

Annual Assessment of the Effectiveness of Institutional Controls at the Mound Site Miamisburg, Ohio

June 2013



U.S. DEPARTMENT OF
ENERGY

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Management

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Contents

Abbreviations.....	iv
1.0 Introduction.....	1
2.0 Period of Review.....	2
3.0 RODs.....	2
4.0 Overview of Institutional Controls.....	2
5.0 Aerial View of the Mound Site Property.....	5
6.0 Summary of 2012 Annual Assessment and CERCLA Five-Year Review.....	7
6.1 2012 Annual Assessment.....	7
6.1.1 Summary.....	7
6.1.2 Recommendations or Findings.....	7
6.2 2011 CERCLA Five-Year Review.....	7
6.2.1 Five-Year Review Summary.....	7
6.2.2 Five-Year Review Recommendations.....	8
6.2.3 EPA-Identified Issues to be Addressed in the 2016 Five-Year Review.....	8
7.0 2013 Physical Inspections Performed.....	8
7.1 Parcel D.....	9
7.2 Parcel H (Formerly Release Block H).....	9
7.3 Parcel 3.....	11
7.4 Parcel 4.....	11
7.5 Parcels 6, 7, 8, and 9.....	11
7.5.1 Vanguard Boulevard Construction.....	11
7.5.2 OU-1 Area.....	14
7.5.3 Tracts 1 and 2.....	19
7.5.4 T Building.....	19
7.6 Phase I Parcel.....	22
8.0 Interviews and Record Reviews.....	22
8.1 City of Miamisburg.....	22
8.2 MDC.....	25
8.3 Property Agreements.....	26
8.3.1 Sales Agreements Between the Environmental Management Consolidated Business Center (EMCBC) and MDC.....	26
8.3.2 General Purpose Lease Between EMCBC and MDC.....	26
8.3.3 City of Miamisburg Ordinance 6393.....	26
8.3.4 Parcel Boundaries and Current Ownership.....	27
8.3.5 Property Ownership Changes Since Last Assessment.....	27
8.4 Montgomery County.....	29
8.4.1 Parcel 3 ROD Boundary Differs from Parcel 3 Transferred to MDC.....	29
8.4.2 Parcel 6A Acreage and Legal Description Differs in Parcel 6, 7, and 8 ROD.....	29
8.4.3 Parcel 7 Legal Description Was Not Updated After Sale of Tracts 1 and 2.....	29
8.4.4 Parcel 6, 7, 8, and 9 Legal Descriptions and Boundaries Do Not Match County Records.....	29
9.0 Conclusions.....	29
10.0 Recommendations.....	30
11.0 Contact Information.....	31
12.0 References.....	31

Figures

Figure 1.	ROD Parcel Boundaries for the Mound Site, Miamisburg, Ohio	4
Figure 2.	Mound Site Looking North (March 2011).....	6
Figure 3.	IC Assessment Walkdown (April 16, 2013).....	9
Figure 4.	Parcel H Soil-Removal Exclusion Area Within the Original Mound Site Boundary.....	10
Figure 5.	Vanguard Blvd. Looking South Toward OU-1 (Parcel 9) Area	12
Figure 6.	Vanguard Blvd. Looking South Toward Excelitas Building and New Parking Areas.....	12
Figure 7.	Vanguard Blvd. Looking Northeast Toward Building 61	13
Figure 8.	Vanguard Blvd. Looking Southwest Toward Central Office Space (COS) Building	13
Figure 9.	Erosion Problems South of Vanguard Blvd. near Well 0346	14
Figure 10.	Erosion Problems North of Former Outfall 002	15
Figure 11.	Erosion Problems near Well P015 in OU-1 Area	15
Figure 12.	French Drain Installation Southward from Well P046 in OU-1 Area	16
Figure 13.	Drainage Issues in Roadbed Southwest of OU-1 Pump and Treatment Building 300 and Trailers 1 and 16.....	16
Figure 14.	French Drain Being Installed in OU-1 Area to Correct Drainage Problem.....	17
Figure 15.	IC Walkdown Participants Observing the Area Around New Monitoring Wells in OU-1	18
Figure 16.	IC Walkdown Participants Observing Drainage Repairs near OU-1 Monitoring Well	18
Figure 17.	Bob Ransbottom, Bill Hertel, and Gary Weidenbach (Stoller) Observing Water on the Floor of Room 57 in T Building During the IC Walkdown.....	19
Figure 18.	Standing Water Caused by Sump Pump Failure in T Building Room 57, Observed During the IC Walkdown	20
Figure 19.	Anthony Campbell (Ohio EPA), Gwen Hooten (LM), Tim Fischer (EPA), and Greg Lupton (Stoller) Standing on Red Concrete in Front of Room 58 in the T Building During the IC Walkdown	20
Figure 20.	Standing Water Caused by Sump Pump Failure in T Building Room 58, Observed During the IC Walkdown	21
Figure 21.	Brian Nickel (Ohio EPA), Ellen Stanifer (City of Miamisburg), Shannon Dettmer (ODH), Larry Kelly (EMCBC), Anthony Campbell (Ohio EPA), and Gwen Hooten (LM) Standing on Red Concrete in T Building Room 44 During the IC Walkdown.....	21
Figure 22.	Current Parcels, Buildings, and Ownership.....	28

