.90E+03	30/108	3.72E+02	3.72E+02	--	--	Yes
Phenol	000108-95-2	8.00E+01	1.20E+02	3/108	7.85E+02 ^c	1.20E+02	--	5.16E+09	No:2
Phenol, 4-chloro-2-(phenylmethyl)	120-32-1	1.10E+02	2.00E+02	4/19	8.39E+02 ^c	2.00E+02	--	--	Yes
Pyrene	00129-00-0	3.00E+00	6.10E+03	36/108	5.02E+02	5.02E+02	--	4.88E+05	No:2
<i>Volatile Organic Compounds (ug/kg)</i>									
1,1,1-Trichloroethane	000071-55-6	3.40E-01	2.10E+02	14/758	5.80E+00 ^c	5.80E+00	--	6.84E+05	No:2
1,1,2-Trichloro-1,1,2-trifluoroethane	000076-13-1	7.40E-01	1.90E+01	17/808	5.70E+00 ^c	5.70E+00	--	6.93E+08	No:2
1,1-Dichloroethane	000075-34-3	3.90E+00	5.20E+00	2/757	5.80E+00 ^c	5.20E+00	--	1.93E+05	No:2
1,1-Dichloroethene	000075-34-3	1.00E+00	3.03E+04	73/884	5.80E+00 ^c	5.80E+00	--	4.20E+04	No:2
1,2-Dibromo-3-chloropropane	000088-12-8	7.00E+00	7.00E+00	1/572	1.10E+01 ^c	7.00E+00	--	7.28E+02	No:2
1,2-Dichlorobenzene	000085-50-1	3.90E-01	3.20E+01	23/679	5.80E+00 ^c	5.80E+00	--	2.88E+05	No:2
1,2-Dichloroethane	000107-06-2	4.80E-01	1.50E+01	3/757	5.70E+00 ^c	5.70E+00	--	3.45E+03	No:2
1,2-Dichloropropane	000078-97-5	4.80E-01	2.00E+00	5/757	5.80E+00 ^c	2.00E+00	--	2.08E+03	No:2
1,3-Dichlorobenzene	000541-73-1	3.90E-01	1.70E+00	8/678	5.80E+00 ^c	1.70E+00	--	5.16E+05	No:2
1,4-Dichlorobenzene	000106-48-7	4.30E-01	4.20E+00	12/678	5.80E+00 ^c	4.20E+00	--	1.00E+05	No:2
2-Butanone	000078-93-3	2.00E+00	7.20E+01	30/754	2.20E+01 ^c	2.20E+01	--	6.65E+08	No:2

Table 2 - Identification of Constituents of Potential Concern for the Construction Worker Exposed to Surface and Subsurface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
2-Hexanone	000591-78-6	2.00E+00	1.70E+01	3/755	2.20E+01 ^c	1.70E+01	--	--	No:3
4-Methyl-2-Pentanone	000109-10-1	1.00E+00	1.30E+02	10/755	2.20E+01 ^c	2.20E+01	--	1.47E+06	No:2
Acetone	000067-84-1	2.00E+00	5.30E+02	140/755	2.20E+01 ^c	2.20E+01	--	1.92E+07	No:2
Ammonia	07664-41-7	1.40E+01	2.70E+01	2/13	2.00E+03^c	2.70E+01	--	--	Yes
Benzene	000071-43-2	4.80E-01	1.40E+03	79/872	5.80E+00 ^c	5.80E+00	--	8.46E+03	No:2
Carbon disulfide	000075-15-0	4.00E-01	4.30E+01	83/755	5.80E+00 ^c	5.80E+00	--	1.10E+05	No:2
Carbon tetrachloride	000068-23-5	1.00E+00	5.80E+02	32/866	5.80E+00 ^c	5.80E+00	--	2.44E+03	No:2
Chlorobenzene	000108-90-7	1.80E+00	3.00E+00	3/757	5.80E+00 ^c	3.00E+00	--	4.86E+04	No:2
Chloroform	000067-66-3	1.60E-01	3.67E+03	211/866	3.13E+01	3.13E+01	--	2.56E+03	Yes
Chloromethane	000074-87-3	6.80E-01	8.80E-01	1/757	1.10E+01 ^c	6.80E-01	--	1.59E+04	No:2
cis-1,2-Dichloroethene	000156-58-2	4.30E-01	2.01E+05	157/872	5.80E+00 ^c	5.80E+00	--	2.13E+05	No:2
Cyclohexane	000110-82-7	5.00E-01	6.40E-01	3/583	5.80E+00 ^c	6.40E-01	--	--	No:3
Ethylbenzene	000109-41-4	2.80E-01	7.50E+03	83/871	5.80E+00 ^c	5.80E+00	--	7.80E+04	No:2
Isopropylbenzene	000069-82-8	8.00E-01	8.00E-01	1/585	5.80E+00 ^c	8.00E-01	--	5.28E+04	No:2
Methyl-Cyclohexane	000109-97-2	4.00E-01	1.40E+00	29/583	5.80E+00 ^c	1.40E+00	--	--	No:3
Methylene chloride	00075-09-2	8.40E-01	2.80E+03	340/757	2.01E+01	2.01E+01	--	8.25E+04	No:2
m-Xylene	000108-38-3	1.70E+01	1.70E+01	1/18	5.80E+00 ^c	5.80E+00	--	2.77E+05	No:2
Naphthalene	000091-20-3	2.00E+00	1.30E+02	6/114	5.80E+00 ^c	5.80E+00	--	1.76E+04	No:2
o-Xylene	000085-47-6	7.00E+00	7.00E+00	1/18	5.80E+00 ^c	5.80E+00	--	4.26E+07	No:2
Styrene	000109-42-5	1.80E-01	9.00E-01	7/757	5.80E+00 ^c	9.00E-01	--	1.48E+08	No:2
Tetrachloroethene	00127-18-4	3.50E-01	2.23E+04	327/864	1.92E+02	1.92E+02	--	3.66E+03	Yes
Toluene	00108-88-3	2.20E-01	7.16E+04	577/870	6.40E+02	6.40E+02	--	2.00E+05	No:2
Total 1,2-Dichloroethene	000540-59-0	1.00E+00	1.80E+03	50/192	6.71E+01	6.71E+01	--	1.92E+05	No:2
Total Xylenes	001330-20-7	4.00E-01	2.40E+01	31/798	5.80E+00 ^c	5.80E+00	--	6.42E+04	No:2
trans-1,2-Dichloroethene	000156-80-5	3.20E-01	2.00E+03	35/872	5.80E+00 ^c	5.80E+00	--	4.26E+05	No:3
Trichloroethene	00079-01-6	4.20E-01	1.43E+05	378/863	1.28E+03	1.28E+03	--	4.38E+02	Yes
Trichlorofluoromethane	000075-89-4	2.90E-01	5.50E+00	35/590	5.80E+00 ^c	5.50E+00	--	1.30E+05	No:2
Vinyl chloride	000075-01-4	2.00E+00	2.30E+03	33/866	5.80E+00 ^c	5.90E+00	--	1.07E+03	No:3
Radionuclides (pCi/g)									
Actinium-227		1.50E-01	2.29E+00	52/3883	3.59E-01 ^c	3.59E-01	1.10E-01	4.56E-01	No:3
Actinium-228	14331-93-0	1.90E-01	1.79E+00	409/500	6.46E-01	6.46E-01	--	2.17E-01	No:5
Americium-241		4.00E-02	5.42E-01	78/9978	8.81E-02 ^c	8.81E-02	--	6.32E+00	No:2

Table 2 - Identification of Constituents of Potential Concern for the Construction Worker Exposed to Surface and Subsurface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC ^{2b}
Beryllium-7	013988-02-4	2.20E+00	2.20E+00	1/5	4.72E-01 ^c	4.72E-01	--	4.61E+00	No:2
Bismuth-210M		4.79E-02	9.10E-01	6/3168	8.36E-02 ^c	8.35E-02	--	8.97E-01	No:3
Bismuth-212	14913-49-8	3.90E-01	1.76E+00	58/58	1.21E+00	1.21E+00	--	1.11E+00	No:5
Bismuth-214	14733-03-3	2.33E-01	2.50E+00	508/511	8.21E-01	8.21E-01	1.20E+00	1.31E-01	No:1
Cesium-134	13987-70-9	5.30E-02	5.30E-02	1/1	--	5.30E-02	--	1.38E-01	No:2
Cesium-137+D		1.00E-02	1.50E+00	307/3937	6.00E-02^c	6.00E-02	4.20E-01	3.82E-01	Yes
Cobalt-60		1.00E-02	6.85E-02	35/3937	7.80E-02 ^c	7.80E-02	--	7.91E-02	No:3
Lead-210+D	14255-04-0	2.16E-01	5.89E+00	1568/3240	8.69E-01	8.69E-01	1.20E+00	8.25E-01	No:1
Lead-212	15092-94-1	1.12E-01	2.00E+00	158/505	8.81E-01	8.81E-01	1.50E+00	1.79E+00	No:1
Lead-214	15067-28-4	2.20E-01	3.20E+00	469/500	8.69E-01	8.69E-01	1.20E+00	1.00E+00	No:1
Neptunium-237+D	13994-20-2	4.70E-01	4.70E-01	1/1	--	4.70E-01	--	1.10E+00	No:2
Plutonium-238		2.90E-03	5.39E+01	697/4304	8.40E+00^c	8.40E+00	1.30E-01	6.12E+00	Yes
Plutonium-239/240		7.85E-03	1.74E+00	104/639	6.95E-02 ^c	6.95E-02	1.80E-01	8.01E+00	No:2
Potassium-40	13968-00-2	9.90E-01	3.94E+01	540/558	1.44E+01	1.44E+01	3.70E+01	1.18E+00	No:1
Protactinium-231+D		6.67E-01	1.91E+00	5/3168	1.93E+00 ^c	1.91E+00	--	3.91E-01	No:3
Radium-224	13233-32-4	1.04E+00	2.30E+00	13/13	1.90E+00	1.90E+00	1.50E+00	3.24E+00	No:2
Radium-226+D	13982-83-3	1.19E-01	2.80E+00	3889/3942	8.72E-01	8.72E-01	2.00E+00	1.10E-01	No:1
Radium-228+D	15262-20-1	2.90E-01	1.31E+00	9/9	7.58E-01	7.58E-01	--	1.67E-01	Yes
Strontium-90+D		7.18E-02	5.79E+00	6/47	4.88E-01 ^c	4.89E-01	7.20E-01	8.40E+00	No:2
Thallium-208	14913-50-9	7.20E-02	5.80E-01	440/443	2.55E-01	2.55E-01	--	5.59E-02	No:5
Thorium-227	15823-47-9	7.00E-02	2.29E+00	4/7	2.07E+00 ^c	2.07E+00	--	2.14E+00	No:5
Thorium-228+D	14274-82-9(+D)	2.90E-02	2.10E+00	698/719	7.57E-01	7.57E-01	1.50E+00	1.19E-01	No:1
Thorium-230+D		8.40E-02	2.71E+00	708/3957	7.53E+00^c	2.71E+00	1.90E+00	9.26E-02	Yes
Thorium-232+D	7440-29-1	3.70E-02	2.00E+01	3649/4280	4.90E-01	4.90E-01	1.40E+00	6.90E-02	No:1
Thorium-234	15065-10-8	1.16E+00	3.80E+00	37/38	2.12E+00	2.12E+00	--	1.78E+01	No:2
Tritium	10028-17-8	1.70E-02	5.00E+01	119/119	4.57E+00	4.57E+00	1.60E+00	7.58E+03 ^d	No:2
Uranium-233/234	U-233/234	1.89E-01	1.70E+00	525/527	7.16E-01	7.16E-01	--	4.82E-01	Yes
Uranium-234	13968-29-5	2.79E-01	1.08E+00	73/79	8.82E-01	8.82E-01	1.10E+00	1.05E+01	No:1
Uranium-235+D		1.40E-02	1.60E-01	92/544	4.00E-01 ^c	1.60E-01	1.10E-01	1.54E+00	No:2
Uranium-235/236		2.77E-02	1.50E-01	88/420	8.30E-02 ^c	8.30E-02	1.10E-01	3.10E-01	No:2
Uranium-238+D	7440-61-1(+D)	1.80E-01	2.21E+00	2791/3240	6.92E-01	6.92E-01	1.20E+00	4.13E+00	Yes^f

Table 2 - Identification of Constituents of Potential Concern for the Construction Worker Exposed to Surface and Subsurface Soil in Parcel 9

Notes:

a. Unless otherwise denoted, value listed represents 95% UCL

b. COPC analyte status definitions:

Yes—retained as a COPC

No:1—not retained as a COPC due to background concentration > lower of the maximum detected concentration or 95% UCL concentration

No:2—not retained as a COPC due to RBGV > maximum concentration

No:3—not retained as a COPC due to \leq 5% detected

No:4—not retained as a COPC as it is considered an essential nutrient

No:5—not retained as a COPC as it is part of the thorium-232, uranium-235, and uranium-238 natural decay series with a half-lives less than or equal to 6 months

c. Value represents 70th percentile

d. RBGV for chromium (III)

e. RBGV for tritium (particulate)

f. Although the 95% UCL is < background, uranium-238 was retained as a COPC as it is process-related.

Table 3 - Identification of Constituents of Potential Concern for a Site Employee Exposed to Surface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
<i>Inorganics (mg/kg)</i>									
Aluminum	7429-90-5	1.10E+03	3.20E+04	30/30	1.25E+04	1.25E+04	1.90E+04	1.80E+05	No:1
Antimony	7440-36-0	1.00E+00	4.46E+01	14/30	1.97E+01	1.97E+01	--	8.19E+01	No:2
Arsenic	7440-38-2	1.60E+00	7.70E+00	32/36	4.49E+00	4.49E+00	8.60E+00	2.26E+00	No:1
Barium	7440-39-3	1.02E+01	1.10E+02	30/30	5.97E+01	5.67E+01	1.80E+02	1.25E+04	No:1
Beryllium	7440-41-7	1.10E-01	1.40E+00	27/30	8.90E-01	8.90E-01	1.30E+00	3.70E+02	No:1
Bismuth	07440-86-6	3.80E-01	6.91E+01	17/22	2.64E+01	2.64E+01	3.84E+01	--	No:1
Cadmium	7440-43-9	3.50E-01	9.30E+00	20/36	2.93E+00	2.83E+00	2.10E+00	1.01E+01	No:2
Calcium	7440-70-2	4.51E+04	3.45E+05	36/36	1.24E+05	1.24E+05	3.10E+05	--	No:1
Chromium	7440-47-3	2.70E+00	4.64E+01	36/36	2.48E+01	2.48E+01	2.00E+01	3.07E+05 ^d	No:2
Cobalt	7440-48-4	1.00E+00	1.30E+01	36/36	9.52E+00	8.53E+00	1.90E+01	1.93E+03	No:1
Copper	7440-50-8	3.90E+00	4.46E+02	36/36	1.05E+02	1.05E+02	2.60E+01	8.19E+03	No:2
Iron	7439-89-6	3.31E+03	3.40E+04	36/36	1.79E+04	1.79E+04	3.50E+04	--	No:1
Lanthanum	7439-91-0	3.40E+00	4.60E+00	1/2	--	4.60E+00	--	--	Yes
Lead	7439-92-1	2.90E+00	9.81E+01	36/36	2.71E+01	2.71E+01	4.80E+01	--	No:1
Lithium	7439-93-2	1.70E+00	3.95E+01	16/22	1.65E+01	1.65E+01	2.80E+01	--	No:1
Magnesium	7439-95-4	1.44E+04	8.23E+04	36/36	3.94E+04	3.84E+04	4.00E+04	--	No:1
Manganese	7439-96-5	1.34E+02	6.36E+02	36/36	4.07E+02	4.07E+02	1.40E+03	3.25E+03	No:1
Mercury	7439-97-6	1.30E-01	1.20E+00	8/33	2.00E-01 ^e	2.00E-01	1.50E-01	5.79E+04	No:2
Molybdenum	7439-98-7	9.00E-01	2.46E+01	12/16	1.27E+01	1.27E+01	2.72E+01	1.02E+03	No:1
Nickel	7440-02-0	3.20E+00	3.15E+01	36/36	2.10E+01	2.10E+01	3.20E+01	4.09E+03	No:1
Potassium	7440-09-7	5.03E+02	1.00E+04	32/32	4.44E+03	4.44E+03	1.90E+03	--	No:4
Selenium	07782-48-2	3.80E+01	5.50E+01	3/36	1.10E+00 ^e	1.10E+00	5.90E-01	1.02E+03	No:2
Silver	7440-22-4	1.60E+00	2.15E+01	28/36	8.34E+00	8.34E+00	1.70E+00	1.02E+03	No:2
Sodium	7440-23-5	9.34E+01	1.55E+03	29/36	6.94E+02	6.94E+02	2.40E+02	--	No:4
Tantalum	7440-25-7	3.28E+02	3.28E+02	1/1	--	3.28E+02	--	--	Yes
Thallium	07440-28-0	4.30E-01	6.90E-01	2/33	1.64E+00 ^e	6.90E-01	4.60E-01	1.35E+01	No:2
Tin	07440-31-5	1.60E+00	1.81E+01	8/16	6.73E+00	6.73E+00	2.09E+01	1.23E+05	No:1
Total Cyanide	00057-12-5	1.40E-01	3.10E-01	4/23	1.20E+00 ^e	3.10E-01	--	4.09E+03	No:2
Vanadium	7440-62-2	4.80E+00	4.80E+01	36/36	2.36E+01	2.36E+01	2.50E+01	2.04E+02	No:1

Table 3 - Identification of Constituents of Potential Concern for a Site Employee Exposed to Surface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC ^{2b}
Zinc	7440-66-6	8.40E+00	2.74E+02	36/36	1.38E+02	1.39E+02	1.40E+02	6.13E+04	No:1
<i>Explosives (ug/kg)</i>									
1,3-Dinitrobenzene	000099-65-0	2.00E+02	2.00E+02	1/27	1.50E+03 ^c	2.00E+02	--	2.04E+04	No:2
1,3,5-Trinitrobenzene	000099-35-4	3.10E+02	3.10E+02	1/27	1.50E+03 ^c	3.10E+02	--	6.13E+06	No:2
2,4-Dinitrotoluene	000121-14-2	2.00E+02	2.00E+02	1/84	7.20E+02 ^c	2.00E+02	--	2.57E+03	No:2
HMX	002661-41-0	4.10E+02	6.60E+02	2/32	3.00E+03 ^c	6.60E+02	--	1.02E+07	No:2
RDX	000121-82-4	7.10E+02	6.55E+03	4/32	2.50E+03 ^c	2.50E+03	--	5.20E+04	No:2
<i>Pesticides/PCBs (ug/kg)</i>									
4,4'-DDD	000072-54-8	9.20E-01	2.80E+00	5/37	8.20E+00 ^c	2.80E+00	4.30E+03	2.38E+04	No:1
4,4'-DDE	000072-55-9	2.40E-01	1.60E+00	9/37	3.80E+00 ^c	1.60E+00	4.00E+03	1.69E+04	No:1
4,4'-DDT	000050-26-3	2.20E-01	2.10E+00	6/37	8.92E+00 ^c	2.10E+00	1.30E+04	8.56E+03	No:1
Aldrin	000309-00-2	1.20E-01	2.50E+00	6/37	3.22E+00 ^c	2.50E+00	--	1.03E+02	No:2
alpha-BHC	000319-84-8	2.10E-01	1.10E+01	9/37	2.40E+00 ^c	2.40E+00	--	9.08E+02	No:2
alpha-Chlordane	005103-71-9	1.00E-01	4.80E+00	10/37	1.04E+01 ^c	4.80E+00	--	7.64E+03	No:2
Aroclor-1242	053489-21-9	3.70E+01	1.00E+03	3/547	4.00E+01 ^c	4.00E+01	--	--	No:3
Aroclor-1248	12672-29-6	7.10E+00	3.80E+04	305/547	1.07E+03	1.07E+03	--	--	Yes
Aroclor-1254	011097-89-1	4.24E+01	6.84E+01	5/222	5.62E+01 ^c	5.62E+01	5.80E+04	6.83E+02	No:1
Aroclor-1260	011098-82-5	4.48E+01	9.90E+01	3/222	4.67E+01 ^c	4.67E+01	--	--	No:3
Aroclor-1262	037324-23-5	4.10E+00	1.30E+03	32/325	4.00E+01 ^c	4.00E+01	--	--	Yes
Aroclor-1268	011100-14-4	5.60E+01	1.90E+02	5/325	3.90E+01 ^c	3.90E+01	--	--	No:3
delta-BHC	000319-88-8	1.90E-01	1.90E-01	1/37	6.70E+00 ^c	1.90E-01	--	--	No:3
Dieldrin	000060-57-1	9.20E-02	6.40E+00	9/37	3.82E+00 ^c	3.82E+00	--	3.58E+02	No:2
Endosulfan II	033213-65-9	2.00E-01	3.50E+00	3/37	4.94E+00 ^c	3.50E+00	--	--	Yes
Endosulfan sulfate	001031-07-8	1.30E-01	2.00E+00	4/37	1.78E+01 ^c	2.00E+00	--	--	Yes
Endrin	000072-20-8	1.50E-01	1.60E+00	3/37	5.34E+00 ^c	1.60E+00	--	6.13E+04	No:2
Endrin aldehyde	007421-93-4	7.10E-01	4.70E+00	8/34	1.67E+01 ^c	4.70E+00	--	--	Yes
Endrin ketone	053494-70-5	1.50E-01	2.00E+00	5/37	1.78E+01 ^c	2.00E+00	--	--	Yes
gamma-BHC (Lindane)	000059-89-9	3.30E-02	3.30E-02	1/37	3.54E+00 ^c	3.30E-02	--	4.40E+03	No:2
gamma-Chlordane	005103-74-2	2.90E-01	3.50E+00	7/37	1.04E+01 ^c	3.50E+00	--	7.64E+03	No:2
Heptachlor	000078-44-8	3.80E-02	2.80E-01	2/37	2.88E+00 ^c	2.80E-01	--	1.27E+03	No:2
Heptachlor epoxide	001024-57-3	1.00E-01	4.10E-01	4/37	8.92E+00 ^c	4.10E-01	--	6.29E+02	No:2
Methoxychlor	00072-43-5	3.10E-01	1.80E+01	5/37	8.93E+01 ^c	1.80E+01	3.00E+04	1.02E+06	No:1