Tables

Table 1.	RODs, Remedies, ICs, and Legal Enforcement Instruments.....	3
Table 2.	Crosswalk of Street Addresses to DOE Building Identifications.....	23
Table 3.	City of Miamisburg Permit Files for Mound Site (April 30, 2012, to April 10, 2013) ..	24
Table 4.	City of Miamisburg Files—Planning Commission and Other Reviews.....	24
Table 5.	Mound Site Parcels, Buildings, and Transfer Information	27

Table 6. Outstanding Recommendations from Previous Annual or CERCLA Five-Year Review Inspections of ICs	30
Table 7. Recommendations from 2013 Annual Inspection for ICs	30

Appendixes

Appendix A	Annual Assessment Checklist for the Mound Site
Appendix B	Example of Real Estate Easement for Utility Work Performed on MDC Property
Appendix C	T Building Rooms with Special ICs – Core Team Guidance and 2010 Baseline Photos
Appendix D	Photos of T Building Red Concrete Cracks 2013
Appendix E	Table of Mound Site Property Information on Montgomery County Auditor’s Website
Appendix F	Aerial Photo with ROD Parcel Boundaries March 2011

Abbreviations

Blvd.	Boulevard
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRP	Comprehensive Reuse Plan
DOE	U.S. Department of Energy
EM	Office of Environmental Management
EMCBC	Environmental Management Consolidated Business Center
EPA	U.S. Environmental Protection Agency
ES	CERCLA 120(h) Summary Notice of Hazardous Substances 120(h) Environmental Summary
IC	institutional control
LM	Office of Legacy Management
MDC	Mound Development Corporation (formerly MMCIC)
MMCIC	Miamisburg Mound Community Improvement Corporation
O&M Plan	<i>Operation and Maintenance (O&M) Plan for the Implementation of Institutional Controls at the 1998 Mound Plant Property, Phase I Parcel</i>
ODH	Ohio Department of Health
Ohio EPA	Ohio Environmental Protection Agency
OU-1	Operable Unit 1
ROD	record of decision
Stoller	S.M. Stoller Corporation

1.0 Introduction

This report documents the U.S. Department of Energy (DOE) Office of Legacy Management (LM) 2013 annual assessment of the effectiveness of sitewide institutional controls (ICs) for the entire Mound site¹ in Miamisburg, Ohio, for the period from May 1, 2012, to April 30, 2013. The site has completed all of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h) requirements for property transfer as an industrial-use site.

The annual IC assessment and report follow requirements in the *Operations and Maintenance (O&M) Plan for the U.S. Department of Energy Mound Site, Miamisburg, Ohio* (O&M Plan) (DOE in preparation).

This annual IC assessment determined that 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.

ICs are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and protect the integrity of the remedy. Each annual IC assessment includes a physical inspection of land parcels; discussions with the property owners; a review of all applicable records, including construction, street-opening, occupancy, and other permits; zoning modification requests; and well drilling logs.

The Mound site ICs are defined in the Records of Decision (RODs) (DOE 1995, 1999a, 1999c, 1999d, 2001b, 2001d, 2003b, 2009) and the CERCLA 120(h) Summary Notice of Hazardous Substances Environmental Summaries (ESSs) (DOE 1999a, 1999b, 2001a, 2001c, 2003a, 2010, 2011a), which are listed in Section 12.0, "References." The ICs were developed with input from the public; the City of Miamisburg; the U.S. Environmental Protection Agency (EPA); the Ohio Environmental Protection Agency (Ohio EPA); the Ohio Department of Health (ODH); and the Mound Development Corporation (MDC), formerly named the Miamisburg Mound Community Improvement Corporation (MMCIC).

The Mound site ICs run with the land in the form of (1) restrictions and covenants in quitclaim deeds or (2) activity and use limitations in the environmental covenant and the lease agreement.

Although not an IC, groundwater monitoring is required by CERCLA remedies for some land parcels. Starting in 2013, groundwater monitoring information for the Phase I Parcel and Parcels 6, 7, and 8 was combined into one annual groundwater monitoring report due June 13, 2013. Operable Unit 1 (OU-1) monitoring analysis, which is currently reported in Environmental Restoration Monthly Reports, will be included in the annual groundwater monitoring report when the OU-1 exit strategy is finalized.

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.

2.0 Period of Review

This annual assessment covers the period from May 1, 2012, to April 30, 2013. It identifies information that is new since the last reporting period, such as new construction, demolition, or excavation; lot-splits or the sale of parcels to new landowners; and new permit applications filed by property owners or their agents. Previous annual assessments are available in the CERCLA Public Reading Room and online at the LM Mound website (<http://www.lm.doe.gov/land/sites/oh/mound/mound.htm>).

LM contacted EPA, Ohio EPA, ODH, MDC, and the City of Miamisburg 30 days before the visual inspection. DOE submits the annual IC assessment report to EPA and Ohio EPA no later than June 13 of each year.

3.0 RODs

Table 1 summarizes the ROD dates, parcels, remedies, IC objectives, and legal enforcement instruments. Figure 1 shows the parcel areas covered by specific RODs.

4.0 Overview of 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 minimize the potential for human exposure to contamination and protect the integrity of the remedy. ICs are defined in each ROD and described in the O&M Plan (DOE 2013c).