Table 3-Identification of Constituents of Potential Concern for a Site Employee Exposed to Surface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
<i>Semi-Volatile Organic Compounds (ug/kg)</i>									
1,2,4-Trichlorobenzene	000120-82-1	3.00E-01	2.20E+00	17/804	5.70E+00 ^c	2.20E+00	--	8.23E+05	No:2
2-Methylnaphthalene	000091-57-8	1.70E+02	1.90E+02	2/39	7.62E+02 ^c	1.90E+02	--	8.18E+05	No:2
4-Methylphenol	000108-44-5	2.60E+02	2.90E+02	1/37	7.72E+02 ^c	2.60E+02	--	1.02E+06	No:2
Acenaphthene	000083-32-9	2.10E+01	1.30E+03	8/39	7.62E+02 ^c	7.62E+02	--	3.09E+06	No:2
Anthracene	000120-12-7	5.20E+01	8.00E+02	9/39	7.48E+02 ^c	7.46E+02	--	1.55E+07	No:2
Benz(a)anthracene	000056-55-3	5.30E+01	2.50E+03	20/39	5.88E+02	5.88E+02	--	1.98E+03	Yes
Benzo(a)pyrene	000050-32-8	3.10E+01	2.30E+03	24/39	5.34E+02	5.34E+02	--	1.98E+02	Yes
Benzo(b)fluoranthene	000205-99-2	4.70E+01	4.90E+03	20/39	9.82E+02	9.82E+02	--	1.98E+03	Yes
Benzo(g,h,i)Perylene	000191-24-2	1.00E+02	1.10E+03	14/39	3.38E+02	3.38E+02	--	--	Yes
Benzo(k)fluoranthene	000207-08-9	3.70E+01	4.50E+03	15/39	9.33E+02	9.33E+02	--	1.98E+04	No:2
Benzoic acid	000065-85-0	8.20E+01	7.70E+02	7/34	3.51E+03 ^c	7.70E+02	--	2.49E+06	No:2
Bis(2-ethylhexyl) phthalate	00117-81-7	6.90E+01	2.90E+03	19/37	7.40E+02	7.40E+02	--	1.25E+05	No:2
Butyl benzyl phthalate	000085-68-7	8.30E+01	6.70E+02	4/37	7.54E+02 ^c	8.70E+02	--	1.25E+07	No:2
Carbazole	000088-74-8	1.90E+01	3.00E+02	4/22	7.05E+02 ^c	3.00E+02	--	8.72E+04	No:2
Chrysene	000219-01-9	2.60E+01	4.00E+03	23/37	8.85E+02	8.85E+02	--	1.69E+05	No:2
Dibenz(a,h)anthracene	000053-70-3	2.40E+01	1.00E+03	7/39	7.62E+02 ^c	7.62E+02	--	1.98E+02	Yes
Dibenzofuran	000132-64-9	4.00E+01	2.40E+02	4/37	7.54E+02 ^c	2.40E+02	--	1.25E+05	No:2
Diethyl phthalate	000084-86-2	8.30E+01	1.10E+02	2/37	7.54E+02 ^c	1.10E+02	--	4.99E+07	No:2
Dimethyl phthalate	000131-11-3	1.10E+02	1.10E+02	1/37	7.72E+02 ^c	1.10E+02	--	2.04E+09	No:2
Di-n-butyl phthalate	000084-74-2	8.80E+01	6.70E+02	7/37	7.42E+02 ^c	6.70E+02	--	8.23E+06	No:2
Di-n-octyl phthalate	000117-84-0	2.40E+01	1.80E+02	4/37	7.72E+02 ^c	1.80E+02	--	9.19E+06	No:2
Fluoranthene	00208-44-0	5.50E+01	5.80E+03	25/39	1.14E+03	1.14E+03	--	2.06E+06	No:2
Fluorene	000086-73-7	6.40E+01	3.90E+02	4/39	7.82E+02 ^c	3.90E+02	--	2.06E+06	No:2
Indeno(1,2,3-cd)pyrene	000183-39-5	4.60E+01	1.30E+03	17/39	3.58E+02	3.58E+02	--	1.98E+03	No:2
Phenanthrene	000085-01-8	5.30E+01	3.90E+03	22/39	1.25E+03	1.25E+03	--	--	Yes
PHENOL, 4-CHLORO-2-(PHENYLMETHYL	120-32-1	1.10E+02	2.00E+02	4/14	6.76E+02 ^c	2.00E+02	--	--	Yes
Pyrene	00129-00-0	3.80E+01	6.10E+03	26/39	1.08E+03	1.08E+03	--	1.55E+06	No:2
<i>Volatile Organic Compounds (ug/kg)</i>									
1,1,1-Trichloroethane	000071-55-8	3.40E-01	2.10E+02	14/621	5.70E+00 ^c	5.70E+00	--	5.72E+07	No:2
1,1,2-Trichloro-1,1,2-trifluoroethane	000075-13-1	7.40E-01	1.80E+01	16/597	5.70E+00 ^c	5.70E+00	--	8.13E+09	No:2
1,1-Dichloroethane	000075-34-3	3.90E+00	5.20E+00	2/621	5.70E+00 ^c	5.20E+00	--	2.04E+07	No:2

Table 3 - Identification of Constituents of Potential Concern for a Site Employee Exposed to Surface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
1,1-Dichloroethene	000075-34-3	1.90E+00	4.20E+00	2/621	5.70E+00 ^c	4.20E+00	--	1.02E+07	No:2
1,2-Dibromo-3-chloropropane	000098-12-8	7.00E+00	7.00E+00	1/587	1.10E+01 ^c	7.00E+00	--	4.08E+08	No:2
1,2-Dichlorobenzene	000065-50-1	3.90E-01	3.20E+01	23/605	5.70E+00 ^c	5.70E+00	--	2.82E+00	No:3
1,2-Dichloroethane	000107-06-2	4.80E-01	1.50E+01	3/821	5.70E+00 ^c	5.70E+00	--	6.29E+04	No:2
1,2-Dichloropropane	000078-87-5	4.80E-01	9.50E-01	4/821	4.73E+01 ^c	9.50E-01	--	8.42E+04	No:2
1,3-Dichlorobenzene	000541-73-1	3.90E-01	1.70E+00	8/604	5.70E+00 ^c	1.70E+00	--	1.87E+06	No:2
1,4-Dichlorobenzene	000106-48-7	4.30E-01	4.20E+00	12/604	5.70E+00 ^c	4.20E+00	--	6.50E-02	No:3
2-Butanone	000078-99-3	2.00E+00	3.80E+01	11/620	2.30E+01 ^c	2.30E+01	--	1.23E+08	No:2
4-Methyl-2-Pentanone	000108-10-1	1.00E+00	1.30E+02	3/620	2.30E+01 ^c	2.30E+01	--	1.64E+07	No:2
Acetone	000067-64-1	4.40E+00	5.30E+02	123/620	2.30E+01 ^c	2.30E+01	--	1.84E+08	No:2
Ammonia	07664-41-7	2.70E+01	2.70E+01	1/1	--	2.70E+01	--	--	Yes
Benzene	000071-43-2	4.80E-01	2.20E+01	12/853	5.70E+00 ^c	5.70E+00	--	1.04E+05	No:2
Carbon Disulfide	000075-15-0	4.00E-01	4.30E+01	65/920	5.70E+00 ^c	5.70E+00	--	2.04E+07	No:2
Chlorobenzene	000108-90-7	1.60E+00	1.80E+00	1/821	5.70E+00 ^c	1.60E+00	--	4.08E+06	No:2
Chloroform	000067-66-3	1.80E-01	1.90E+03	105/621	5.70E+00 ^c	5.70E+00	--	2.04E+06	No:2
Chloromethane	000074-87-3	6.80E-01	6.80E-01	1/821	1.10E+01 ^c	6.80E-01	--	--	No:3
cis-1,2-Dichloroethene	000156-58-2	4.30E-01	1.50E+04	75/584	5.70E+00 ^c	5.70E+00	--	2.04E+06	No:2
Cyclohexane	000110-82-7	5.00E-01	6.40E-01	3/583	1.10E+01 ^c	6.40E-01	--	--	No:3
Ethylbenzene	000100-41-4	2.80E-01	5.00E+00	14/853	5.70E+00 ^c	5.00E+00	--	2.04E+07	No:2
Isopropylbenzene	000098-82-8	8.00E-01	8.00E-01	1/590	5.70E+00 ^c	8.00E-01	--	2.04E+07	No:2
methyl-Cyclohexane	000106-87-2	4.00E-01	1.40E+00	29/583	1.10E+01 ^c	1.40E+00	--	--	No:3
Methylene chloride	00075-09-2	8.40E-01	2.80E+03	326/621	2.18E+01	2.18E+01	--	7.63E+05	No:2
m-Xylene	000108-38-3	1.70E+01	1.70E+01	1/17	6.00E+00 ^c	6.00E+00	--	4.08E+08	No:2
Naphthalene	000091-20-3	2.00E+00	1.30E+02	3/40	--	1.30E+02	--	4.38E-02	Yes
o-Xylene	000065-47-6	7.00E+00	7.00E+00	1/17	6.00E+00 ^c	6.00E+00	--	4.08E+08	No:2
Styrene	000100-42-5	1.80E-01	6.00E-01	3/621	5.70E+00 ^c	6.00E-01	9.40E+00	4.08E+07	No:1
Tetrachloroethene	00127-18-4	3.50E-01	1.20E+04	175/621	1.25E+02	1.25E+02	--	1.06E+04	Yes
Toluene	00108-88-3	2.20E-01	3.00E+03	487/853	6.10E+01	6.10E+01	--	4.08E+07	No:2
Total Xylenes	001330-20-7	8.30E-01	2.40E+01	15/853	1.10E+01 ^c	1.10E+01	--	4.08E+07	No:2
trans-1,2-Dichloroethene	000156-60-5	3.20E-01	4.60E+02	13/584	5.70E+00 ^c	5.70E+00	--	4.08E+06	No:2
Trichloroethene	00079-01-6	4.20E-01	5.30E+04	221/621	5.88E+02	5.88E+02	--	1.43E+04	Yes
Trichlorofluoromethane	000075-69-4	2.80E-01	5.50E+00	35/564	5.70E+00 ^c	5.50E+00	--	6.13E+07	No:2

Table 3 - Identification of Constituents of Potential Concern for a Site Employee Exposed to Surface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^a	EPC	Background Value	RBGV	COPC? ^b
Vinyl chloride	000075-01-4	3.20E+00	8.70E+00	2/621	5.70E+00 ^c	5.70E+00	—	3.82E+03	No:2
<i>Radionuclides (pCi/g)</i>									
Actinium-227+D		1.50E-01	2.29E+00	32/2530	3.63E-01 ^c	3.63E-01	1.10E-01	5.02E-01	No:3
Actinium-228	14331-83-0	1.90E-01	1.79E+00	383/470	8.48E-01	8.48E-01	—	2.01E-01	No:5
Americium-241		4.00E-02	5.42E-01	81/2583	9.00E-02 ^c	9.00E-02	—	9.93E+00	No:2
Beryllium-7	013966-02-4	2.20E+00	2.20E+00	1/5	4.72E-01 ^c	4.72E-01	—	4.28E+00	No:2
Bismuth-210M		4.85E-02	9.10E-01	4/2242	6.38E-02 ^c	6.38E-02	—	8.67E-01	No:3
Bismuth-212	14913-49-6	3.80E-01	1.78E+00	58/56	1.21E+00	1.21E+00	—	1.03E+00	No:5
Bismuth-214	14733-03-3	2.93E-01	2.50E+00	472/476	8.03E-01	8.03E-01	1.20E+00	1.22E-01	No:1
Cesium-134	13967-70-9	5.30E-02	5.30E-02	1/1	—	5.30E-02	—	1.28E-01	No:2
Cesium-137+D		1.20E-02	1.50E+00	211/2552	6.15E-02 ^c	6.15E-02	4.20E-01	3.56E-01	Yes
Cobalt-60		1.00E-02	8.95E-02	17/2551	7.80E-02 ^c	7.80E-02	—	7.35E-02	No:3
Lead-210+D	14255-04-0	2.16E-01	5.69E+00	1004/2533	6.65E-01	6.65E-01	1.20E+00	1.19E+00	No:1
Lead-212	15092-04-1	1.12E-01	2.00E+00	474/474	6.64E-01	6.64E-01	1.50E+00	1.73E+00	No:1
Lead-214	15067-28-4	2.20E-01	3.20E+00	485/487	8.49E-01	8.49E-01	1.20E+00	6.29E-01	No:1
Neptunium-237+D	13984-20-2	4.70E-01	4.70E-01	1/1	—	4.70E-01	—	1.09E+00	No:2
Plutonium-238		2.90E-03	5.39E+01	590/2719	7.95E+00 ^c	7.95E+00	1.30E-01	1.13E+01	Yes
Plutonium-239/240		8.60E-03	1.74E+00	85/540	6.92E-02 ^c	6.92E-02	1.90E-01	1.11E+01	No:2
Potassium-40	13985-00-2	9.90E-01	3.94E+01	494/489	1.49E+01	1.49E+01	3.70E+01	1.12E+00	No:1
Protactinium-231+D		6.67E-01	1.91E+00	4/2243	1.90E+00 ^c	1.90E+00	—	4.41E-01	No:3
Radium-224	13233-32-4	1.04E+00	2.30E+00	13/13	1.80E+00	1.80E+00	1.50E+00	5.47E+00	No:2
Radium-226+D	13982-83-3	1.18E-01	2.72E+00	2525/2552	8.11E-01	8.11E-01	2.00E+00	1.05E-01	No:1
Radium-228+D	15262-20-1	2.90E-01	1.31E+00	9/9	7.58E-01	7.58E-01	—	1.76E-01	Yes
Strontium-90+D		7.18E-02	8.27E-01	5/13	4.32E-01 ^c	4.32E-01	7.20E-01	1.50E+01	No:1
Thallium-208	14913-50-9	7.20E-02	5.80E-01	415/418	2.55E-01	2.55E-01	—	5.18E-02	No:5
Thorium-227	15623-47-9	7.00E-02	2.39E+00	4/7	3.44E-01 ^c	3.44E-01	—	2.17E+00	No:5
Thorium-228+D	14274-82-9(+D)	2.90E-02	2.10E+00	612/622	7.72E-01	7.72E-01	1.50E+00	1.14E-01	No:1
Thorium-230+D		8.40E-02	2.71E+00	616/2560	7.29E+00 ^c	2.71E+00	1.90E+00	9.58E-02	Yes
Thorium-232+D	7440-29-1	3.70E-02	4.92E+00	2408/2703	6.22E-01	5.22E-01	1.40E+00	6.88E-02	No:1
Thorium-234	15085-10-8	1.16E+00	3.90E+00	34/35	2.08E+00	2.08E+00	—	2.58E+01	No:2
Tritium	10028-17-8	1.02E-01	8.69E-01	8/14	5.73E-01	5.73E-01	1.60E+00	1.45E+04 ^d	No:1

Table 3 - Identification of Constituents of Potential Concern for a Site Employee Exposed to Surface Soil in Parcel 9

Analyte	CAS Number	Minimum Concentration	Maximum Concentration	Detection Frequency	95% UCL or 70th Percentile ^d	EPC	Background Value	RBGV	COPC? ^h
Uranium-233/234	U-233/234	1.89E-01	1.70E+00	495/497	7.14E-01	7.14E-01	--	5.52E-01	Yes
Uranium-234	13986-29-5	3.10E-01	9.40E-01	30/30	7.01E-01	7.01E-01	1.10E+00	1.97E+01	No:1
Uranium-235+D		1.40E-02	1.30E-01	95/498	1.30E-01 ^e	1.30E-01	1.10E-01	1.65E+00	No:2
Uranium-235/238		3.40E-02	1.50E-01	72/358	9.28E-02 ^e	9.28E-02	--	3.33E-01	No:2
Uranium-238+D	7440-61-1(+D)	1.80E-01	2.21E+00	2019/2271	7.07E-01	7.07E-01	1.20E+00	5.22E+00	Yes ^f

Notes:

a. Unless otherwise denote, value listed represents 95% UCL

b. COPC analyte status definitions:

Yes --retained as a COPC

No:1 --not retained as a COPC due to background concentration > lower of the maximum detected concentration or 95% UCL concentration

No:2 --not retained as a COPC due to RBGV > maximum concentration

No:3 --not retained as a COPC due to <=5% detected

No:4 --not retained as a COPC as it is considered an essential nutrient

No:5 --not retained as a COPC as it is part of the thorium-232, uranium-235, and uranium-238 natural decay series with a half-lives less than or equal to 6 months

c. Value represents 70th percentile

d. RBGV for chromium (III)

e. RBGV for tritium (particulate)

f. Although the 95% UCL is < background, uranium-238 was retained as a COPC as it is process-related.