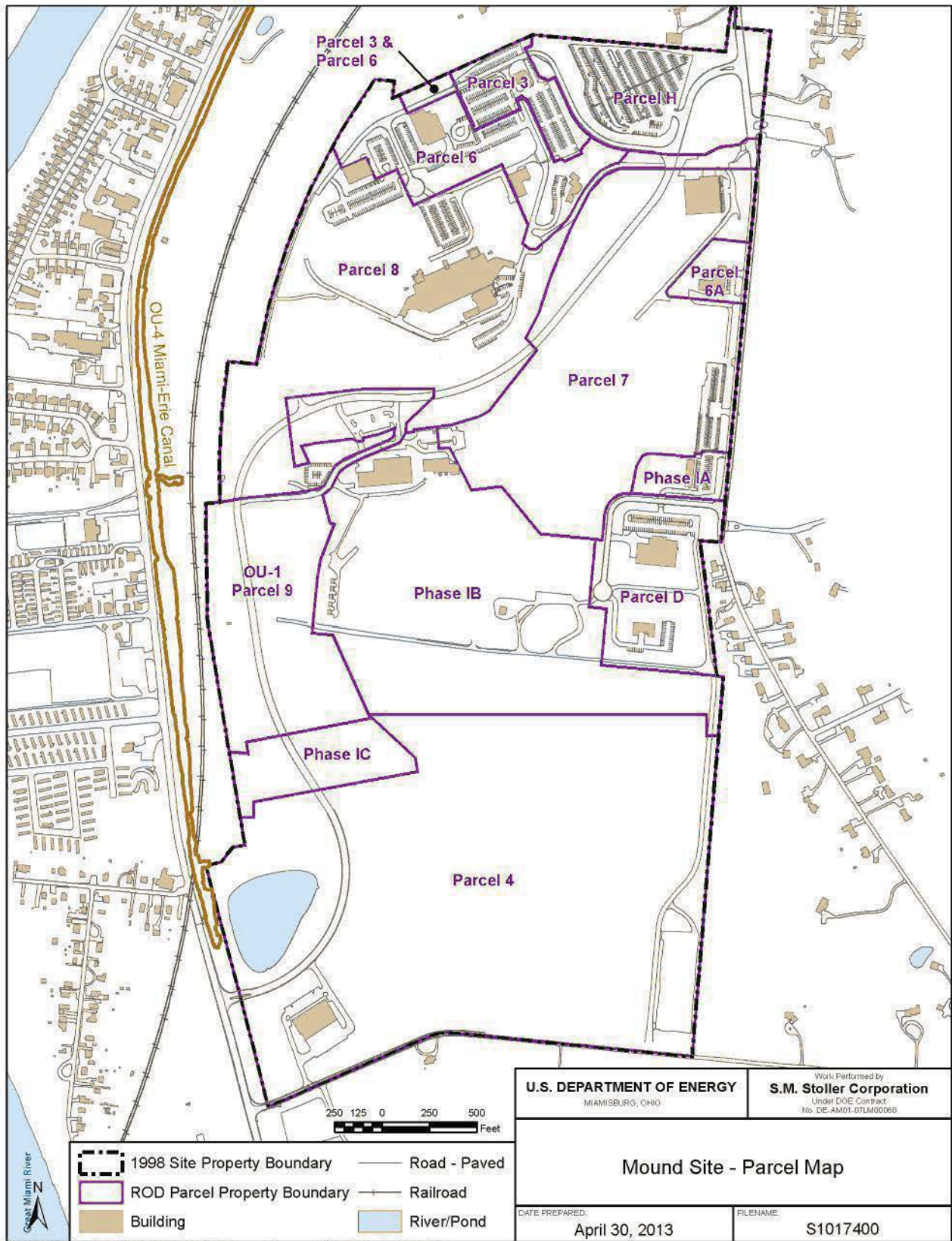
DOE remediated the Mound site property to EPA's risk-based standards for industrial/commercial use only. Because the site is not approved for unlimited use, ICs were imposed as part of the CERCLA remedy. The Mound ICs were developed with input from the public, the City of Miamisburg, the regulators, and MDC.

The Mound site ICs run with the land in the form of (1) restrictions and covenants in the quitclaim deeds or (2) activity and use limitations in the environmental covenant and the lease agreement. The quitclaim deeds and environmental covenant documents are recorded with Montgomery County, Ohio, so that all future property owners will know about the deed restrictions.

Additional information on ICs can be found in *Institutional Controls: A Citizen's Guide to Understanding Institutional Controls at Superfund, Brownfields, Federal Facilities, Underground Storage Tank, and Resource Conservation and Recovery Act Cleanups* (EPA 2005).

Table 1. RODs, Remedies, ICs, and Legal Enforcement Instruments

ROD Parcel ID	Former ID or Other Names	ROD Date	Acreage in ROD	Remedy	Owner	Legal Enforcement Instrument	Objectives of ICs	
OU-1	Area B, landfill	1995	See Parcel 9					
D	Release Block D	1999	12.43	ICs	MDC	Deed restrictions in quitclaim deed dated February 11, 2009	Restrict land use to industrial only. Prohibit the removal of soil. Prohibit the use of groundwater.	
H	Release Block H	1999	14.29	ICs				
3	None	2001	5.581	ICs				
4	New or South property	2001	94.838	ICs				
Phase I	A	2003	2.542	Monitored natural attenuation	DOE	Amendment #25 to General Purpose Lease Agreement (in process)	Prohibit the removal of concrete floor material in specified rooms of T Building.	
	B		42.882					
	C		6.568	ICs				
6	6, 6A 7, and 8	2010	13.636	Monitored natural attenuation	DOE	Amendment #25 to General Purpose Lease Agreement (in process)	Prohibit the penetration of concrete floor material in specified rooms of T Building.	
7			42.307					
8			45.247					
			2.352 or 3.320	ICs				BOI Solutions Inc.
	5.350							
	Tract 1 Tract 2 (Identified as 6B from EM to MDC. 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 as a Special Instrument Deed 2012-00004722 on January 24, 2012)	Provide site access for federal and state agencies for taking response actions, including sampling and monitoring.	
OU-4	Miami-Erie Canal	2004	On City property	No action	City of Miamisburg	None required	No ICs required	



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Figure 1. ROD Parcel Boundaries for the Mound Site, Miamisburg, Ohio

The Mound site ICs are designed to:

1. **Prohibit the removal of soil** from within the original DOE Mound site property boundaries, without prior written approval from Ohio EPA and ODH.
2. **Prohibit the extraction or consumption of, exposure to, or the use in any way of the groundwater** underlying the site, without prior written approval from EPA and Ohio EPA.
3. **Limit land use to industrial/commercial use only.** Each parcel ROD 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 for 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:
 - 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.
4. **Prohibit the removal of concrete floor material** from specified rooms of T Building (Appendix C) to offsite locations without prior approval from EPA, Ohio EPA, and ODH.
5. **Prohibit the penetration of concrete floors** in specified rooms of T Building (Appendix C) without prior approval from EPA, Ohio EPA, and ODH.
6. **Allow site access for federal and state agencies** for sampling and monitoring.

The RODs contain parcel-specific deed-restriction language. RODs and other CERCLA administrative record documents are available in the CERCLA Public Reading Room and electronically on the LM Mound website (<http://www.lm.doe.gov/land/sites/oh/mound/mound.htm>).

OU-1, the Phase I Parcel, and Parcels 6, 7, and 8 have CERCLA remedies that also require groundwater monitoring. Starting this year, the physical condition of the wells and seeps covered by those remedies will be included in the annual Mound site groundwater monitoring report.

5.0 Aerial View of the Mound Site Property

Figure 2 is an aerial photo, taken in March 2011, which shows the entire site looking north.

Appendix F contains a March 2011 aerial photo with the ROD boundaries. The next aerial photo, normally taken before each CERCLA Five-Year Review, is planned for 2016.



Figure 2. Mound Site Looking North (March 2011)

6.0 Summary of 2012 Annual Assessment and CERCLA Five-Year Review

6.1 2012 Annual Assessment

6.1.1 Summary

As stated in the *Annual Assessment of the Effectiveness of Site-Wide Institutional Controls Applied to the Former DOE Mound Site Property* (DOE 2012a), the 2012 annual assessment concluded that the Mound site ICs functioned as designed, adequate oversight mechanisms appeared to be in place to identify possible violations, and adequate resources were available to correct or mitigate any problems if a violation were to occur.

6.1.2 Recommendations or Findings

There were three recommendations from the 2012 annual assessment:

1. Install a permanent marker for well 0451.
2. Work with the City of Miamisburg to ensure that permit and zoning systems that capture future site-work involving soil removal, regardless of property ownership, will be maintained.
3. Complete the soil removal white paper, which will become part of the O&M Plan.

6.2 2011 CERCLA Five-Year Review

6.2.1 Five-Year Review Summary

In 2011, DOE conducted the CERCLA Five-Year Review, which evaluated the implementation and performance of the selected site remedies. The *Third Five-Year Review for the Mound, Ohio, Site, Miamisburg, Ohio* (DOE 2011b) stated:

The ICs implemented at the Mound Site are protective of human health and the environment because they are functioning as intended. The groundwater remedies for Phase I and Parcels 6, 7, and 8 are expected to be protective of human health and the environment upon attainment of cleanup goals. In the interim, exposure pathways are being controlled through ICs. The remedy for OU-1 is protective of human health and the environment as exposure pathways are being controlled through plume containment and Federal ownership of the land. Controlled access to the landfill is no longer necessary since excavation was completed; however, for the remedy to be protective in the long-term, ICs to restrict soil removal and groundwater use need to be implemented.