APPENDIX C

Legal Description of Parcel 9



Description of 23.148 Acres

Situated in the State of Ohio, County of Montgomery, City of Miamisburg, being part of Section 36, Fractional Township 2, Range 5, Miami Rivers Survey, being 23.148 acres out of Section 36, being part of City of Miamisburg Lot No. 4777 and Lot No. 2290, being 7.545 acres of land that lie over and across a 79.74 acre tract of land described in deed to the United States of America of record in Deed Microfiche No. 81-376A01, being 4.658 acres of land that lie over and across a 17.68 acre tract of land described in deed to the United States of America of record in Deed Book 1214, Page 248, being 0.030 acres of land that lie over and across a 33.11 acre tract of land described in deed to the United States of America of record in Deed Book 1246, Page 45, being 2.295 acres of land that lie over and across a 20.46 acre tract of land described in deed to the United States of America of record in Deed Book 1215, Page 347, being 6.547 acres of land that lie over and across a 6.66 acre tract of land described in deed to the United States of America of record in Deed Book 1258, Page 56, being 0.529 acres of land that lie over and across a 0.54 acre tract of land described in deed to the United States of America of record in Deed Book 1215, Page 347, being 1.544 acres of land that lie over and across a 1.6 acre tract of land described in deed to the United States of America of record in Deed Book 1258, Page 74, and being more particularly described as follows:

COMMENCING for reference at a railroad spike found at the southeast corner of said Section 36 and the southwest corner of Section 30, Fractional Township 2, Range 5, Miami Rivers Survey and being an angle point in the southerly line of a 94.838 acre tract of land as described in deed to Miamisburg Mound Community Improvement Corporation of record in Deed Microfiche No. 02-128007-0040;

Thence North 05°16'47" East with the section line between Section 30 and Section 36 and crossing said 94.838 acre tract, a distance of 1353.00 feet to a point at the northeasterly corner of a 42.56 acre tract of land described in deed to the United States of America of record in Deed Microfiche No. 81-323A11;

Thence North 83°53'43" West with the northerly line of said 42.56 acre tract and the southerly line of said 79.74 acre tract, a distance of 1146.00 feet to an iron pin found at the southeasterly corner of said 1.6 acre tract, being the southwesterly corner of said 79.74 acre tract, and being the **TRUE POINT OF BEGINNING** of the tract to be described;

Thence North 84°16'50" West with the southerly line of said 1.6 acre tract and the northerly line of said 42.56 acre tract, a distance of 100.33 feet to an iron pin found at the southwesterly corner of said 1.6 acre tract and being on the easterly right of way line of the Consolidated Rail Corporation tract;

Thence North 09°25'27" West with said easterly right of way line and the westerly line of said 1.6 acre tract, a distance of 696.73 feet to an iron pin found at the northwesterly corner of said 1.6 acre tract and the southwesterly corner of said 0.54 acre tract;

Thence North 00°48'14" West with said easterly right of way line and the westerly line of said 0.54 acre tract, a distance of 616.70 feet to a concrete monument found;

Thence North 84°55'06" East with said right of way line and the northerly line of said 0.54 acre tract, a distance of 74.92 feet to an iron pin set at the northeasterly corner of said 0.54 acre tract, being the northwesterly corner of said 6.66 acre tract, and being the southwesterly corner of said 33.11 acre tract;

Thence North 79°29'02" East crossing said 33.11 acre tract, a distance of 98.70 feet to an iron pin set;

Thence crossing into and through said 17.68 acre tract with the following thirty-two courses and distances:

- 1.) North 83°59'02" East, a distance of 347.69 feet to an iron pin set;
- 2.) North 76°52'04" East, a distance of 79.92 feet to an iron pin set;
- 3.) North 63°02'39" East, a distance of 31.36 feet to an iron pin set;
- 4.) North 29°43'09" East, a distance of 122.02 feet to an iron pin set;
- 5.) North 54°03'57" East, a distance of 63.19 feet to an iron pin set;
- 6.) North 67°15'25" East, a distance of 240.29 feet to an iron pin set;
- 7.) North 57°23'02" East, a distance of 36.99 feet to an iron pin set;
- 8.) North 19°27'18" East, a distance of 13.71 feet to a surveyor's nail set;
- 9.) North 06°55'42" East, a distance of 33.94 feet to an iron pin set;
- 10.) South 69°49'16" West, a distance of 84.57 feet to an iron pin set;
- 11.) South 77°13'35" West, a distance of 89.22 feet to an iron pin set;
- 12.) South 09°29'45" West, a distance of 17.42 feet to an iron pin set;
- 13.) South 81°50'07" West, a distance of 28.32 feet to an iron pin set;
- 14.) North 57°54'36" West, a distance of 29.12 feet to an iron pin set;
- 15.) South 82°54'26" West, a distance of 197.88 feet to an iron pin set;
- 16.) South 79°49'02" West, a distance of 75.88 feet to an iron pin set;
- 17.) South 24°27'29" East, a distance of 99.13 feet to an iron pin set;
- 18.) South 75°54'00" West, a distance of 78.91 feet to an iron pin set;
- 19.) North 07°58'24" West, a distance of 93.66 feet to an iron pin set;
- 20.) North 05°28'40" West, a distance of 44.09 feet to an iron pin set;
- 21.) North 07°27'35" West, a distance of 227.31 feet to an iron pin set;
- 22.) North 83°13'43" East, a distance of 387.72 feet to an iron pin set;
- 23.) North 89°28'55" East, a distance of 397.71 feet to an iron pin set;
- 24.) South 01°39'10" East, a distance of 41.56 feet to an iron pin set;
- 25.) South 46°26'35" West, a distance of 201.86 feet to an iron pin set;

- 26.) South 04°41'32" West, a distance of 53.96 feet to an iron pin found;
- 27.) South 32°10'12" West, a distance of 60.23 feet to a railroad spike found;
- 28.) South 67°54'44" West, a distance of 195.34 feet to a railroad spike found;
- 29.) South 63°34'09" West, a distance of 106.73 feet to an iron pin found;
- 30.) South 51°02'43" West, a distance of 58.56 feet to an iron pin found;
- 31.) South 25°16'22" West, a distance of 89.08 feet to an iron pin found;
- 32.) South 50°24'09" West, a distance of 58.42 feet to an iron pin found in said 20.46 acre tract;

Thence crossing said 20.46 acre tract with the following five (5) courses and distances:

- 1.) South 14°15'31" East, a distance of 152.25 feet to an iron pin found;
- 2.) South 75°40'33" East, a distance of 22.83 feet to an iron pin found;
- 3.) South 21°04'56" West, a distance of 206.76 feet to an iron pin found;
- 4.) South 08°49'20" West, a distance of 94.67 feet to an iron pin found;
- 5.) South 05°38'00" West, a distance of 283.96 feet to an iron pin set on the southerly line of said 20.46 acre tract and the northerly line of said 79.74 acre tract;

Thence South 83°58'45" East with said line, a distance of 109.48 feet to an iron pin found;

Thence crossing said 79.74 acre tract with the following three (3) courses and distances:

- 1.) South 24°18'00" East, a distance of 459.08 feet to an iron pin found;
- 2.) South 24°26'31" East, a distance of 23.00 feet to an iron pin found;
- 3.) South 79°07'51" West, a distance of 666.49 feet to an iron pin found on the westerly line of said 79.74 acre tract and the easterly line of said 1.6 acre tract;

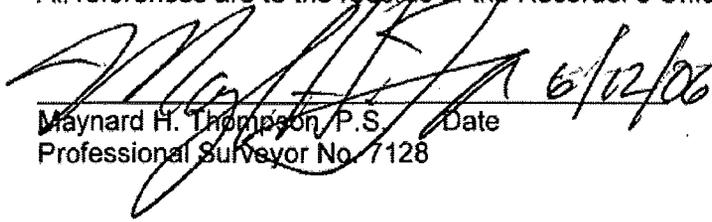
Thence South 09°23'41" East with said line, a distance of 60.41 feet to the **TRUE POINT OF BEGINNING**, containing 23.148 acres of land, more or less.

Subject however to all easements, restrictions and rights-of-way of record, if any.

Basis of Bearing is the section line between Sections 30 and 36 being North 05°16'47" East as determined by GPS measurements between Montgomery County Monuments 1057 and 1058 and the Ohio State Plane Coordinate System, South Zone. All iron pins Set are 5/8" solid iron pins 30" in length with an orange plastic cap stamped "Floyd Browne Group".

The above description is based on and referenced to an exhibit prepared by Floyd Browne Group dated 06-12-06, attached hereto and made a part hereof.

All references are to the records of the Recorder's Office, Montgomery County, Ohio.

 6/12/06

Maynard H. Thompson, P.S. Date
Professional Surveyor No. 7128



APPENDIX D

Building Information

BUILDINGS LOCATED IN PARCEL 9

Building 1 & Building 106 Building 1 was a one-story, 986-square-foot concrete block structure, with a sheet metal addition (Building 106) on one side. The roof was of built-up membrane coal tar and asphalt. The building had electrical service of 240V and central steam. Building 1 was constructed in 1958. It consisted of four heavy-walled rooms, plus a small office area with a window air conditioner. The facility had been used to support the same program since construction. Research and testing activities involving energetic materials were conducted in the building. In the past, the building was used for processing and blending of explosive powders. More recently, it was used for packaging of energetic materials.

Building 24 The facility was constructed for the purpose of treating raw well water and had been used for the same purpose since construction. The facility was a concrete block structure built with slab-on-grade floor with built up membrane roof. The facility contained two large-capacity (100,000 gallon) zeolite-softening beds plus the chemicals and injection equipment for chlorination and rust inhibition. The building also contained two high-capacity booster pumps to distribute the treated water.

Building 27 and S-6 The explosive materials laboratory and testing, was a two-story, 5,300-square-foot, reinforced concrete, slab-on-grade structure with a built-up membrane (asphalt) roof. The south wall had frangible panels. The first floor contained laboratories, an office, storage, and explosive bays. The second floor contained a lavatory and a locker room. The building was serviced by sanitary and storm water service lines, a fire sprinkler water main, and electric service. Building 27 was constructed in 1969. The building had been used for the same purpose since construction. Research and testing activities using energetic materials have occurred in the building. Research, development and testing activities using radioactive materials have not occurred in Shed 6 (S-6) which occupied 35 square feet and was removed in 2002.

Building 42 Pyrotechnics and Thermite Production facility was a two-story, 2,892-square-foot combination reinforced concrete and concrete block slab-on-grade structure. It had a built-up membrane (coal tar) roof. A gravel area was on there on the remaining side. On the first floor of the structure (approximately 2,000 square feet) are the assembly cells, an electronic equipment room, lavatory, laboratory, office, storage, and a janitor's closet. The second floor (approximately 200 square feet) was the penthouse containing mechanical equipment. It had an outside access stairway. The building was serviced by central steam for heat and chilled water, and electrical service of 240V Building 42 was constructed in 1970. The building had been used for the same purpose since construction. Component testing and assembly of pyrotechnics and energetic materials have occurred in the building. The assembly rooms had steel blast shields or steel blast cells. The interior assembly

BUILDINGS LOCATED IN PARCEL 9

rooms contain distribution systems for nitrogen, argon, and high-pressure air.

Building 43 was a one-story, 1516 square-foot, reinforced concrete structure. The roof was of built-up membrane (asphalt). The building had been serviced with electrical service of 240V, and central steam and chilled water. Building 43 was constructed in 1971. The facility had been used for the same purpose since construction. Research and development activities involving thermite had been conducted in the building.

Building 67 was a one-story, 3,787-square-foot structure. Built slab-on-grade, it was a concrete-covered, polystyrene foam building with a metal roof. The building previously served as office space for energetic materials support staff. The building contains open office space with relocatable partitions, a lavatory, storage closets for office supplies and records, and a mechanical room with exterior entrance. There was interstitial space between the ceiling and the roof for utility duct work. The building was serviced by central steam for heat and chilled water, and electrical service of 240V. Building 67 was constructed in 1983. Mound personnel familiar with its construction indicated that approximately 15 feet of the site was removed and replaced with select fill prior to construction because of possible contamination involving a classified hazardous material. Records were not available to indicate whether or not all of the contamination had been removed. The building had been used for the same purpose since construction. The building was not contaminated with any radioactive, energetic, or asbestos-containing building materials.

Building 74 was a one-story, 400-square-foot, slab-on-grade structure. The facility was a manufactured Butler Building with metal arched walls and roof. The building was serviced by central steam for heat, an exhaust fan, and electrical service of 120V. Building 74 was constructed in 1984. The building was used for the same purpose since construction until activities were discontinued.

Building 85 was constructed in 1989. The building was built as a Class I powder processing facility, with a high bay area, three-foot thick reinforced concrete wall and ceiling, and an explosion-proof electrical system. The building had never been used.

Building 300 The building housed the OU1 pump and treat system using an air stripper for VOCs. It had been used for the same purpose since construction. The building was a prefabricated metal structure built with slab-on-grade. The facility was not supplied with utilities other than 480V, three-phase power to run the system and provide electric space heat.

Building 301: The building housed the OU1 air sparging/soil vapor extraction process. It had been used for the same purpose since construction. The facility was a

BUILDINGS LOCATED IN PARCEL 9

prefabricated metal structure on skids. The facility was not supplied with utilities other than 480V, three-phase power to run the system and provide electric heat.

Building 301A: The facility housed a gas chromatograph to analyze gases removed in the air sparging/soil vapor extraction process in Building 300. Building 301A was a converted prefabricated guard post building with electrical service.

Magazine 52 was a single compartment unit. This magazine was a reinforced concrete box structure classified as a non-standard, earth-covered magazine. The compartment area was less than 200 sq. ft. Magazine 52 was constructed in 1970, and demolished in 1999. The magazine had been used for the same purpose since construction. The magazine was used for the storage of energetic materials.

Magazine 64 was constructed in 1974. The building had been used for the same purpose since construction. Storage of energetic materials and components had occurred.

Building PH originally housed fuel oil pumps to supply the power house with fuel from a nearby tank (now demolished). It now houses a steam condensate pump and was used for storage. The facility no longer served its original design intent and the pumps have been removed. It then housed a steam line condensate pump and was used for miscellaneous storage of powerhouse supplies and some contractor supplies. No research, development, or production activities using radioactive or energetic materials have occurred in the building. The environmental appraisal showed that the building contained asbestos. The building was a concrete block structure with built-up membrane roof and slab-on-grade flooring. The facility had central steam heat, a window unit air conditioner, and 480V three-phase power. The brine line for the Building 24 zeolite softening bed recharge passed through Building PH.

Old Oil Storage Tank 5 Above ground, 315,000 gallon Fuel Oil Tank

Well Houses (WH)-1. The building, since its initial construction, had covered the well and housed a pump to help supply water to the Mound facility. WH-1, a well house, was a slab-on-grade floor with concrete block walls and a metal roof. The facility was not supplied with utilities other than 480V, three-phase power to run the water well pump and an electric space heater.

WH 2. The building covered a well and pump that helped furnish water to the Mound facility. It had been used for the same purpose since construction. WH-2, a well house, was a concrete slab-on-grade with masonry exterior walls and a built-up membrane roof. The facility had no utilities other than 480V, three-phase power to

BUILDINGS LOCATED IN PARCEL 9

run the water well pump and an electric space heater. A propane-fueled standby, direct-drive engine was hooked to the pump to provide power during electrical power outages.

WH-3. This building covered a well and pump that provides plant water supply to the Mound facility. It had been used for the same purpose since construction. WH-3, a well house, was a concrete slab-on-grade floor with masonry exterior walls and a built-up membrane roof. The facility had no utilities other than 480V, three-phase power to run the water well pump and an electric space heater. There was a propane-fueled, direct-drive engine to provide standby power during electrical power outages.

APPENDIX E

PRS Information

PRS DESCRIPTION	Contaminant	Initial Core Team Decision	Closeout document and decision	Comment period
PRS-8: Site Sanitary Landfill (Waste Storage and Disposal Sites Release Block I) PRSs 8, 9, 10, 11, & 12 included the historical landfill site and historical disposal site of plant waste materials, including general trash and liquid waste in an area of the site commonly referred to as Area B.		NFA	Recommendation signed 3/4/96	3/18/96 – 4/1/96
PRS-9: Area 18, Site Sanitary Landfill Cover (Waste Storage and Disposal Sites Release Block I). PRSs 8, 9, 10, 11, & 12 included the historical landfill site and historical disposal site of plant waste materials, including general trash and liquid waste in an area of the site commonly referred to as Area B.		NFA	Recommendation signed 3/4/96	3/18/96 – 4/1/96
PRS-10: Site Sanitary Landfill (Waste Storage and Disposal Sites Release Block I). PRSs 8, 9, 10, 11, & 12 included the historical landfill site and historical disposal site of plant waste materials, including general trash and liquid waste in an area of the site commonly referred to as Area B.		NFA	Recommendation signed 3/4/96	3/18/96 – 4/1/96
PRS-11: Site Sanitary Landfill (Waste Storage and Disposal Sites Release Block I). PRSs 8, 9, 10, 11, & 12 included the historical landfill site and historical disposal site of plant waste materials, including general trash and liquid waste in an area of the site commonly referred to as Area B. Based on the discovery of thorium contamination commingled with drum remnants at PRS 11.		NFA	OSC signed 11/26/03	12/5/03 – 1/4/04
PRS-12: Site Sanitary Landfill (Waste Storage and Disposal Sites Release Block I). PRSs 8, 9, 10, 11, & 12 included the historical landfill site and historical disposal site of plant waste materials, including general trash and liquid waste in an area of the site commonly referred to as Area B.		NFA	Recommendation signed 3/4/96	3/18/96 – 4/1/96
PRS-13: Trash Incinerator (Former Treatment Site). PRS 13 was identified as a trash incinerator was part of an overall open burning process employed from 1948-1970 in the old burn area, which was part of OU1.		NFA	Recommendation signed 12/18/96	2/22/97 – 4/3/97
PRS-14: Area C, Waste Storage Area (AKA Drum Staging Area and Chemical Waste Storage). Historical use as a drum storage area for staging chemical waste prior to off-site disposal.		NFA	Recommendation signed 5/8/96	6/19/96 – 7/17/96
PRS-21: Building 1, Leach Pit (Area 1). The RCRA PRSs 21, 22, 25, 26, 27, and 29, otherwise known as wastewater transfer structures, were identified as Potential Release Sites because of the concern that residual volatile organic compounds from past operations associated with Buildings 1 & 27 remained in/on the structures.		NFA	Recommendation signed 11/16/00	5/10/01 – 6/10/01
PRS-22: Building 1 Explosives, Waste Water Settling Basin (Tank 200). The RCRA PRSs 21, 22, 25, 26, 27, and 29, otherwise known as wastewater transfer structures, were identified as Potential Release Sites because of the concern that residual volatile organic compounds from past operations associated with Buildings 1 & 27 remained in/on the structures.		NFA	Recommendation signed 11/16/00	5/10/01 – 6/10/01

PRS DESCRIPTION	Contaminant	Initial Core Team Decision	Closeout document and decision	Comment period
PRS-23: Building 43 Explosives Waste Water Settling Basin (Tank 201). PRS 23 was identified as a concrete tank (Tank 201) that was installed in 1969 to filter and settle-out explosive elements from a planned explosive, production process slated to be housed in Building 43.		NFA	Recommendation signed 12/18/96	2/27/97 – 4/3/97
PRS-24: Building 43 Solvent Storage Tank (Tank 221) was identified as a solvent storage tank (Tank 221) that was constructed to store acetone or alcohol solvents for use in Building 43. The proposed use of Building 43, to purify explosive materials, never took place. The tank was never used and was removed in 1990.		NFA	Recommendation signed 12/18/96	2/27/97 – 4/3/97
PRS-25: Building 27 (unlined) Leach Pit (Area 1) was taken out of service in 1985. The RCRA PRSs 21, 22, 25, 26, 27, and 29, otherwise known as wastewater transfer structures, were identified as Potential Release Sites because of the concern that residual volatile organic compounds from past operations associated with Buildings 1 & 27 remained in/on the structures.		NFA	Recommendation signed 11/16/00	5/10/01 – 6/10/01
PRS-26: Building 27 Concrete Flume (Tank 217), use was discontinued in 1991. The RCRA PRSs 21, 22, 25, 26, 27, and 29, otherwise known as wastewater transfer structures, were identified as Potential Release Sites because of the concern that residual volatile organic compounds from past operations associated with Buildings 1 & 27 remained in/on the structures.		NFA	Recommendation signed 11/16/00	5/10/01 – 6/10/01
PRS-27: Building 27 Settling Sump (Tank 218). The RCRA PRSs 21, 22, 25, 26, 27, and 29, otherwise known as wastewater transfer structures, were identified as Potential Release Sites because of the concern that residual volatile organic compounds from past operations associated with Buildings 1 & 27 remained in/on the structures.		NFA	Recommendation signed 11/16/00	5/10/01 – 6/10/01
PRS-28: Building 27 Solvent/Drum Storage Area (Pad). It was an asphalt pad used for the temporary storage of past process solvent waste, and was presently used for storage of acetone.		NFA	Recommendation signed 6/19/01	5/8/02 – 6/8/02
PRS-29: Building 27 Filtration System. The RCRA PRSs 21, 22, 25, 26, 27, and 29, otherwise known as wastewater transfer structures, were identified as Potential Release Sites because of the concern that residual volatile organic compounds from past operations associated with Buildings 1 & 27 remained in/on the structures.		NFA	Recommendation signed 11/16/00	5/10/01 – 6/10/01
PRS-30: Building 27 Diesel Fuel Storage Tank (Tank 213) (AKA Bldg. 27 Propane Tank). PRS 30 was the site north of Building 27 where a propane tank was located. This tank was mistakenly listed as a PRS because it was incorrectly listed as an underground fuel oil tank by Mound Plant UST Plan.		NFA	Recommendation signed 3/18/97	6/17/97 – 7/18/97
PRS-33: Underground Sanitary Sewer Line G14 EAST. PRSs 31-36, 125 & 270 were identified as PRSs as a result of breaks and/or separations in Mound's sanitary sewer lines, identified during 1982 video survey of the lines.		NFA	Recommendation signed 11/26/02	12/4/02 – 1/3/03

PRS DESCRIPTION	Contaminant	Initial Core Team Decision	Closeout document and decision	Comment period
PRS-34: Underground Sanitary Sewer Line GI4 WEST. PRSs 31-36, 125 & 270 were identified as PRSs as a result of breaks and/or PRS-41: Area 3, Thorium Drum Storage and Redrumming Area. PRS 41 was located on the western portion of the site (Figure I).		NFA	Recommendation signed 11/26/02	12/4/02 – 1/3/03
PRS-59: Contaminated Soil Box Storage Area. PRS 59 was identified as a storage area for boxes containing plutonium contaminated soil during a USEPA 1988 preliminary Review Visual Site Inspection		NFA	Recommendation signed 5/13/97	7/15/97 – 8/17/97
PRS-67: Plant Drainage Ditch. PRS 67 was an open, unlined channel that flowed above ground through the central part of the facility from Building 22 to the retention basins on the western plant boundary. Only a portion of this PRS is located within Parcel 9. The ditch carried surface run-off from both the Main Hill and SM/PP Hill areas and the asphalt lined pond (removed) that drained into the ditch through culvert (removed), emerging behind Building 22. From that point the open ditch falls 40 feet over a length of 1800 feet.		NFA	OSC signed 1/10/06	N/A
PRS-69: Overflow Pond and outflow pipe were a PRS due to the presence of plutonium-238 contamination, site sanitary landfill leachate, effluent from the plant drainage system, and storm water runoff. The overflow pond was located near the southwest corner of the original plant property. Operating continuously since 1979, the pond had a capacity of 5 million gallons.		NFA	OSC signed 1/12/06	N/A
PRS-71: Building 85 Waste Solvent Tank (Tank 136). Historical process knowledge indicated that this PRS, which was a below grade tank located adjacent to Building 85, was never used.		NFA	Recommendation signed 3/4/96	3/18/96 – 4/1/96
PRS-75: Railroad Siding (Historical Railroad Spur Area) soils area in the vicinity of the railway siding, created due to its use as a radioactive drum storage, loading, unloading, and repackaging area. Multiple soil samples taken from the PRS 75 area had recorded concentrations of thorium-232 and plutonium-238 in excess of guideline criteria.	Th-232 Pu-238 Ra-226 U-238	RA	OSC signed 1/29/05	N/A
PRS 81: Drilling Mud Drum Storage Areas (3 locations, 2 within Parcel 9). These areas were designated a PRS due to suspected barium contamination from borehole cuttings that were stored in drums. The areas were used from 1987-1989.		NFA	Recommendation signed 5/8/96	5/15/96 – 6/17/96
PRS 176: Area 14, Radioactive Waste Line Break. In 1974, the soils associated with the WTS leaks (PRS-176) were remediated. In the mid 1980s, the WTS line, the two holding tanks, and Building 43 were removed.		NFA	Recommendation signed 12/17/96	1/9/97 - 2/13/97
PRS 282: Spoils Disposal Area Construction Spoils Area		FA	Recommendation signed 1/7/03	1/22/03 – 2/20/03