6.2.2 Five-Year Review Recommendations

The following three recommendations were identified as a result of the five-year review and associated actions:

1. Verify that the quitclaim deed for Parcels 6, 7, and 8 is appropriately recorded and is free and clear of all liens and encumbrances.
2. Finalize the sitewide IC Management/Land Use Control Plan (with CERCLA Summary).
3. Finalize the Sitewide O&M Plan for groundwater remedies.

6.2.3 EPA-Identified Issues to be Addressed in the 2016 Five-Year Review

In the September 27, 2011, approval letter, EPA concurred with the protectiveness statements and approved the report. However, EPA also listed the following issues that must be addressed in future Five-Year Reviews at the Mound site:

- While the Summary Form on p. *xii* makes title work for Parcels 6, 7, and 8 a follow-up action, it leaves out title work for Parcels D, H, 3, and 4 and Phase 1. Title work must be completed for all parcels as part of the Five-Year Review of the ICs process.
- EPA, Ohio EPA, and DOE are currently finalizing a *Sitewide IC Management and Land Use Control Plan* for the DOE Mound property. This plan should be included as an appendix in future Five-Year Reviews to aid in the review process.

7.0 2013 Physical Inspections Performed

S.M. Stoller Corporation (Stoller) personnel conducted thorough physical inspections in 2013 before hosting the physical walkdown with the regulators, MDC, and the City of Miamisburg. Those preliminary inspections looked for violations of ICs (such as soil removal, well installation, nonindustrial/noncommercial use) and reviewed the physical conditions of wells and seeps.

The walkdown with the regulators and stakeholders occurred on April 16, 2013, with a driving tour of the site. Gwen Hooten, LM Mound Site Manager, began the walkdown at the Mound Science and Energy Museum with a presentation that defined the scope of the annual assessment and presented the results of the preliminary inspections. Participants were given a safety briefing, a copy of the presentation, and the IC checklist for the walkdown.

Participants (Figure 3) in the annual walkdown included: Gwen Hooten, LM; Larry Kelly, EMCBC; Tim Fischer, EPA; Brian Nickel and Anthony Campbell, Ohio EPA; Shannon Dettmer, ODH; Frank Bullock, MDC; Ellen Stanifer, City of Miamisburg; Bill Hertel, Greg Lupton, Dave Hinaman, Gary Weidenbach, and Bob Ransbottom, Stoller; and Joyce Massie, J.G. Management Systems Inc.



*Figure 3. IC Assessment Walkdown (April 16, 2013).
(Left to Right front row: Larry Kelly, Ellen Stanifer, Shannon Dettmer, Tim Fischer,
Joyce Massie, Gwen Hooten; back row: Brian Nickel, Frank Bullock, Bill Hertel,
Gary Weidenbach, Bob Ransbottom, Anthony Campbell, Greg Lupton.)*

The following sections summarize the results of the preliminary inspections and the physical walkdown on April 16, 2013. Appendix A contains the completed checklist.

7.1 Parcel D

There were no observations of noncompliance with the ICs. In particular, there was no evidence of unauthorized well installation, soil removal, or site activities inconsistent with industrial/commercial use within this parcel.

7.2 Parcel H (Formerly Release Block H)

There were no observations of noncompliance with the ICs. In particular, there was no evidence of unauthorized well installation, soil removal, or site activities inconsistent with industrial/commercial use within this parcel.

One area of Parcel H, shown in purple in Figure 4, is exempt from the soil-removal restriction. Modifications to the entry and the rerouting of Mound Road isolated this area from the original Mound property.