PRS DESCRIPTION	Contaminant	Initial Core Team Decision	Closeout document and decision	Comment period
PRS-300: Area 19, Underground Waste Transfer Line. This PRS was identified based on the fact that a pair of lines (waste transfer system [WTS]) had been installed to transfer plutonium-238 contaminated waste solutions from SM Building to WD Building. The PRS consisted of the WTS lines and the soil surrounding them from the SM area to the WD Building, a distance of approximately 2,600 feet.		NFA	Recommendation signed 12/17/96	1/9/97 – 2/13/97
PRS 346: Elevated Soil Gas Location was soil PRS located in the southern sector of the original Mound Plant. No radioactive or hazardous waste generating processes or activities were known to have occurred. These soils locations were identified as PRSs due to qualitative hydrocarbon detections found during the PETREX soil gas portion of OU5, Non Area of Concern investigation.		NFA	Recommendation signed 11/20/96	12/19/96 – 1/23/97
PRS 354: Elevated Soil Gas Location was identified due to a single elevated radiological detection of plutonium found during the Mound Soil Screening Analysis performed as part of the June 1994 OU5, Operational Area Phase I Investigation.		NFA	Recommendation signed 2/19/97	5/8/97 – 6/16/97
PRS 357: is a sampling location in the driveway area northwest of Bldg 67, between the main access road and the access roads leading to Bldg 67 and the sewage disposal plant parking lots. This soil location was identified as an PRS due to qualitative hydrocarbon detections found during the PETREX soil gas portion of the OM, Non Area of Concern Investigation. No radioactive or hazardous waste generating processes or activities are known to have occurred at these PRSs.		NFA	Recommendation signed 11/20/96	12/10/96 – 1/23/97
PRS 358: Located along the railroad siding near Bldg 24. Elevated Soil Gas Location was identified due to elevated levels of organic chemicals detected by the qualitative PETREX survey during the OU5, Non-AOC Investigation.		NFA	Recommendation signed 12/18/96	2/27/97 – 4/3/97
PRS 359: Elevated Soil Gas Location		NFA	Recommendation signed 11/20/96	12/19/96 – 1/23/97
PRS 361: Elevated Soil Gas Location		NFA	Recommendation signed 11/20/96	12/19/96 – 1/23/97
PRS 409: The site of a former chemical (Stoddard Solvent) concrete pad staging area. This area was encountered and remediated during the installation of a storm water drainage pipe in 1996. Contamination soils area located in Release Block I, OU1, just west of the site sanitary landfill. This area was identified September 23, 1996 by the contractor installing the OU4 canal re-route drainage pipe.	Stoddard Solvent	RA	Recommendation signed 1/11/05	8/25/05 – 9/24/05

PRS DESCRIPTION	Contaminant	Initial Core Team Decision	Closeout document and decision	Comment period
PRS 410: Based on a surface (8" below grade) soil stain and odor (thought to be diesel fuel) encountered during the removal and replacement of a storm water drainage pipe. The stained soil was sampled for total petroleum hydrocarbons (TPH) and found to contain 198 parts per million (ppm) (vs. 105 ppm Bureau of Underground Storage Tank Regulations criteria). All stained soil was removed, the utility project completed, and the area backfilled with clean gravel. The area was subsequently paved with asphalt.	TPH	FA	Recommendation signed 12/1/04	12/9/04 – 1/9/05
PRS 414: South Area Groundwater and Soil Evaluation.		Retired	Recommendation signed 12/2/04	12/9/04 – 1/8/05
PRS 418: Overflow Pond South Inlet.		NFA	Recommendation signed 6/22/01	8/9/00 – 9/14/00
PRS 419: Drainage Outflow Reroute. The reroute extends for a length of approximately 4500 feet proceeding south from its entrance near the concrete sealed "twin 60s" before exiting the Mound Plant property and emptying into the Great Miami River.		NFA	Recommendation signed 11/17/99	1/19/00 – 2/17/00
PRS 441: Soil Staging Area and Expansion the soil staging area and expansion area located near the rail spur, north of the overflow pond. This area had been used for the staging and loading of contaminated soils and debris awaiting shipment offsite. Includes the soil staging area, rail siding (including a segment formerly part of PRS 75), and a segment of the site drainage ditch (formerly part of PRS 67). The siding had been used for loading and unloading packaged materials and packaged wastes for the polonium, thorium, and plutonium projects during the 1950s, 60s, and 70s.	Th-232 Pu-238 Ra-226 U-238	RA	OSC signed 12/1/09	NA

NFA No Further Assessment
FA Further Assessment
RA Removal Action
NA Not Applicable

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Appendix E

November 30, 2012, Amendment to 2008 Sales Contract, General Purpose Lease Amendment #24, and General Purpose Lease Appendix #1

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AMENDMENT TO SALES CONTRACT DATED AUGUST 28, 2008

BETWEEN THE

U.S. DEPARTMENT OF ENERGY

AND

MOUND DEVELOPMENT CORPORATION (PREVIOUSLY THE

MIAMISBURG MOUND COMMUNITY CORPORATION)

November 30, 2012

WHEREAS, the US Department of Energy (DOE) and the Miamisburg Mound Community Improvement Corporation (which name was changed to Mound Development Corporation) (MDC), entered into a contract for the sale of DOE's Mound Facility in Miamisburg, Ohio, dated January 23, 1998, and;

WHEREAS, said contract of January 23, 1998 was replaced with a Sales Agreement between the parties of August 28, 2008 (Sales Agreement); and

WHEREAS, pursuant to the agreement of January 23, 1998, DOE conveyed certain portions of the Mound Facility to MDC; and

WHEREAS, pursuant to the Sales Agreement, DOE has tendered executed deeds to the balance of the Mound property not previously conveyed to MDC;

WHEREAS, DOE is in full compliance with all terms and conditions of the Sales Agreement and has completed its obligations thereunder;

WHEREAS, MDC has advised that it is not currently in a position to accept the property tendered to MDC by DOE as required under the Sales Agreement; and

NOW, THEREFORE, effective this 30 day of November, 2012, this agreement serves to amend the Sales Agreement, such that it retains all terms and conditions of the Sales Agreement except for those conflicting provisions of the Sales Agreement which this agreement now supersedes, and DOE and MDC agree as follows:

A. DELAYED ACCEPTANCE

MDC agrees that:

1. DOE has delivered to MDC properly executed deeds to Parcels 6, 6A, 7, 8 and 9 ("Parcels 6-9" herein) at the Mound Facility which constitutes the balance of the property to be conveyed under the Sales Agreement.
2. MDC had advised DOE that it is not currently in a financial condition to accept conveyance of the aforementioned Parcels 6-9 due to the expense of real estate taxes and other costs inherent with ownership of that property.
3. MDC will return the unrecorded deeds to Parcels 6-9 to DOE, and agrees to accept all of the deeds to Parcels 6-9, without modification, no later than the 30th day of September, 2017; however, MDC may accelerate the acceptance date for all of the Parcels, at its discretion, upon notification to DOE. MDC agrees that the sole contingency on its acceptance is the passage of time and that no further action on the part of DOE is or will be required. No later than the above-stated date, MDC will take all necessary action to have deeds to the real property within

Parcels 6-9 recorded in the records of the Montgomery County, Ohio Recorder's Office as a complete and effective transfer of title of the real property within Parcels 6-9 to MDC.

DOE agrees that:

4. This agreement serves as an amendment to the 2008 Sales Agreement. DOE is allowing MDC to defer acceptance of all the parcels for a period of time as stated above. During the deferral, DOE shall lease the Mound site in its entirety to MDC.

5. MDC will provide consideration of ten dollars (\$10.00) and, in exchange, DOE will not require MDC to timely accept the real estate tendered as set forth in Section III of the Sales Agreement. MDC will timely accept for conveyance the real estate tendered no later than the 30th day of September, 2017.

B. INTERIM SALES

MDC has represented that it desires to attempt to sell some or all of Parcels 6-9 to third parties. In the event that MDC arranges the sale of property within Parcels 6-9, MDC will notify DOE in writing of these arrangements. Within the lease period, DOE shall make all or any part of Parcels 6-9, available for transfer to MDC after MDC has identified and surveyed the property it seeks to acquire, and after the completion of any required governmental notifications. MDC will bear all costs for any further subdivision of Parcels 6-9. DOE will not pay any costs associated with any property transfers contemplated herein. Once property is transferred, MDC may proceed with the sale of the property as the owner. This amendment to the existing sales agreement memorializes MDC's obligation to take ownership of all of Parcels 6-9 no later than September 30, 2017.

If MDC accepts title to greater than 50% of the acreage of Parcels 6-9 at any time during the lease term prior to September 30, 2017, MDC agrees to accept title to all remaining untransferred portions of Parcels 6-9 within five business days. When MDC accepts title to greater than 50% of the acreage of Parcels 6-9, DOE will issue and MDC will record the deed to the remaining acreage of Parcels 6-9. If MDC has not accepted title to greater than 50% of the acreage of Parcels 6-9 by September 30, 2017, MDC agrees to accept, on September 30, 2017, title to the entire remaining acreage of Parcels 6-9 and will record the deed within 5 business days.

C. INTERIM LEASING

1. During the term hereof, DOE and MDC agree that DOE will lease the property contained in Parcels 6-9 to MDC via the existing General Purpose Lease, as amended, which transfers all property responsibilities to MDC. Consistent with Article III of the Sales Agreement, MDC acknowledges that this deferral of transfer of Parcels 6-9 **requires MDC to maintain all property within those Parcels in good repair at no cost to or obligation of DOE.** "Good repair" is defined as including keeping the properties and the mechanical systems of the buildings in good working order for and operating buildings and maintaining all property to

protect the health and welfare of the public as further clarified in the General Purpose Lease Agreement, as Amended.

2. MDC and DOE have completed a condition assessment for each physical property asset on the site to establish the base condition of the properties for maintenance purposes. DOE shall have the right to inspect the properties upon giving MDC a 24 hour notice of said inspection and general inspection of all physical assets shall take place at least quarterly. Any deficiencies found by DOE shall be noted and a written request to remedy them shall be sent to MDC. MDC shall remedy the deficiencies as recommended by DOE within 4 weeks of receiving such notice. DOE shall re-inspect the assets where the repairs have been accomplished. If all repairs have been completed to DOE's satisfaction, DOE will give final approval of the repairs as completed to MDC.

D. GENERAL

1. **SUCCESSORS AND ASSIGNS:** The covenants, provisions and agreements herein contained shall in every case be binding on and inure to the benefit of the Parties hereto respectively, and their respective successors. The rights and responsibilities under this agreement may not be assigned by MDC without the written consent of DOE.

2. **RISK OF LOSS:** In order to adequately address the risk of loss to the DOE due to fire or other casualty, MDC agrees to insure said property for its full replacement cost for all risks; however, the availability of insurance or lack thereof, shall not alter or reduce the obligation of MDC to keep the property in its present condition as noted in the General Purpose Lease Agreement, as Amended. For values of insurance for Buildings 61 and T, MDC shall insure for the appraised value of said buildings as stated in the 2012 appraisal. For Building 28 the MDC shall carry General Liability Insurance. At the time of the execution of this amendment, MDC shall provide a copy of a valid and current insurance binder showing the properties in Parcels 6-9 and naming the DOE as an insured party. This provision supersedes "RISK OF LOSS" in the 2008 Sales Agreement.

3. **OTHER AGREEMENTS:** No prior, present, or contemporaneous agreements shall be binding upon DOE or MDC unless specifically written in this agreement. No modification or change in this agreement shall be valid or binding upon the Parties unless in writing and executed by a representative authorized to contract for each Party.

4. **OFFICIALS NOT TO BENEFIT:** No member of or delegate to the United States Congress, or resident commissioner, shall be admitted to any share or part of this agreement, or to any benefit arising from it. This section is included pursuant to 41 U.S.C. Section 22 and 18 U.S.C. Sections 431, 432, and 433.

AMENDMENT TO SALES CONTRACT

5. NOTICES: Any notices required under this agreement shall be forwarded to MDC or DOE respectively by Registered or Certified mail, return receipt requested, or by overnight delivery, at the following addresses:

Realty Officer
U.S. Department of Energy
EM Consolidated Business Center
250 E. 5th Street, Suite 500
Cincinnati, OH 45202
Miamisburg, OH 45343-3020

President
Mound Development Corporation
P. O. Box 232
Miamisburg, OH 45343-0232

IN WITNESS WHEREOF, the Parties, by and through their authorized representatives have executed the foregoing agreement, effective the date first above written.

AUTHORIZED REPRESENTATIVE OF MDC:

By: Mike Graw

Title: President

Date: 11-30-12

FOR DOE:

By: Julie

Title: DIRECTOR, EM CBC

Date: 11-30-12

**U. S. DEPARTMENT OF ENERGY
AMENDMENT NUMBER 24 TO THE GENERAL PURPOSE LEASE**

WHEREAS, the Parties hereto, UNITED STATES OF AMERICA, acting by and through the Department of Energy, hereinafter referred to as the "GOVERNMENT," and the Miamisburg Mound Community Improvement Corporation (renamed the Mound Development Corporation), hereinafter referred to as the "Lessee," contracted for the sale of the Government's Mound Facility from the Government to Lessee; and

WHEREAS, the Government has previously conveyed certain portions of the Mound Facility to Lessee and has previously leased other portions of the Mound Facility to Lessee; and

WHEREAS, the Government tendered executed deeds to Lessee by which the Government would convey the balance of the Mound Facility property (including Lessee's leaseholds) which the Government agreed to sell to Lessee under the aforesaid contract for sale (Parcels 6, 6A, 7, 8 and 9, herein "Parcels 6-9"); and

WHEREAS, Lessee has temporarily returned the executed deeds to the Government and the Government has temporarily accepted back the deeds to Parcels 6-9 until the date of deferred conveyance; and

WHEREAS, Lessee has advised that it is not currently in a financial position to accept title to Parcels 6-9; and

WHEREAS, the parties hereto have, contemporaneously with this agreement, entered into an amended Sales Agreement whereby the Government has agreed to a delay acceptance by Lessee of the deeds for Parcels 6-9; and

NOW, THEREFORE, for good and valuable consideration, the Parties hereto agree that the General Purpose Lease (GPL), Parts I & II, entered into on the 7th day of September, 1994, and all Amendments prior to the date hereof, between the Government and Lessee, are amended this day as follows:

(1) The real property, known as Parcels 6-9, as described in Exhibit A, is hereby included within the GPL effective as of the date of this document. The Lessee shall be responsible for maintenance of all of the facilities within Parcels 6-9, as well as all others that are part of GPL.

T Building, as noted in Exhibit A, Lessee is responsible for the maintenance of groundwater pumping in T Building regardless of occupancy in order to avoid flooding of below grade levels.

Building 28: will continue to be cold and dark until Lessee demolishes the building;

Building 61: will be placed in a stand by condition per the Stand by Status Plan as noted in Exhibit A;

Buildings 45, COS, OSE, OSW and 126. Lessee will continue to operate and maintain these buildings at the current levels as agreed to in the GPL Part II Article A (1) , either occupied or unoccupied and not allowed to deteriorate due to neglect of structures, systems, roofs, or any other aspects of maintenance reasonably required to keep the properties ready for occupancy.

The Government and its contractors shall have rights to access the Premises, their trailers 1 and 16, building 300, the Pump and Treatment Station, and groundwater wells and Seep locations to continue the management of its CERCLA compliance requirements. These activities may include drilling and installation of wells, recovering wells, geoprobes, sampling existing wells and potentially modifying the Pump and Treat system. In so much as reasonably possible, such activities will be communicated to Lessee and conducted so as to minimize interfering with the ordinary and reasonable use of the site.

(2) Lessee acknowledges prior receipt of suitable environmental reports detailing all environmental conditions of the leased property.

(3) Delete from the GPL, Part I, section 5, beginning with the words, "This Lease may be renewed..." through the end of section 5. This lease is not subject to a renewal option. Notwithstanding any other provision in the GPL or any amendment to the GPL, this lease will terminate on the 30th day of September 2017.

(5) Delete from the GPL, Part I, section 8.B. in its entirety. Government will be furnishing no services to Lessee. **Lessee agrees to be responsible for all costs, expenses, maintenance, utility, and service charges of whatever sort as are needed or customarily supplied to maintain the structures and property in its current condition.**

(6) Delete from the GPL, Part II, Article A (1) the first two sentences beginning with "The government at its own expense" and ending with "load bearing standards." Delete GPL, Part II, A (2) entirely.

(8) Delete from the GPL, Part II, Article F in its entirety. Lessee agrees to obtain and maintain insurance coverage. In order to adequately address the risk of loss to the DOE due to fire or any other act of nature or other casualty, Lessee agrees to insure buildings 45, 126, COS, OSW and OSE for full replacement costs for all risks. For buildings 61 and T, Lessee agrees to insure the buildings in at least an amount equal to the values as appraised and stated in the most recent Real Estate Appraisal Report of The Mound Advanced Technology Center dated July 10, 2012, by the Pillar Valuation Group, Inc. Building 28 shall only be insured for general liability. The availability of insurance or lack thereof shall not alter or reduce the obligation of Lessee to keep the property in the agreed to condition as noted in Paragraph 1 above and Exhibit A.

Upon execution of this Amendment, Lessee shall provide proof of valid and current insurance as agreed to above for all properties in this agreement and naming the DOE as an insured party. This provision supersedes "RISK OF LOSS" in the 2008 Sales Agreement.

(9) Government shall not be responsible for any costs, charges, fees or expenses in maintaining, securing, insuring or taking any other action of any sort in regard to the leasehold property,

including but not limited to, Parcels 6-9. Lessee agrees to bear all costs, expenses, fees or liability of whatever sort in keeping all property under the GPL in the condition agreed to in Paragraph 1 above existing as of the date of this agreement. It is the intent of the parties that Lessee shall bear all costs and burdens of the GPL leasehold to the same extent as though title had passed to Lessee as of the date hereof.

(10) In all cases where this lease amendment conflicts with the General Purpose Lease, Parts I & II, and/or any prior amendment to the General Purpose Lease, this Amendment takes precedence and any conflicting provision of a preceding document shall be without force and effect.

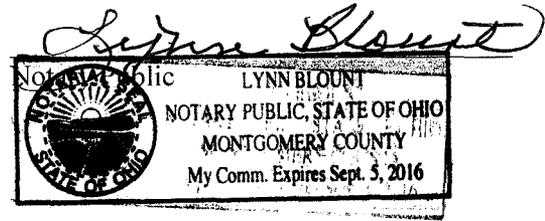
IN WITNESS WHEREOF, the parties hereto have caused this Lease amendment to be executed on their behalf by their duly authorized representative effective as of the date last executed below.

MOUND DEVELOPMENT CORPORATION
By Michael J. Grauwelman
Title President

THE UNITED STATES OF AMERICA
By [Signature]
Title Director, EMCBC

STATE OF)
) ss:
COUNTY OF)

The foregoing instrument was signed before me, a Notary Public, this 14 day of December 2012 by Michael J. Grauwelman as President of the Mound Development Corporation, an Ohio non profit corporation, on behalf of the corporation.



STATE OF)
) ss:
COUNTY OF)

The foregoing instrument was signed before me, a Notary Public, this 14 day of December, 2012 by ACE Craig, U.S. Department of Energy, of The United States of America, on behalf of the United States of America.

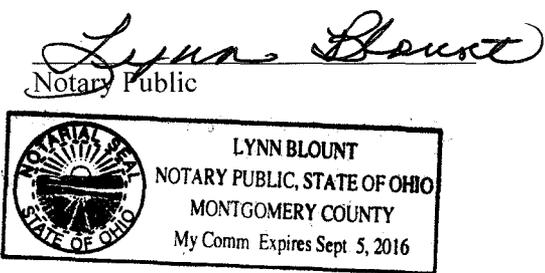


EXHIBIT A

REQUIRED ACTIVITIES RELATED TO BUILDINGS 61, 126, OSE, AND T BUILDING OVERSIGHT ONGOING ACTIVITIES

The identified Parcels 6-9 are described as follows; Parcel 6 is 13.65 acres, Parcel 6A is 3.32 acres, Parcel 7 is 42.3, Parcel 8 is 45.2 acres and Parcel 9 is 23.1 acres, more detailed descriptions are contained in the deeds for each property. These parcels include a number of the buildings that are the focus of the required activities the Mound Development Corporation (MDC) are to perform

As a follow up to the meeting on 10/31, MDC's understanding of the path forward will include:

- T - Building: MDC will operate the building similarly to the way DOE currently operates the facility. Exceptions include: reducing the lighting levels in areas that will not to be frequently inspected/visited.
- MDC intends on conducting an evaluation to determine if there is a safe and effective way to further reduce the building operational cost while protecting the building from health/industrial concerns (e.g., water overflowing the sumps). MDC will provide any proposed modifications in the building operation to DOE for approval.
- Building 61: MDC will place Building 61 in a stand by condition per the Stand by Status Plan that follows;
 1. Reduce number of Wall Packs units that are operational (if possible)
 2. Reduce lighting on building interior except for emergency lights in Stairways
 3. Do not restart Boiler – make-up water tank needs to be drained, as well as the condensation lines (Leave in summer standby condition for future use)
 4. Drain all pumping lines that service toilets, faucets, and kitchen area to protect from freezing
 5. Drain and cap Sprinkler System to protect from freezing
 6. Install timer or modify HVAC controls (if possible following discussion with HVAC controls personnel) for HVAC FAN ONLY operations during limited hours (TBD based on discussions with HVAC personnel)
 7. Conduct monthly building walk-thru to check building status.
- Building 28: MDC will continue to be cold and dark until MDC demolishes the building

BUILDINGS 45, COS, OSE, OSW AND 126:

- The balance of the buildings (45, COS, OSE, OSW and 126) will continue to be operated and maintained at the current levels, either occupied or unoccupied.
- MDC and DOE agree to work together on any requests that significantly change the building operating conditions.
- MDC is working with DOE's EM/LM or its contractor to take a few air samples in T building. This is for MDC's evaluation to understand what's going in T-building now as a baseline for our evaluation.
- MDC & DOE will conduct quarterly walk-thru of the buildings to review building conditions, and determine if adjustments are necessary to maintain building structural and operational integrity.

**U. S. DEPARTMENT OF ENERGY
APPENDIX NUMBER 1 TO THE GENERAL PURPOSE LEASE**

WITNESSETH:

The General Purpose Lease, parts I & II entered into on the 7th day of September, 1994, between the UNITED STATES OF AMERICA, acting by and through the Department of Energy, hereinafter referred to as the "GOVERNMENT," and the Miamisburg Mound Community Improvement Corporation (renamed the Mound Development Corporation), hereinafter referred to as the "Lessee," contracted for the sale of the Government's Mound Facility from the Government to the Lessee; is appended effective as of this date, November 18, 2013 as follows:

This Appendix Number 1, brings the aforementioned lease into compliance with the Environmental Protection Agency's guidance for Institutional Control Implementation and Assurance Plans (ICIAPs) issued in December 2012, and reiterates to new management and those whom succeed the current management, of the required Institutional Controls covering the remaining land parcels and buildings as stated in the subject lease. MDC is responsible to ensure this action when these properties transfer, the ICs must continue in the form of deed restrictions.

Background Summary:

The former Mound Site Property was remediated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) with associated Records of Decision (RODs) requiring adherence to enforceable ICs. The approved Mound RODs for the leased areas with their associated ICs are as follows *Parcels 6, 7, and 8 Record of Decision, Miamisburg Closure Project, Miamisburg, Ohio, Final, August 2009; Operable Unit 1 Record of Decision, Final, June 1995; and the Amendment of the Operable Unit 1 Record of Decision, U.S. Department of Energy, Mound Closure Project, Final, August 2011.*

The IC activity and use limitations in this lease amendment were described in the *Parcel 9 Environmental Covenant* (Special Instrument Deed #2012-00004722 filed 1-24-12 with Montgomery County, Ohio). The two special T Building deed restrictions were described in the *Parcels 6, 7, 8 ROD.*

Activity and Use Limitations:

Limitation on movement of soil: no soil from the Property shall be placed on any property outside the boundaries of the Mound property, described in Exhibit B of the Parcel 9 Environmental Covenant, without prior written approval from Ohio Department of Health (ODH), Ohio EPA and US EPA, or successor agencies.

General Purpose Lease appendix 1

Prohibition against residential use or farming activities: the Property shall not be used for any residential or farming activities, or any other activities which result in the chronic exposure of children less than eighteen years of age to soil or ground water from the Property. Other prohibited uses shall include, but not be limited to:

- Single or multi-family dwellings or rental units;
- Day care facilities;
- Schools or other educational facilities for children less than eighteen years of age; and
- Community centers, playgrounds or other recreational or religious facilities for children under eighteen years of age.

Prohibition against use of ground water, ground water under the Property shall not be extracted, consumed, exposed or used in any way without prior written approval of US EPA and Ohio EPA.

Prohibition against the removal of concrete floor material in specified rooms of T Building (see figure) to offsite locations without prior approval from USEPA, OEPA and ODH must be ensured.

Prohibition against the penetration of concrete floors in specified rooms of T Building (see figure) locations without prior approval from USEPA, OEPA, and ODH must be ensured.

For questions or further information, please contact the Mound Site Lead for DOE Environmental Management's Consolidated Business Center, Larry Kelly at (513) 246-0609 and/or Legacy Management's Gwen Hooten, Mound Site Manager at (720) 880-4349.

IN WITNESS WHEREOF, the parties hereto have caused this Lease to be executed on their behalf by their duly authorized representative as of the date written above. All other terms and conditions in the lease agreement remains the same.

MOUND DEVELOPMENT CORPORATION (MDC)

THE UNITED STATE OF AMERICA

By 
Title: President, MDC

By _____
Title: Realty Officer, DOE EMCBC,

ERIC A. CLUXTON

STATE OF OHIO

SS:

COUNTY OF MONTGOMERY

The foregoing instrument was acknowledged before me this 23rd day of December, 2013 by Eric A. Cluxton as President of the Miamisburg Mound Community Improvement Corporation, an Ohio not-for-Profit Corporation, on behalf of the corporation.

Lorraine A. Huber
Notary Public

LORRAINE A. HUBER, Notary Public
In and for the State of Ohio
My Commission Expires May 22, 2016

STATE OF)

) SS:

COUNTY OF)

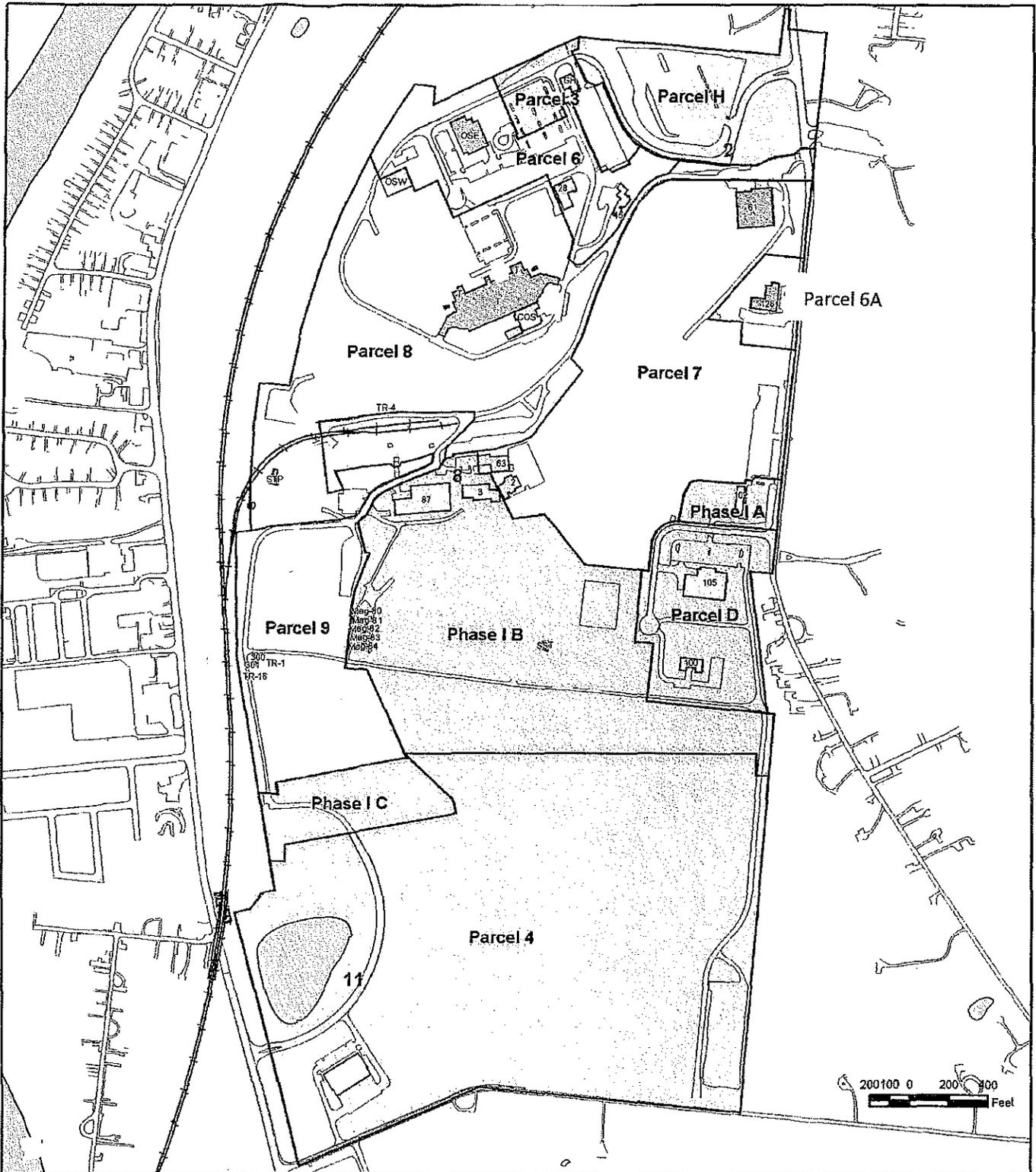
The foregoing instrument was acknowledged before me this 8th day of January, 2014 by Larry Kelly, Realty Officer, Environmental Management Consolidated Business Center, U.S. Department of Energy, of The United States of America, on behalf of the United States of America.

Scott D. Lucarelli
Notary Public



SCOTT D. LUCARELLI
NOTARY PUBLIC
STATE OF OHIO
Recorded in
Butler County
My Comm. Exp. 8/10/15

PARCEL MAP



Legend

Parcel - DOE	Building Ownership	Road - paved
Parcel - MDC	DOE	Railroad
River	Leased by MDC	
Pond	MDC	

U.S. DEPARTMENT OF ENERGY
MIAMISBURG, OHIO

Work Performed by
S.M. Stoller Corporation
Under DOE Contract
No. DE-AC01-07LM00080

Mound Site Points of Interest

DATE PREPARED:
November 11, 2009

FILENAME:
S0527400.mxd

Appendix F

Mound Site Parcel IDs from Montgomery County Property Records (January 2015)

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Mound Site Parcel IDs from Montgomery County Property Records

January 2015

PARID	Parcel Location on record	Legal Description	Land Use	Acres	Deed	Sale	Conveyance	Owner per Record	General Location	Applicable ROD
City Of Miamisburg Owned Property										
K46 01507 0025	Vanguard Blvd	7994 Mound Advanced Technology Center Sec 1	C - Commercial Vacant Land	2.1941	201300079430			City of Miamisburg Ohio	Left of main entrance	Parcel H minus road
K46 01507 0026	Vantage Pt	7995 Mound Advanced Technology Center Sec 1	C - Other Commercial Structures	7.857				City of Miamisburg	Large parking lot	Parcel H minus road
K46 01507 0027	Capstone Dr	7996 Mound Advanced Technology Center Sec 1	C - Other Commercial Structures	2.4123				City of Miamisburg	GH parking lot	Parcel 3 minus road
K46 01507 0028	Capstone Dr	7997 Mound Advanced Technology Center Sec 1	C - Office Building 1-2 Stories	1.3139				City of Miamisburg	OSE parking lot	Parcel 3 minus road
K46 01507 0029	Enterprise Ct	7998 Mound Advanced Technology Center Sec 1	C - Office Building 1-2 Stories	2.3279				City of Miamisburg	Bldg. 102 1075 Mound Road	Phase 1A
K46 01507 0030	Enterprise Ct	7999 Mound Advanced Technology Center Sec 1	C - Other Commercial Structures	4.8008				City of Miamisburg	Bldg. 105 1095 Mound Road	Parcel D minus road
K46 01507 0033	Vanguard Blvd	8002 Mound Advanced Technology Center Sec 1	C - Commercial Vacant Land	111.2165				City of Miamisburg	Large area with Parcel 4 & Phase I parts	Parcel 4, Phase 1B, 1C minus road
K46 01507 0034	Vanguard Blvd	8003 Mound Advanced Technology Center Sec 1	C - Commercial Vacant Land	14.9112				City of Miamisburg	Pond	Parcel 4 minus road
K46 01507 0036	Vanguard Blvd	8005 Mound Advanced Technology Center Sec 1	C - Commercial Vacant Land	2.7179				City of Miamisburg	Corner Benner and Rt 25	Parcel 4 minus road
K46 01507 0037	Vanguard Blvd	8006 Mound Advanced Technology Center Sec 1	C - Other Commercial Structures	0.8456				City of Miamisburg	Parking lot on right top of hill	Parcel 3 minus road
Total City Owned				150.5972						

Mound Site Parcel IDs from Montgomery County Property Records

January 2015

PARID	Parcel Location on record	Legal Description	Land Use	Acres	Deed	Sale	Conveyance	Owner per Record	General Location	Applicable ROD
MDC Owned Property										
K46 01109T0007	1374 Vanguard Dr	5-2-30, 5-2-36 Abatement 11-9-8, 15-7-21,22	E - Com Reinvest Area Tax Abatement	0.0000	2002-00128007			Miamisburg Mound Community	Redundant record	
K46 01507 0032	Vanguard Blvd	8001 Mound Advanced Technology Center Sec 1	I - Manufacturing & Assembly Medium	10.0802				Miamisburg Mound Community Improvement Corp	Excelitas area	Phase IB
K46 01507 0035	1374 Vanguard Blvd	8004 Mound Advanced Technology Center Sec 1	C - Commercial Warehouses	3.0332				Miamisburg Mound Community Improvement Corp	Flex Building	Parcel 4
			Total MDC Property	13.1134						
BOI Solutions, Inc. Owned Property										
K46 00501 0017	.955 Mound Road	2259	C - Office Building 1-2 Stories	5.3500	2012-00084260			BOI Solutions, Inc.	Most of former 6A +parts of Parcel 7	Parcel 6, 7, and 8
K46 00501 0018	Mound Road	2259	E - Exempt Property Owned by USA	0.2710	2012-00084260			BOI Solutions, Inc.	Part of 6A road front	Parcel 6, 7, and 8
			Total BOI Property	5.6210						
Dyrdek Group, Inc. Owned Property										
K46 01507 0031	.790 Enterprise Court	8000 Mound Advanced Technology Center Sec 1	C - Office Building 1-2 Stories	5.5191	201400069587			Dyrdek Group, Inc. 2850 Ocean Park Blvd. Ste 300 Santa Monica, CA 90405	Bldg. 100	Parcel D minus road
			Total Dyrdek Property	5.5191						

Mound Site Parcel IDs from Montgomery County Property Records

January 2015

DOE Owned Property										
PARID	Parcel Location on record	Legal Description	Land Use	Acres	Deed	Sale	Conveyance	Owner per Record	General Location	Applicable ROD
K46 00334 0021	Mound Ave	5-2-36	E - Exempt Property Owned by USA	0.7235	01214 P00012			United States of America	Small area north of parcel 6	Parcel 6, 7, and 8
K46 00501 0002	Mound Rd	2259PT 5-1-9	E - Exempt Property Owned by USA	5.063	01214 P00017			United States of America	Most of Parcel 6	Parcel 6, 7, and 8
K46 00501 0015		2259PT	E - Exempt Property Owned by USA	0.1170	2012-00082086		DOE HQ to EMCBC	United States of America Department of Energy	Northern slice of 6A	Parcel 6, 7, and 8
K46 00501 0016		2259PT 2290PT, 5-2-30/36	E - Exempt Property Owned by USA	36.9990	2012-00082087		DOE HQ to EMCBC	United States of America	approximate Parcel 7	Parcel 6, 7, and 8
K46 00503 0013	Old Main St	2290PT	E - Exempt Property Owned by USA	64.2570	01258P00056			United States of America	combo parts of Parcels 6 8 9	Parcel 6, 7, and 8; Parcel 9
K46 00503 0030	Old Main St	2290PT	E - Exempt Property Owned by USA	1.922	2012 0082087			United States of America	Part of Parcel 7 east of Excelitas	Parcel 6, 7, and 8
K46 01109 0001	Benner Rd	4777PT	E - Exempt Property Owned by USA	10.2040	1981-00376A001			United States of America	OU1	Parcel 9
K46 01109 0003	S Dixie Dr	4779	E - Exempt Property Owned by USA	1.6000	01258P000074			United States of America	Road west of laydown area	Parcel 9
				Total DOE Property	120.8855					
Total site acreage showing on county web (DOE, MDC, BOI)				295.7362						
				Historical acreage	305.0630					
Excludes roadways which continue to be covered by institutional controls.				Difference	-9.3268					

Notes:

This table shows current Montgomery County property records. It does not contain the MDC resurveys and parcel changes made in February 2015

The parcel descriptions and drawings following this table in Appendix F describe only the DOE-owned property leased to MDC.

As noted in Section 3.4.4, these parcel configurations are not the same as the Parcel 6, 7, 8, and 9 ROD parcel configurations.