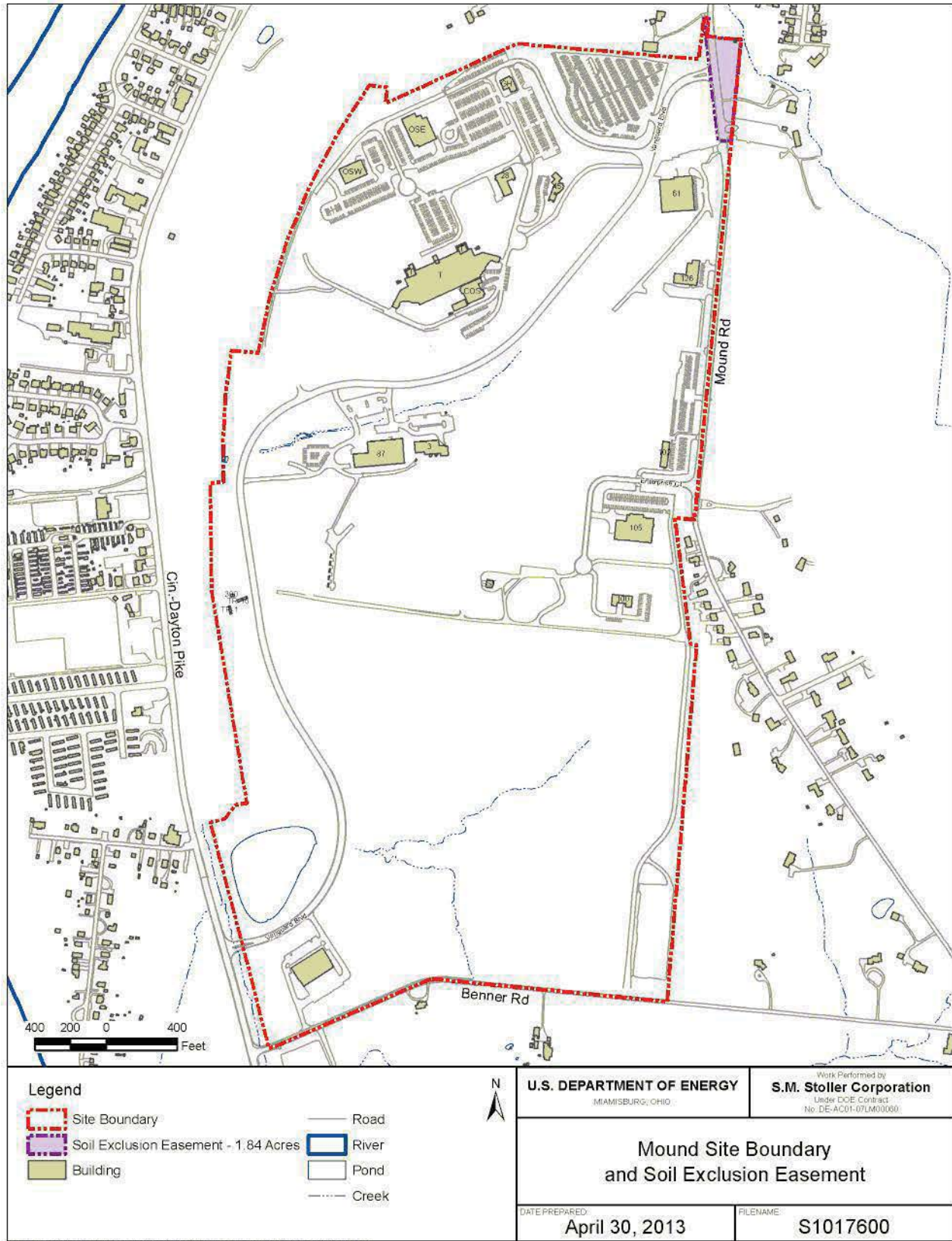


Figure 4. Parcel H Soil-Removal Exclusion Area Within the Original Mound Site Boundary

7.3 Parcel 3

There were no observations of noncompliance with the ICs. In particular, there was no evidence of unauthorized well installation, soil removal, or site activities inconsistent with industrial use within this parcel.

7.4 Parcel 4

There was no evidence of unauthorized well installation or soil removal within this parcel.

Three signs, which state “Recreational Use Prohibited,” were observed at the pond used for retaining and detaining storm-water runoff in the southwestern part of Parcel 4.