Print

Close

PARID: K46 00334 0021
PARCEL LOCATION: MOUND AVE

NBHD CODE: C1900000

Owner

Name
 UNITED STATES OF AMERICA

Mailing

Name UNITED STATES OF AMERICA
 Mailing Address %
 City, State, Zip ,

Legal

Legal Description 5-2-36
 Land Use Description E - EXEMPT PROPERTY OWNED BY USA
 Acres .7235
 Deed 01214P00012
 Tax District Name MIAMI TWP-MIAMISBURG C-MIAMISBURG CSD

Values

***** TENTATIVE VALUES *****

Assessed Values	100%	35%
Land	\$4,920	\$1,720
Improvements	\$0	\$0
CAUV	\$0	\$0
Total	\$4,920	\$1,720

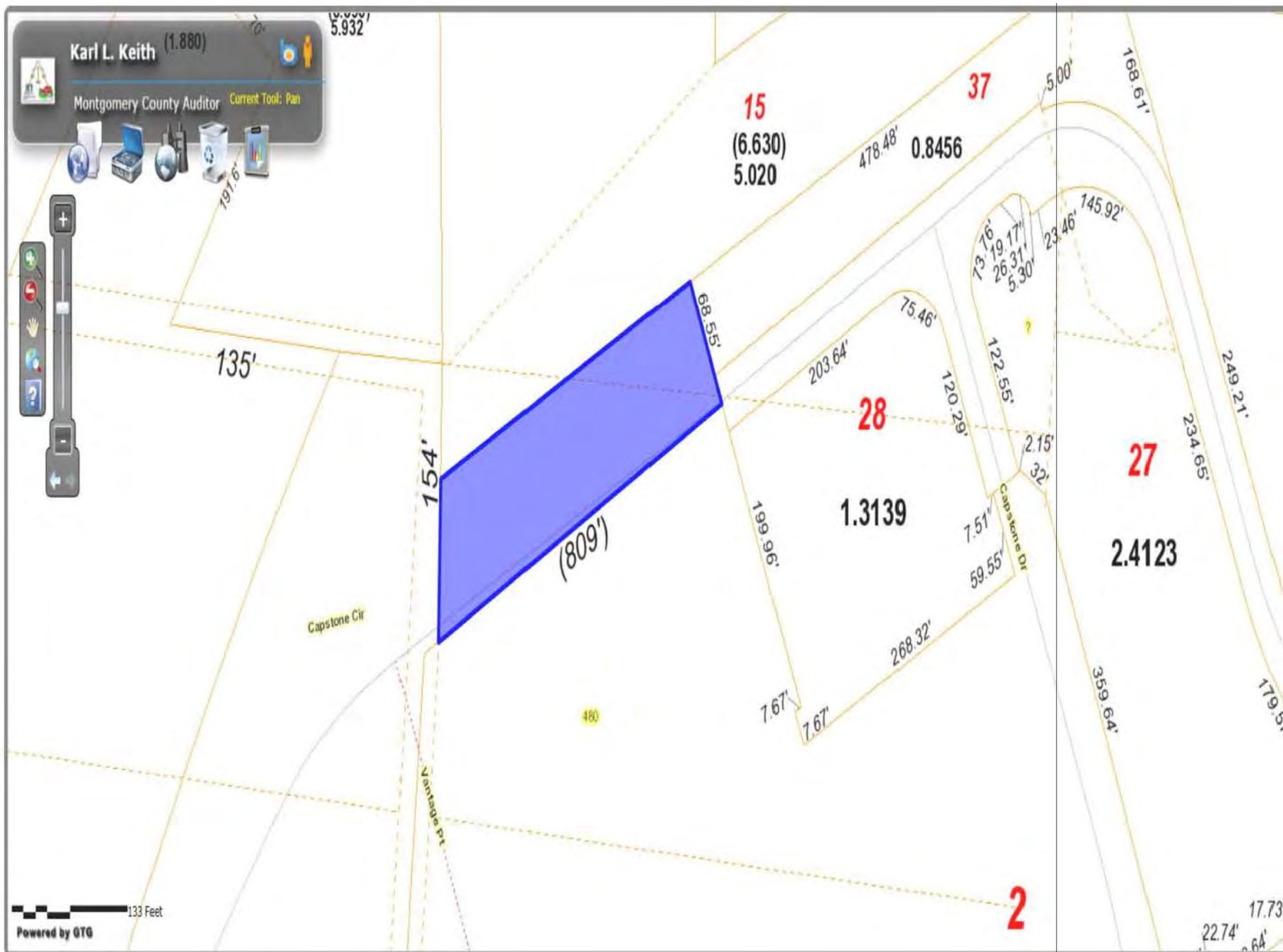
***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback	\$0.00
2.5% Rollback	\$0.00
Homestead	\$0.00
City of Dayton Credit	\$0.00
Reduction Factor	\$0.00

Tax Summary

Year	Prior Year	Prior Year Payments	1st Half Due 2/15/2013	1st Half Payments	2nd Half Due 7/19/2013	2nd Half Payments	Total Currently Due
2013	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Print

Close

PARID: K46 00501 0002
PARCEL LOCATION: MOUND RD

NBHD CODE: C1900000

Owner

Name
 UNITED STATES OF AMERICA

Mailing

Name ADDRESS UNKNOWN

Mailing Address

City, State, Zip ,

Legal

Legal Description 2259PT
 5-1-9
 Land Use Description E - EXEMPT PROPERTY OWNED BY USA
 Acres 5.063
 Deed 01214P00017
 Tax District Name MIAMI TWP-MIAMISBURG C-MIAMISBURG CSD

Values

***** TENTATIVE VALUES *****

Assessed Values	100%	35%
Land	\$141,760	\$49,620
Improvements	\$7,798,080	\$2,729,330
CAUV	\$0	\$0
Total	\$7,939,840	\$2,778,950

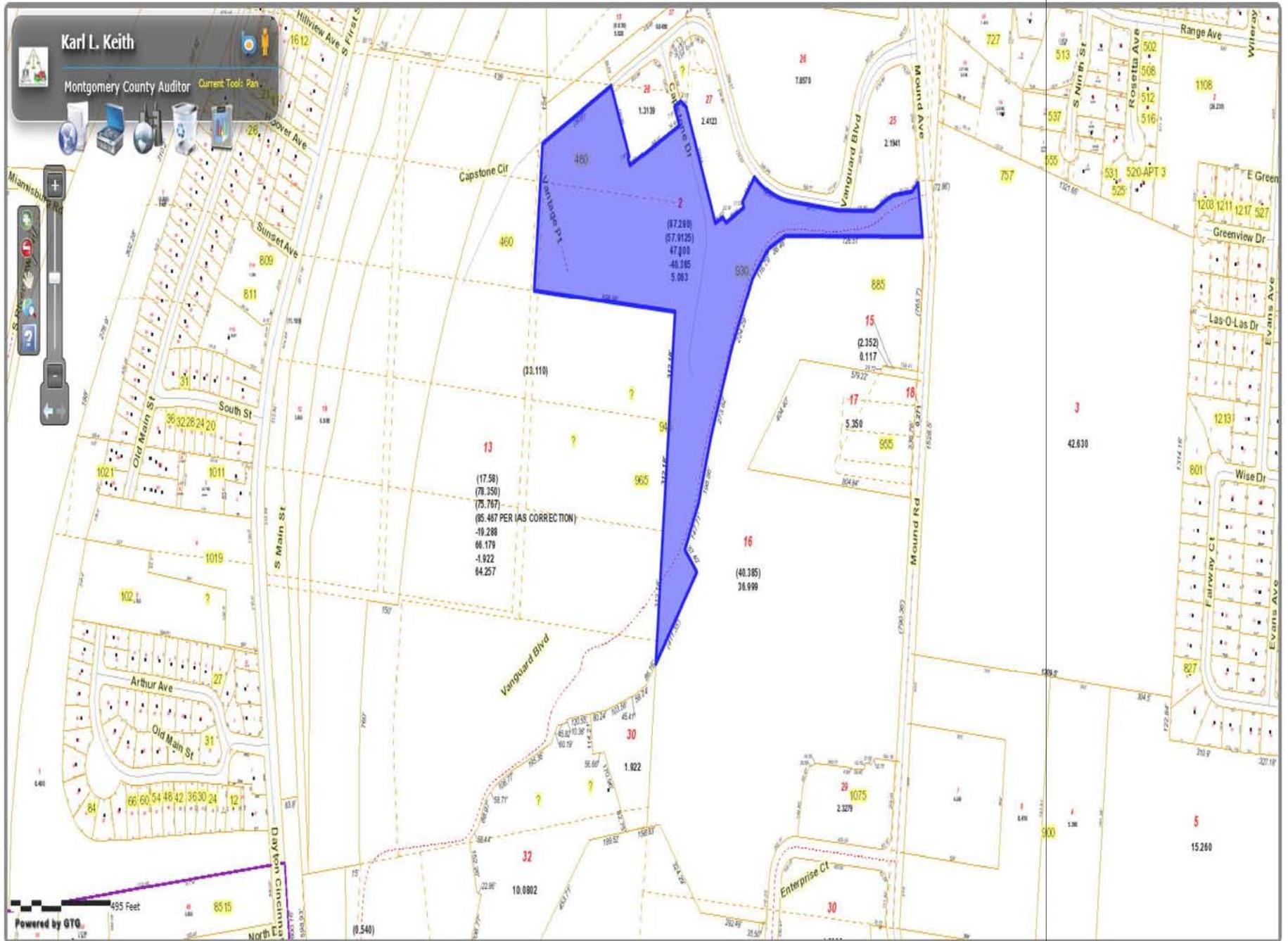
***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback	\$0.00
2.5% Rollback	\$0.00
Homestead	\$0.00
City of Dayton Credit	\$0.00
Reduction Factor	\$0.00

Tax Summary

Year	Prior Year	Prior Year Payments	1st Half Due 2/15/2013	1st Half Payments	2nd Half Due 7/19/2013	2nd Half Payments	Total Currently Due
2013	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Print

Close

PARID: K46 00501 0015
PARCEL LOCATION: MOUND RD

NBHD CODE: C1900000

Owner

Name
 UNITED STATES OF AMERICA DEPT OF ENERGY

Mailing

Name UNITED STATES OF AMERICA
 DEPT OF ENERGY
 Mailing Address 250 E 5TH ST
 City, State, Zip CINCINNATI, OH 45202

Legal

Legal Description 2259PT
 Land Use Description E - EXEMPT PROPERTY OWNED BY USA
 Acres .117
 Deed
 Tax District Name MIAMI TWP-MIAMISBURG C-MIAMISBURG CSD

Sales

Date	Sale Price	Deed Reference	Seller	Buyer
12-DEC-12		201200082086	UNITED STATES OF AMERICA	UNITED STATES OF AMERICA

Values

***** TENTATIVE VALUES *****

Assessed Values	100%	35%
Land	\$3,280	\$1,150
Improvements	\$0	\$0
CAUV	\$0	\$0
Total	\$3,280	\$1,150

***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback	\$0.00
2.5% Rollback	\$0.00
Homestead	\$0.00
City of Dayton Credit	\$0.00
Reduction Factor	\$0.00

Tax Summary

Year	Prior Year	Prior Year Payments	1st Half Due 2/15/2013	1st Half Payments	2nd Half Due 7/19/2013	2nd Half Payments	Total Currently Due
2013	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Print

Close

PARID: K46 00501 0016
PARCEL LOCATION: MOUND RD

NBHD CODE: C1900000

Owner

Name
 UNITED STATES OF AMERICA

Mailing

Name ADDRESS UNKNOWN

Mailing Address

City, State, Zip ,

Legal

Legal Description 2259PT 2290PT, 5-2-30/36

Land Use Description E - EXEMPT PROPERTY OWNED BY USA
 Acres 36.999

Deed
 Tax District Name MIAMI TWP-MIAMISBURG C-MIAMISBURG CSD

Sales

Date	Sale Price	Deed Reference	Seller	Buyer
13-DEC-12		201200082087	UNITED STATES OF AMERICA	UNITED STATES OF AMERICA

Values

***** TENTATIVE VALUES *****

Assessed Values	100%	35%
Land	\$1,001,840	\$350,640
Improvements	\$688,560	\$241,000
CAUV	\$0	\$0
Total	\$1,690,400	\$591,640

***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback	\$0.00
2.5% Rollback	\$0.00
Homestead	\$0.00
City of Dayton Credit	\$0.00
Reduction Factor	\$0.00

Tax Summary

Year	Prior Year	Prior Year Payments	1st Half Due 2/15/2013	1st Half Payments	2nd Half Due 7/19/2013	2nd Half Payments	Total Currently Due
2013	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Print

Close

PARID: K46 00503 0013
PARCEL LOCATION: OLD MAIN ST

NBHD CODE: C1900000

Owner

Name
 UNITED STATES OF AMERICA

Mailing

Name UNITED STATES OF AMERICA
 Mailing Address %
 City, State, Zip ,

Legal

Legal Description 2290PT
 Land Use Description E - EXEMPT PROPERTY OWNED BY USA
 Acres 64.257
 Deed 01258P00056
 Tax District Name MIAMI TWP-MIAMISBURG C-MIAMISBURG CSD

Values

***** TENTATIVE VALUES *****

Assessed Values	100%	35%
Land	\$1,799,200	\$629,720
Improvements	\$9,086,950	\$3,180,430
CAUV	\$0	\$0
Total	\$10,886,150	\$3,810,150

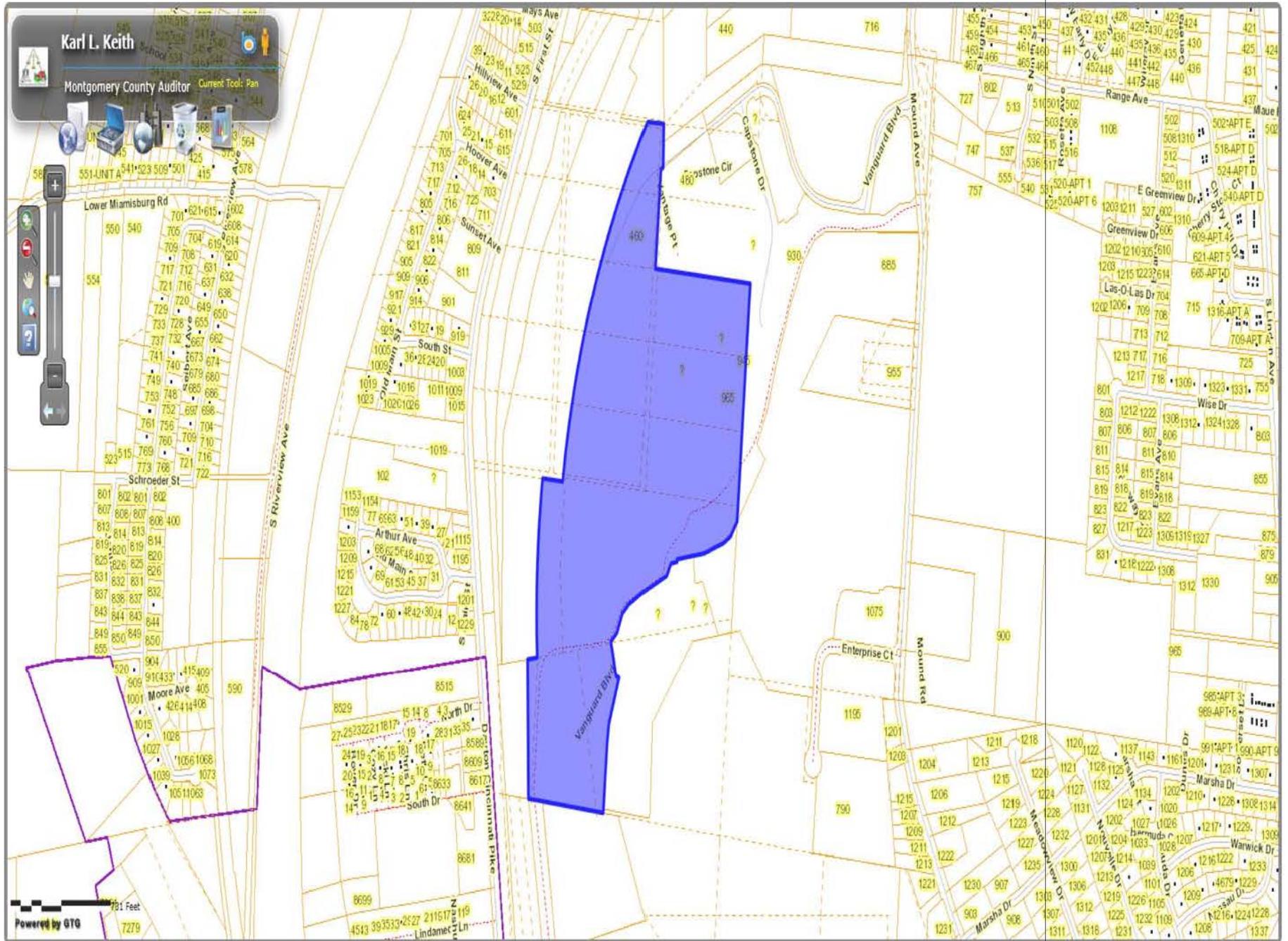
***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback	\$0.00
2.5% Rollback	\$0.00
Homestead	\$0.00
City of Dayton Credit	\$0.00
Reduction Factor	\$0.00

Tax Summary

Year	Prior Year	Prior Year Payments	1st Half Due 2/15/2013	1st Half Payments	2nd Half Due 7/19/2013	2nd Half Payments	Total Currently Due
2013	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Print

Close

PARID: K46 00503 0030
PARCEL LOCATION: OLD MAIN ST

NBHD CODE: C1900000

Owner

Name
 UNITED STATES OF AMERICA

Mailing

Name UNITED STATES OF AMERICA
 DEPT OF ENERGY
 Mailing Address 250 E 5TH ST
 City, State, Zip CINCINNATI, OH 45202

Legal

Legal Description 2290PT
 Land Use Description E - EXEMPT PROPERTY OWNED BY USA
 Acres 1.922
 Deed 01258P00056
 Tax District Name MIAMI TWP-MIAMISBURG C-MIAMISBURG CSD

Sales

Date	Sale Price	Deed Reference	Seller	Buyer
13-DEC-12		201200082087	UNITED STATES OF AMERICA	UNITED STATES OF AMERICA

Values

***** TENTATIVE VALUES *****

Assessed Values	100%	35%
Land	\$53,810	\$18,830
Improvements	\$0	\$0
CAUV	\$0	\$0
Total	\$53,810	\$18,830

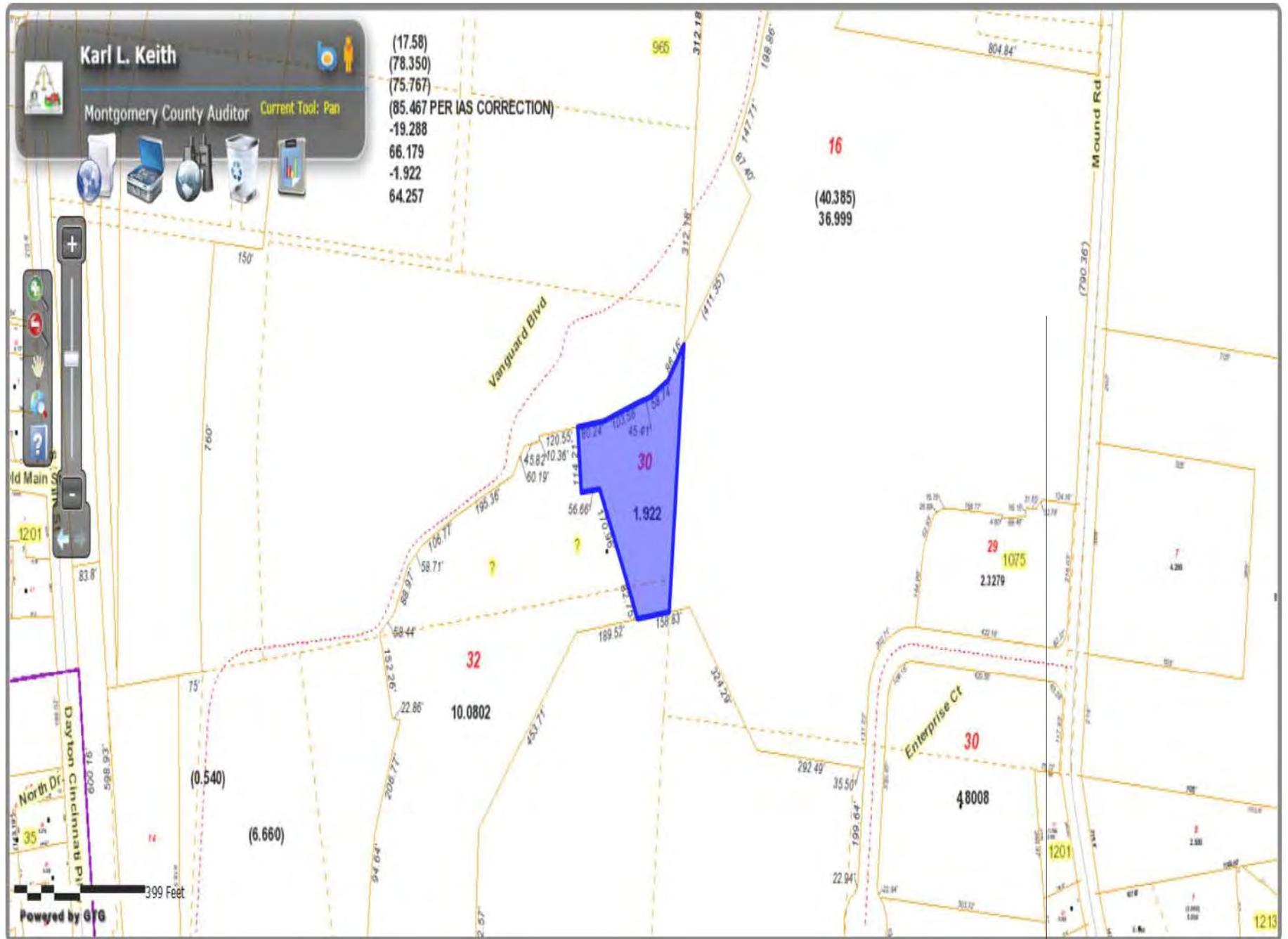
***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback	\$0.00
2.5% Rollback	\$0.00
Homestead	\$0.00
City of Dayton Credit	\$0.00
Reduction Factor	\$0.00

Tax Summary

Year	Prior Year	Prior Year Payments	1st Half Due 2/15/2013	1st Half Payments	2nd Half Due 7/19/2013	2nd Half Payments	Total Currently Due
2013	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Print

Close

PARID: K46 01109 0001
PARCEL LOCATION: BENNER RD

NBHD CODE: C1900000

Owner

Name
 UNITED STATES OF AMERICA

Mailing

Name HARRY HILL AREA MANNAGER
 DEPT OF ENERGY DAYTON AREA
 Mailing Address PO BOX 66
 City, State, Zip MIAMISBURG, OH 45343 0066

Legal

Legal Description 4777PT
 Land Use Description E - EXEMPT PROPERTY OWNED BY USA
 Acres 10.204
 Deed 1981-00376A001
 Tax District Name MIAMI TWP-MIAMISBURG C-MIAMISBURG CSD

Values

***** TENTATIVE VALUES *****

Assessed Values	100%	35%
Land	\$58,980	\$20,640
Improvements	\$0	\$0
CAUV	\$0	\$0
Total	\$58,980	\$20,640

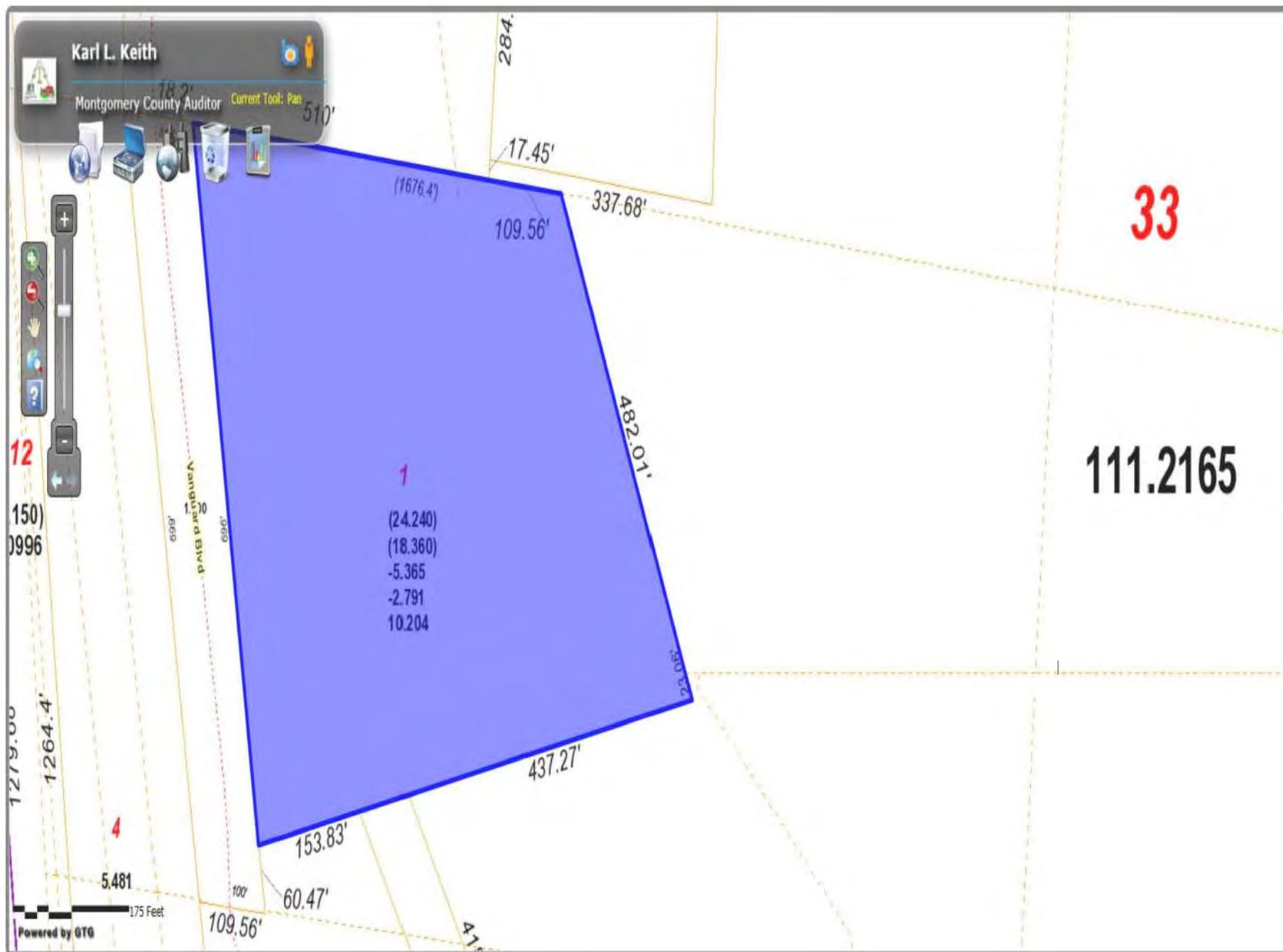
***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback	\$0.00
2.5% Rollback	\$0.00
Homestead	\$0.00
City of Dayton Credit	\$0.00
Reduction Factor	\$0.00

Tax Summary

Year	Prior Year	Prior Year Payments	1st Half Due 2/15/2013	1st Half Payments	2nd Half Due 7/19/2013	2nd Half Payments	Total Currently Due
2013	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Print

Close

PARID: K46 01109 0003
PARCEL LOCATION: DIXIE DR S

NBHD CODE: C1900000

Owner

Name
 UNITED STATES OF AMERICA

Mailing

Name U S OF AMERICA
 Mailing Address PO BOX 271
 City, State, Zip WILMINGTON, OH 45177 0271

Legal

Legal Description 4779
 Land Use Description E - EXEMPT PROPERTY OWNED BY USA
 Acres 1.6
 Deed 01258P00074
 Tax District Name MIAMI TWP-MIAMISBURG C-MIAMISBURG CSD

Values

***** TENTATIVE VALUES *****

Assessed Values	100%	35%
Land	\$10,880	\$3,810
Improvements	\$0	\$0
CAUV	\$0	\$0
Total	\$10,880	\$3,810

***** TENTATIVE VALUES *****

Current Year Rollback Summary

10% Rollback	\$0.00
2.5% Rollback	\$0.00
Homestead	\$0.00
City of Dayton Credit	\$0.00
Reduction Factor	\$0.00

Tax Summary

Year	Prior Year	Prior Year Payments	1st Half Due 2/15/2013	1st Half Payments	2nd Half Due 7/19/2013	2nd Half Payments	Total Currently Due
2013	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

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KAL6-15-7-26, 33, 34, 35 & 36 ALL

TRANSFERRED
15 FEB 20 AM 9:32
KARL L. KEITH
AUDITOR

225 P19

Type: DEE
Kind: PLAT
Recorded: 02/20/2015 09:43:07 AM
Fee Amt: \$259.20 Page 1 of 3
Montgomery County, OH
Willis E. Blackshear County Recorder
File# 2015-0008913

DESCRIPTION:
THE WITHIN PLAT IS A REPLAT OF 139.7546 ACRES, BEING ALL OF LOTS 7995, 8002, 8003, 8004, & 8005 OF THE CONSECUTIVE LOT NUMBERS OF THE CITY OF MIAMISBURG, AKA MOUND ADVANCED TECHNOLOGY CENTER, SECTION 1, AS RECORDED IN BOOK 222, PAGE 30 OF THE PLAT RECORDS OF MONTGOMERY COUNTY, AND LOCATED IN SECTION 25, TOWN 1, RANGE 6 M.Rs. AND SECTIONS 30, 35, AND 36, TOWN 2, RANGE 5 M.Rs., BEING LOTS 7995, 8002, 8003 & 8005 AS CONVEYED TO CITY OF MIAMISBURG, OHIO BY IR# DEED 13-079430, AND LOT 8004 AS CONVEYED TO THE MOUND COMMUNITY IMPROVEMENT CORPORATION NKA MOUND DEVELOPMENT CORPORATION BY IR# 09-011643 OF THE DEED RECORDS OF MONTGOMERY COUNTY, CONTAINING 139.7358 ACRES OF WHICH 139.6551 ACRES ARE IN LOTS AND 0.0807 ACRES IN STREETS.

RECORD PLAN MOUND ADVANCED TECHNOLOGY CENTER SECTION 1-A

BEING A REPLAT OF LOTS 7995, 8002, 8003, 8004, & 8005 OF CONSECUTIVE LOT NUMBERS OF THE CITY OF MIAMISBURG AKA MOUND ADVANCED TECHNOLOGY CENTER SECTION 1, PLAT BOOK 222, PAGE 30 SECTION 25, TOWN 1, RANGE 6 M.Rs. SECTIONS 30, 35, & 36, TOWN 2, RANGE 5 M.Rs. MONTGOMERY COUNTY, OHIO 139.6551 ACRES IN LOTS 0.0807 ACRES IN STREETS 139.7358 ACRES TOTAL NOVEMBER 2014

CERTIFICATION:
THE MEASUREMENTS ARE CERTIFIED CORRECT AND IRON PINS WILL BE SET AS SHOWN, CURVE DISTANCES ARE MEASURED ON THE ARC.

Raymond B. Mefford
RAYMOND B. MEFFORD, PS#7367 DATE 2/19/15



DEDICATION:
WE THE UNDERSIGNED BEING ALL THE OWNERS AND LEINHOLDERS OF THE LAND BEING SUBDIVIDED DO HEREBY ACKNOWLEDGE THE MAKING AND SIGNING OF THIS PLAT TO BE OUR VOLUNTARY ACT AND DEED, AND DO HEREBY DEDICATE THE STREETS AND RESERVE THE EASEMENTS AS SHOWN WITHIN THE PLAT TO THE PUBLIC USE FOREVER.

PREPARED BY:
JUDGE ENGINEERING CO.
1201 E. DAVID ROAD
KETTERING, OHIO 45429
PHONE (937)294-1441 FAX (937)294-6498

OWNER: CITY OF MIAMISBURG, OHIO

W. Z. Miller
WITNESS

Kim Conley
WITNESS

Keith Johnson
KEITH JOHNSON, CITY MANAGER

STATE OF OHIO, COUNTY OF MONTGOMERY S.S.

BE IT REMEMBERED, THAT ON THIS 16th DAY OF February, 2015 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY CAME KEITH JOHNSON, CITY MANAGER MIAMISBURG, OHIO KNOWN AND ACKNOWLEDGED THE SIGNING AND EXECUTION OF THE WITHIN PLAT TO BE HIS VOLUNTARY ACT AND DEED.

IN TESTIMONY THEREOF, I HAVE HEREUNTO SET MY HAND AND NOTARIAL SEAL ON THE DAY AND DATE WRITTEN ABOVE

Leslie J. Karacia
NOTARY PUBLIC
MY COMMISSION EXPIRES 6/16/15



LESLIE J. KARACIA, Notary Public
In and for the State of Ohio
My Commission Expires June 16, 2015

OWNER: MOUND COMMUNITY IMPROVEMENT CORPORATION
NKA MOUND DEVELOPMENT CORPORATION
** MIAMISBURG

Raymond B. Mefford
WITNESS

Eric Cluxton
WITNESS

Eric Cluxton
ERIC CLUXTON, PRESIDENT

STATE OF OHIO, COUNTY OF MONTGOMERY S.S.

BE IT REMEMBERED, THAT ON THIS 15th DAY OF February, 2015 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY CAME ERIC CLUXTON, PRESIDENT MOUND COMMUNITY IMPROVEMENT CORPORATION, DBA: MOUND DEVELOPMENT CORPORATION KNOWN AND ACKNOWLEDGED THE SIGNING AND EXECUTION OF THE WITHIN PLAT TO BE HIS VOLUNTARY ACT AND DEED.

IN TESTIMONY THEREOF, I HAVE HEREUNTO SET MY HAND AND NOTARIAL SEAL ON THE DAY AND DATE WRITTEN ABOVE

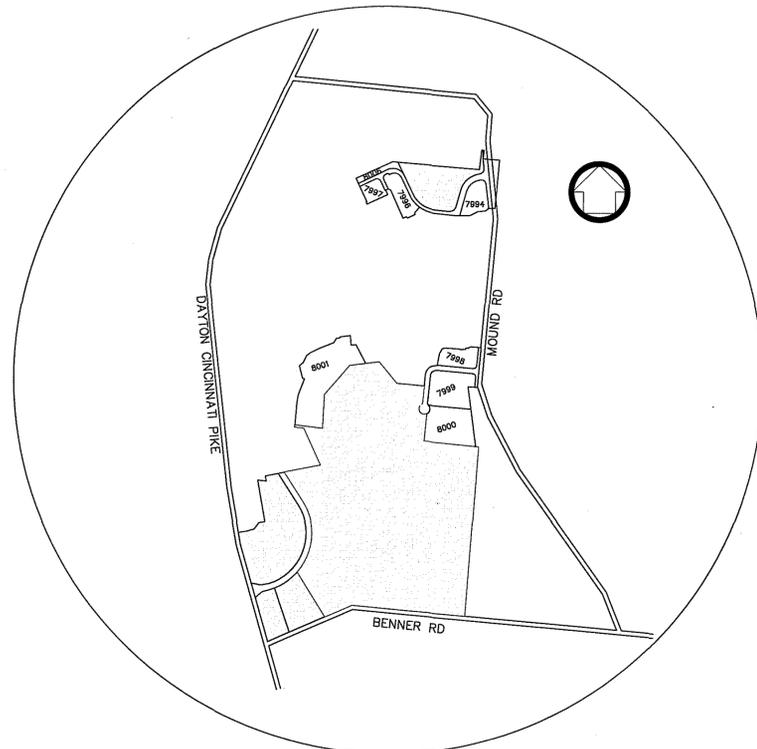
Lorraine A. Huber
NOTARY PUBLIC
MY COMMISSION EXPIRES 5/22/16

LORRAINE A. HUBER, Notary Public
In and for the State of Ohio
My Commission Expires May 22, 2016



PLAT BOOK 225 PAGE:

19



VICINITY MAP
NTS

APPROVAL

APPROVED AND ACCEPTED THIS 15th DAY OF December, 2014
BY THE PLANNING COMMISSION OF THE CITY OF MIAMISBURG, OHIO

Leslie Karacia
SECRETARY
MIAMISBURG, OHIO

APPROVED AND ACCEPTED THIS 16th DAY OF December, 2014
BY THE COUNCIL OF THE CITY OF MIAMISBURG, OHIO

Richard C. Cluxton, Jr.
MAYOR
MIAMISBURG, OHIO

TRANSFERRED
15 FEB 20 AM 9:32
KARL L. KEITH
AUDITOR

OWNER'S STATEMENT:

DATE 2/16, 2015

STATE OF OHIO, COUNTY OF MONTGOMERY, S.S.
KEITH JOHNSON, IN HIS CAPACITY AS CITY MANAGER MIAMISBURG, OHIO BEING DULY SWORN, SAYS THAT ALL PERSONS AND CORPORATIONS, TO THE BEST OF HIS KNOWLEDGE, INTERESTED IN THIS DEDICATION, EITHER AS OWNERS OR LEINHOLDERS, HAVE UNITED IN ITS EXECUTION

OWNER

IN TESTIMONY WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL ON THE DAY AND DATE ABOVE WRITTEN.

Leslie J. Karacia
NOTARY PUBLIC
MY COMMISSION EXPIRES: 6/16/15

LESLIE J. KARACIA, Notary Public
In and for the State of Ohio
My Commission Expires June 16, 2015



LINES OF OCCUPATION WHERE EXISTING AGREE IN GENERAL WITH PROPERTY LINES

PERTINENT DOCUMENTS:
DEED RECORDS, PLATS AND SURVEYS AS SHOWN ON THIS PLAT
in and for the:
ALL MONUMENTATION SET/FOUND IN GOOD CONDITION UNLESS OTHERWISE NOTED

SUPERIMPOSED AREA NOTE:

ALL OF THE LANDS OF THE DEDICATORS FROM WHICH THIS PLAT IS DRAWN

COVENANTS AND RESTRICTIONS:

- LOTS SHOWN ON THIS PLAT SHALL BE SUBJECT TO AND GOVERNED BY ALL APPLICABLE ZONING REQUIREMENTS OF THE CITY OF MIAMISBURG, OHIO
- MOUND ADVANCED TECHNOLOGY CENTER DECLARATION OF COVENANTS AND RESTRICTIONS DATED DECEMBER 14, 2012 AND RECORDED AT INSTRUMENT NO. 2012-084258
- THE PROPERTY THAT IS THE SUBJECT OF THIS PLAT WAS PREVIOUSLY OWNED BY THE UNITED STATES GOVERNMENT. THE DEEDS TRANSFERRING THE PROPERTY FROM THE UNITED STATES GOVERNMENT, THROUGH ITS AGENCY THE DEPARTMENT OF ENERGY, CREATED COVENANTS AND RESTRICTIONS THAT AFFECT THE USE OF THE PROPERTY BY ALL FUTURE OWNERS, TENANTS, EMPLOYEES AND VISITORS. THESE COVENANTS AND RESTRICTIONS CAN BE VIEWED IN THE DEEDS WHICH ARE RECORDED IN THE MONTGOMERY COUNTY, OHIO RECORDER'S OFFICE. THESE DEEDS ARE RECORDED AT THE FOLLOWING LOCATIONS AND ON THE FOLLOWING DATES:

- DEED RECORDED DECEMBER 21, 1999 AT DEED 99-141468
- DEED RECORDED DECEMBER 21, 1999 AT DEED 99-141469
- DEED RECORDED OCTOBER 17, 2002 AT DEED 02-128007
- DEED RECORDED OCTOBER 18, 2002 AT DEED 02-128206
- DEED RECORDED NOVEMBER 22, 2002 AT DEED 02-146503
- DEED RECORDED NOVEMBER 22, 2002 AT DEED 02-146504
- DEED RECORDED FEBRUARY 24, 2009 AT DEED 09-116432
- DEED RECORDED DECEMBER 19, 2012 AT DEED 12-083743

THE RESPECTIVE COVENANTS AND RESTRICTIONS SET FORTH IN THESE DEEDS RUN WITH THE RESPECTIVE LANDS TRANSFERRED THEREBY AND BIND ALL HEIRS, SUCCESSORS AND ASSIGNS

SHEET 1 of 3

APPROVED FOR DESCRIPTION

Leslie Karacia
MONTGOMERY COUNTY ENGINEER

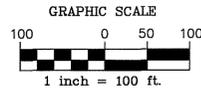
14-0146
JOB NO.

02/17/2015
DATE

Ray Johnson
CHECKED BY



BEARINGS BASED ON THE CENTERLINE
OF BENNER RD. PER IR#DEED 09-011643
N 84°29'45" W



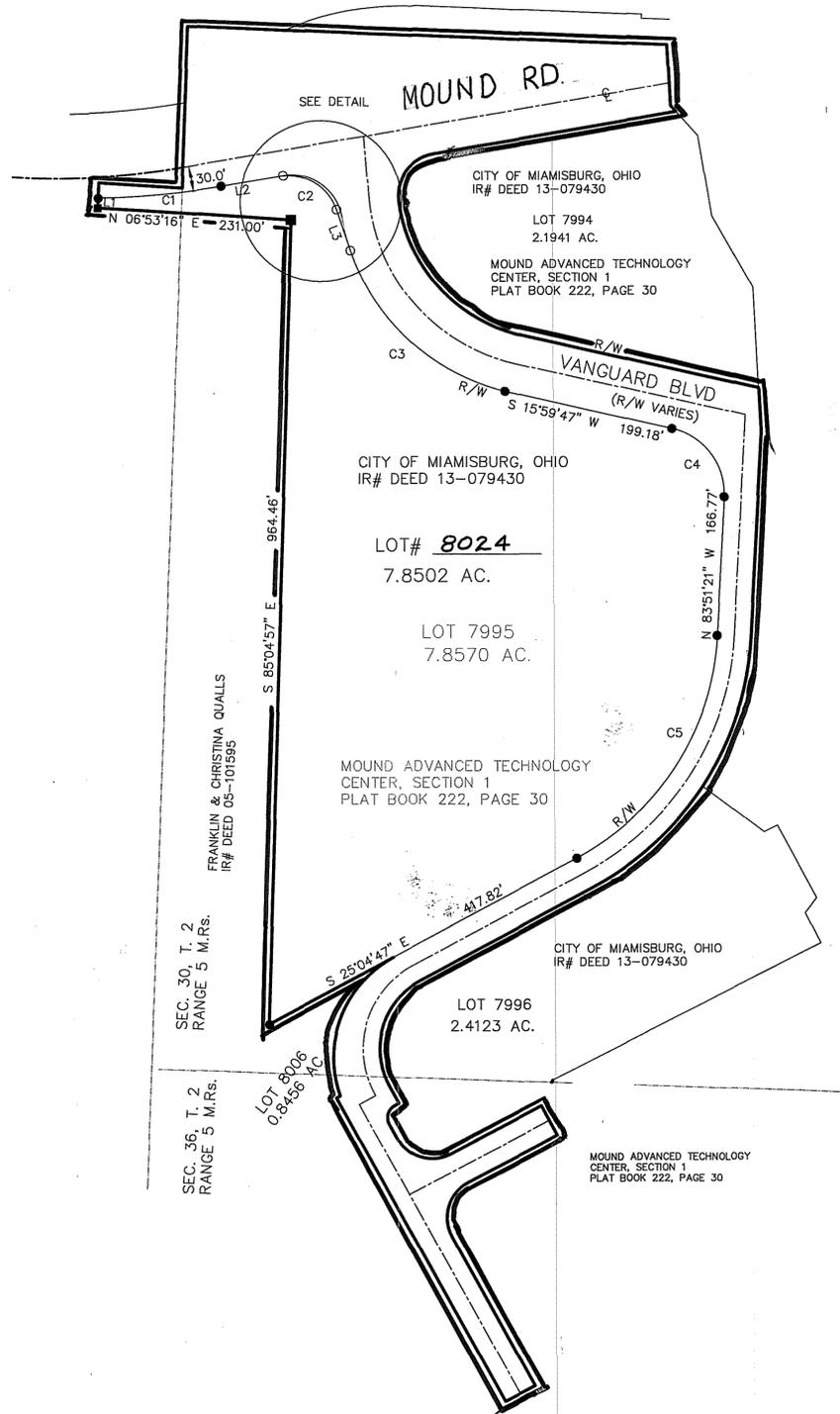
RECORD PLAN
**MOUND ADVANCED
TECHNOLOGY CENTER
SECTION 1-A**

BEING A REPLAT OF LOTS 7995, 8002, 8003, 8004, & 8005
OF CONSECUTIVE LOT NUMBERS OF THE CITY OF MIAMISBURG
AKA MOUND ADVANCED TECHNOLOGY CENTER
SECTION 1, PLAT BOOK 222, PAGE 30
SECTION 25, TOWN 1, RANGE 6 M.Rs.
SECTIONS 30, 35, & 36, TOWN 2, RANGE 5 M.Rs.
MONTGOMERY COUNTY, OHIO
139.6551 ACRES IN LOTS
0.0807 ACRES IN STREETS
139.7358 ACRES TOTAL
NOVEMBER 2014

TRANSFERRED
15 FEB 20 AM 9:33
KARL L. KEITH
AUDITOR

225 P 19A

Type: DEE
Kind: PLAT
Recorded: 02/20/2015 09:43:07 AM
Fee Amt: \$259.20 Page 1 of 3
Montgomery County, OH
Willis E. Blackshear County Recorder
File# 2015-00008913

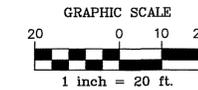
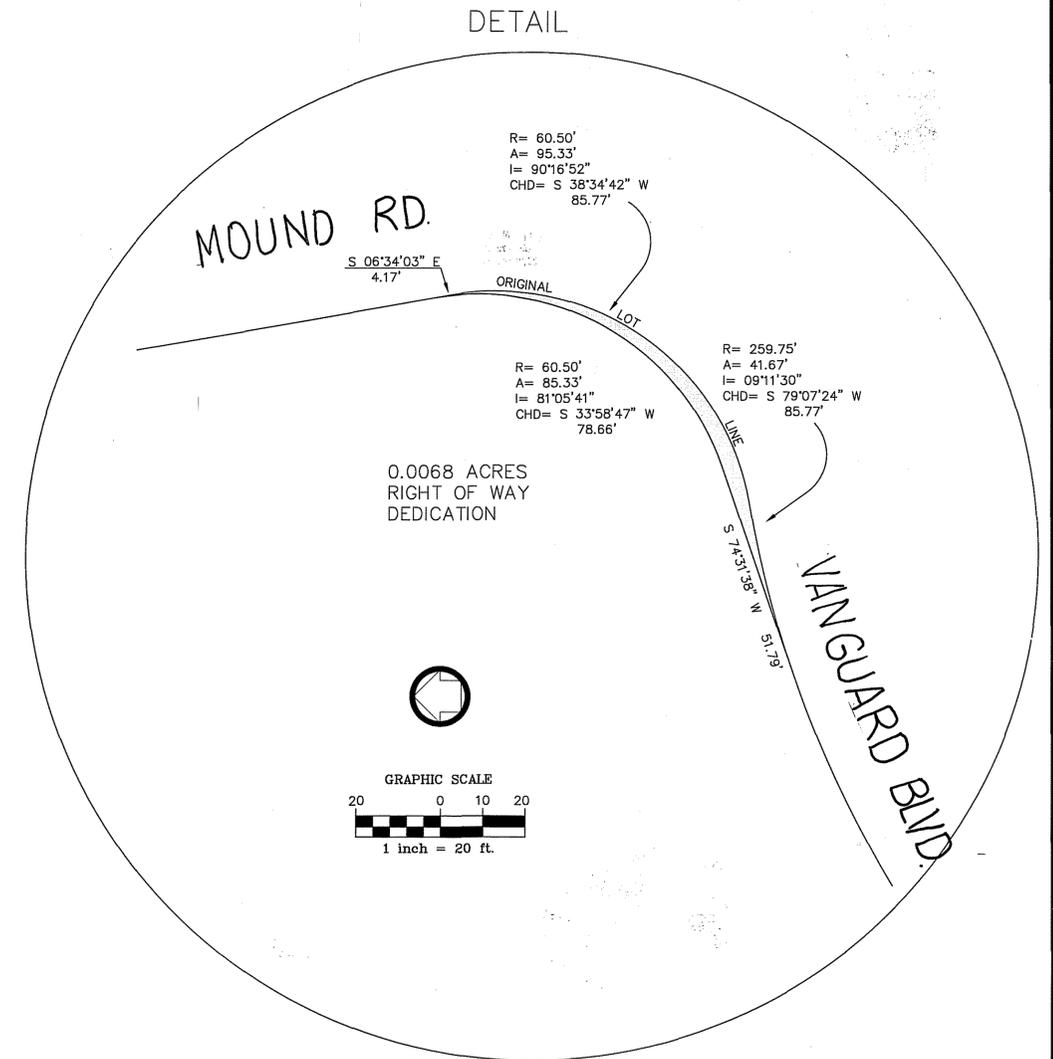


LINE TABLE

LINE	BEARING	DIST
L1	S 84°38'35" E	11.77'
L2	S 06°34'03" E	71.52'
L3	S 74°31'38" W	51.79'

CURVE TABLE

CURVE	RADIUS	DISTANCE	DELTA	CHORD
C1	923.37'	147.17'	09°07'54"	S 02°00'06" E 147.01'
C2	60.50'	85.63'	81°05'41"	S 33°58'47" W 78.66'
C3	259.75'	265.35'	58°31'52"	S 45°15'43" W 253.96'
C4	80.00'	111.91'	80°08'52"	S 56°04'13" W 103.00'
C5	320.67'	328.96'	58°46'34"	N 54°28'04" W 314.72'



INCHES 1 2 3
PLAT BOOK 225 PAGE:

19A

TRANSFERRED
15 FEB 20 AM 9:33
KARL L. KEITH
AUDITOR

PREPARED BY:

JUDGE ENGINEERING CO.
1201 E. DAVID ROAD
KETERING, OHIO 45429
PHONE (937)294-1441 FAX (937)294-6498

SHEET 2 of 3

RECORD PLAN
**MOUND ADVANCED
 TECHNOLOGY CENTER
 SECTION 1-A**

BEING A REPLAT OF LOTS 7995, 8002, 8003, 8004, & 8005
 OF CONSECUTIVE LOT NUMBERS OF THE CITY OF MIAMISBURG
 AKA MOUND ADVANCED TECHNOLOGY CENTER
 SECTION 1, PLAT BOOK 222, PAGE 30
 SECTION 25, TOWN 1, RANGE 6 M.Rs.
 SECTIONS 30, 35, & 36, TOWN 2, RANGE 5 M.Rs.
 MONTGOMERY COUNTY, OHIO
 139.6551 ACRES IN LOTS
 0.0807 ACRES IN STREETS
 139.7358 ACRES TOTAL
 NOVEMBER 2014

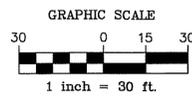
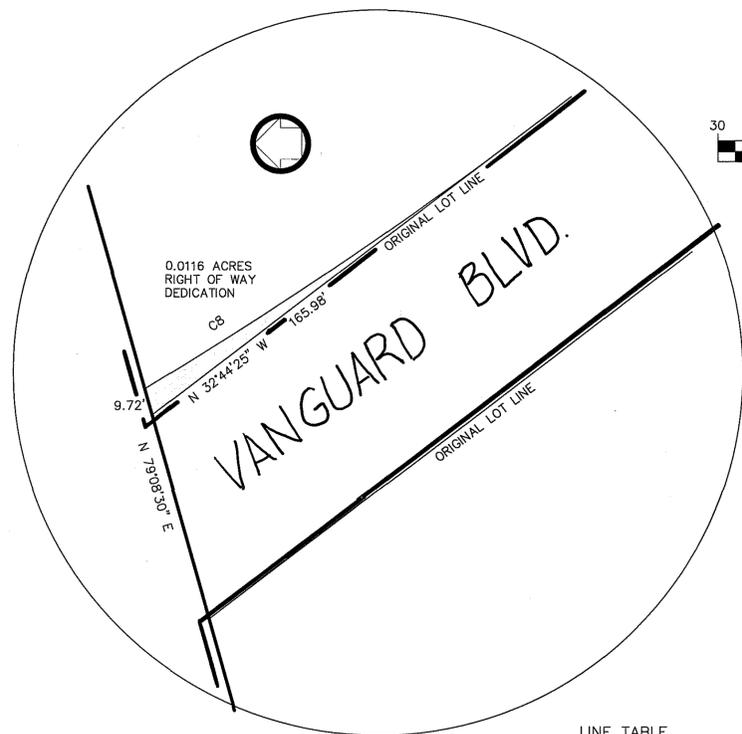
TRANSFERRED
 15 FEB 20 AM 9:33
 KARL L. KEITH
 AUDITOR

225P19B

Type: DEE
 Kind: PLAT
 Recorded: 02/20/2015 09:43:07 AM
 Fee Amt: \$259.20 Page 1 of 3
 Montgomery County, OH
 Willis E. Blackshear County Recorder
 File# 2015-00008913

BEARINGS BASED ON THE CENTERLINE
 OF BENNER RD. PER IR#DEED 09-011643
 N 84°29'45" W

DETAIL

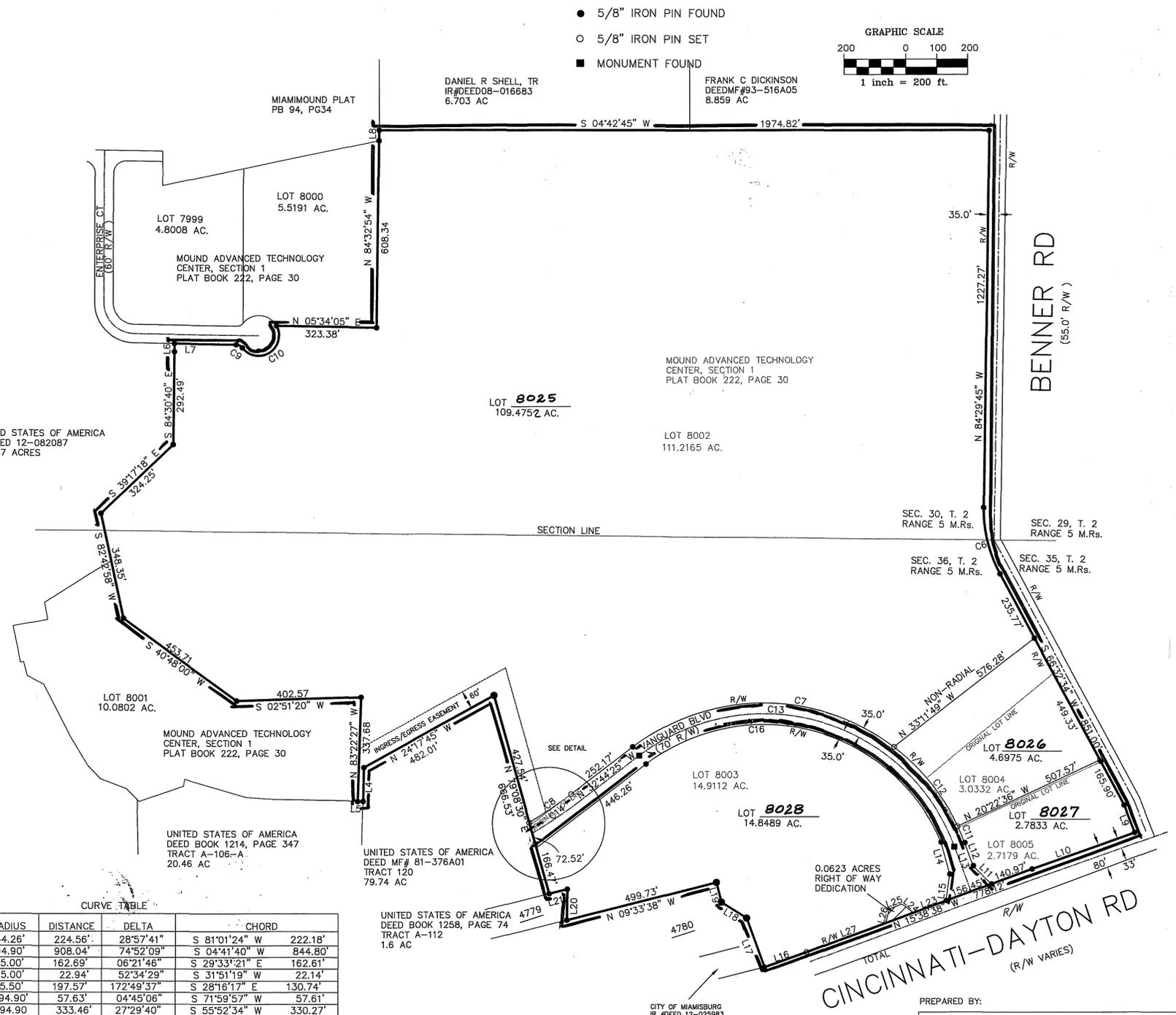


LINE TABLE

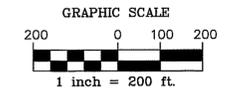
LINE	BEARING	DIST
L4	N 83°58'45" W	109.56'
L5	N 05°38'00" E	17.45'
L6	S 84°26'02" E	35.50'
L7	S 05°34'05" W	199.64'
L8	S 83°59'35" E	34.07'
L9	S 73°18'03" W	95.81'
L10	N 14°40'53" W	351.94'
L11	N 49°26'04" E	82.96'
L12	N 74°22'30" E	79.56'
L13	N 74°00'30" E	154.80'
L14	S 79°38'33" W	107.41'
L15	N 77°26'21" W	86.71'
L16	N 15°01'37" W	143.86'
L17	N 74°56'41" E	170.32'
L18	N 37°22'23" E	95.69'
L19	N 80°25'45" E	65.98'
L20	S 84°25'01" E	100.51'
L21	N 09°26'26" W	60.47'
L22	N 84°30'00" W	56.66'
L23	N 15°38'38" W	112.57'
L24	N 41°42'54" E	46.34'
L25	N 15°37'26" W	43.00'
L26	N 69°56'51" W	48.07'
L27	N 15°38'38" W	274.02'

CURVE TABLE

CURVE	RADIUS	DISTANCE	DELTA	CHORD
C6	444.26'	224.56'	28°57'41"	S 81°01'24" W 222.18'
C7	694.90'	908.04'	74°52'09"	S 04°41'40" W 844.80'
C8	1465.00'	162.69'	06°21'46"	S 29°33'21" E 162.61'
C9	25.00'	22.94'	52°34'29"	S 31°51'19" W 22.14'
C10	65.50'	197.57'	172°49'37"	S 28°16'17" E 130.74'
C11	694.90'	57.63'	04°45'06"	S 71°59'57" W 57.61'
C12	694.90'	333.46'	27°29'40"	S 55°52'34" W 330.27'
C13	659.90'	1233.69'	107°06'55"	S 20°49'03" W 1061.72'
C14	1500.00'	176.29'	06°44'01"	S 29°22'24" E 176.19'
C15	1535.00'	189.86'	07°05'13"	S 29°11'48" E 189.74'
C16	624.90'	1139.69'	104°29'46"	S 19°30'28" W 988.18'



- 5/8" IRON PIN FOUND
- 5/8" IRON PIN SET
- MONUMENT FOUND



PLAT BOOK 225 PAGE:

19B

TRANSFERRED
 15 FEB 20 AM 9:33
 KARL L. KEITH
 AUDITOR

PREPARED BY:
JUDGE ENGINEERING CO.
 1201 E. DAVID ROAD
 KETTERING, OHIO 45429
 PHONE (937)294-1441 FAX (937)294-6498

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Appendix G
Mound Site
Sample Collection Procedures

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Procedure B1—Sampling Method for BVA Wells

The following procedure will be utilized for collection of groundwater samples from wells at the Mound site screened in the Buried Valley Aquifer using a low-flow method.

Field parameter measurements to be recorded:

- Water quality indicators (pH, dissolved oxygen, and specific conductance)
- Temperature
- Oxidation-reduction potential (ORP)
- Turbidity
- Water level

Groundwater samples will be collected using the following procedural steps for low-flow sampling:

- [1] Measure the depth to water prior to purging or using a portable sampling pump.
If a portable pump is used for sampling of wells, the water level should be measured again for monitoring of drawdown during purging. Purging can commence immediately. Pumps should be lowered to approximately 2 feet (ft) from the bottom of the screened interval. Efforts should be made to slowly lower pumps into wells to prevent agitation of the water column.
- [2] Turn pump on at lowest setting and slowly increase the flow rate until water begins to emerge from the discharge tube. Adjust the flow rate to approximately 500 milliliters per minute (mL/min).
- [3] After 1 pump/tubing volume has been purged, water quality indicators, dissolved oxygen (DO), ORP, and turbidity will be measured at regular intervals based on volume purged (1 pump/tubing volume) or time (at least 3 minutes apart).
- [4] Monitor the water level in the well. If drawdown is occurring, the purge rate should be decreased until drawdown stops or a purge rate of 100 mL/min is obtained. If a purge rate of 100 mL/min cannot be maintained, contact the project lead to determine appropriate action for the well.
- [5] Sample collection can begin as soon as the drawdown and the water quality indicators have stabilized. Stability will be considered achieved when the criteria in Table B-1 are achieved and the turbidity of the water has reached 50 nephelometric turbidity units (NTU). A lower NTU level is required when chromium and nickel are analytes.

Table B-1. Stabilization Criteria for Field Parameters

Parameter	Criteria
Water Level	< 0.05 ft
pH	± 0.2 units
Dissolved Oxygen	±10 %
Specific Conductance	±10 %
Turbidity	≤ 50 NTU
	≤ 10 NTU

Procedure B2—Sampling Method for Wells 0411 and 0443

The following procedure will be utilized for collection of groundwater samples from low-yield bedrock wells 0411 and 0443 in Phase I at the Mound site.

Field parameter measurements to be recorded:

- Water quality indicators (pH, dissolved oxygen, and specific conductance)
- Temperature
- Oxidation-reduction potential (ORP)
- Turbidity
- Water level

Groundwater samples will be collected using the following procedural steps:

- [1] Measure the depth to water prior to purging or using a portable sampling pump.
If a portable pump is used for sampling of wells, the water level should be measured again for monitoring of drawdown during purging. Purging can commence immediately. Pumps should be lowered to approximately 2 ft from the bottom of the screened interval. Efforts should be made to slowly lower pumps into wells to prevent agitation of the water column.
- [2] Turn pump on at a flow rate of 100 mL/min to 200 mL/min until water begins to emerge from the discharge tube.
- [3] After 1 pump/tubing volume has been purged, water quality indicators, temperature, ORP, and turbidity will be measured at regular intervals based on volume purged (1 pump/tubing volume) or time (at least 3 minutes apart).
- [4] Monitor the water level in the well. If drawdown in the wells is greater than 3 ft, stop purging water and contact the project lead to determine appropriate action for the well. Sampling method will likely be changed to that in Procedure B3.
- [5] Sample collection can begin as soon as the drawdown and the water quality indicators have stabilized. Stability will be considered achieved when the criteria in Table B-2 are achieved and the turbidity of the water has reached 50 NTU. A lower NTU level is required when chromium (Cr) and nickel (Ni) are analytes. If the turbidity criteria cannot be attained and the other parameters meet criteria, contact the project lead to determine appropriate action for the well.

Table B-2. Stabilization Criteria for Field Parameters

Parameter	Criteria
Water Level	< 3 ft
pH	± 0.2 units
Dissolved Oxygen	±10 %
Specific Conductance	±10 %
Turbidity	≤ 50 NTU
Turbidity—Cr & Ni analyses	≤ 10 NTU

Procedure B3—Sampling Method for Wells 0353, 0444, and 0445

The following procedure will be utilized for collection of groundwater samples from low-yield bedrock wells 0353, 0444, and 0445 in Phase I at the Mound site.

Field parameter measurements to be recorded:

- Water quality indicators (pH, dissolved oxygen, and specific conductance)
- Temperature
- Oxidation-reduction potential (ORP)
- Turbidity
- Water level

Groundwater samples will be collected using the following procedural steps:

- [1] 1. Measure the depth to water prior to purging or portable sampling pump.
If a portable pump is used for sampling of wells, the water level should be measured again for monitoring of drawdown during purging. Purging can commence immediately. Pumps should be lowered to approximately 2 ft from the bottom of the screened interval. Efforts should be made to slowly lower pumps into wells to prevent agitation of the water column.
- [2] Turn pump on at a flow rate of 100 mL/min.
- [3] Sample collection can begin after 1 pump/tubing volume has been purged.
- [4] Water quality indicators, DO, ORP, and turbidity will be measured after the removal of 1 pump/tubing volume and at the end of sampling and recorded.
- [5] Measure and record the depth of water after collecting samples.

Procedure B4—Sampling Method for Seeps

The following procedure will be utilized for collection of surface water samples from seeps at the Mound site.

Field parameter measurements to be recorded:

- pH
- specific conductance
- Oxidation-reduction potential (ORP)

- [1] Note condition of seep water (qualitative description of flow, color, turbidity, etc.) prior to sampling.
- [2] Create a surface basin for ponding of seep water if one is not present.
- [3] Allow water to flush through the basin until its water becomes clear (similar condition prior to creating basin).
- [4] Samples may be collected by using a transfer container or by submerging the sample bottle into the basin. This is not acceptable for pre-preserved sample bottles; a transfer container will be used for collecting samples.