Stoller personnel observed individuals fishing at the pond on April 12 and 14 and advised MDC. MDC also observed fishing on April 30, and advised the fishermen of the prohibitions.

The Mound Core Team agreed on the following wording regarding the signage beginning with the 2011 annual IC assessment:

The second five-year review for the DOE Mound site recommended that the issue of adequate signage around the Parcel 4 retention basin be addressed by DOE, EPA, and Ohio EPA. Signs placed around the basin to inform area visitors that recreational use around the basin is prohibited have been damaged and removed on several occasions by members of the public.

After reconsidering the exposure assumptions that were used to develop the industrial/commercial cleanup standards for the Mound site, DOE, EPA, and Ohio EPA have reached the conclusion that occasional visits to the retention pond by area residents will not result in an unacceptable risk to the visitors. Even so, DOE and the Mound Development Corporation will continue to monitor and discourage these unauthorized uses of the Parcel 4 retention basin area. No further action is required to assure protectiveness of human health or the environment.

7.5 Parcels 6, 7, 8, and 9

There were no observations of noncompliance with the ICs. In particular, there was no evidence of unauthorized well installation, soil removal, or site activities inconsistent with industrial/commercial use within Parcels 6, 7, 8, or 9. Changes observed since the 2012 inspection are detailed in the following sections.

7.5.1 Vanguard Boulevard Construction

Construction of the Vanguard Boulevard (Blvd.) spine road continued during 2012. The roadway connecting the southwest and northeast site entrances was nearly completed at the time of the walkdown, and the final paving was scheduled for May 2013. The construction included the new roadway, a parking lot, storm and sanitary sewers, curbs and gutters, sidewalks, and street lights. Figure 5 through Figure 14 show the progress of the construction.



Figure 5. Vanguard Blvd. Looking South Toward OU-1 (Parcel 9) Area



Figure 6. Vanguard Blvd. Looking South Toward Excelitas Building and New Parking Areas



Figure 7. Vanguard Blvd. Looking Northeast Toward Building 61



Figure 8. Vanguard Blvd. Looking Southwest Toward Central Office Space (COS) Building

EMCBC instructed LM and Stoller to continue to monitor the construction through the DOE-owned parcels. The project followed the MDC soil management plan. No soil was removed from the site. The IC inspectors were told that EM had notified MDC of specific issues relating to soil erosion, drainage around wells, and well access. MDC advised that they were working with their contractor to resolve these issues. Figure 9 shows one of the problems observed.



Figure 9. Erosion Problems South of Vanguard Blvd. near Well 0346

During review of the Vanguard Blvd. construction activities, LM observed that MDC's General Construction Permit with the State of Ohio included a National Pollutant Discharge Elimination System permit for detention, control, and release of stormwater. There were no monitoring requirements included. Stormwater retention and monitoring are not associated with an IC unless large quantities of soil leave the site in muddy stormwater runoff. DOE voiced concerns to MDC about the potential for this occurring after observing muddy runoff during large rain events.

7.5.2 OU-1 Area

Erosion problems were observed near the OU-1 area as shown in Figure 9 through Figure 14. Drainage issues can interfere with access to monitoring wells.

MDC and their contractor are correcting the sources of these drainage issues.



Figure 10. Erosion Problems North of Former Outfall 002



Figure 11. Erosion Problems near Well P015 in OU-1 Area

In Figure 12, the drain connects to the storm-water pipe running west from Vanguard Boulevard.



Figure 12. French Drain Installation Southward from Well P046 in OU-1 Area



Figure 13. Drainage Issues in Roadbed Southwest of OU-1 Pump and Treatment Building 300 and Trailers 1 and 16



Figure 14. French Drain Being Installed in OU-1 Area to Correct Drainage Problem

LM had installed one new pumping well and four Geoprobe monitoring wells for an integrated pumping test. The well logs are not yet on the Ohio Department of Natural Resources website.

There was vandalism reported several nights after the walkdown. Three of the yellow transducer cables were cut, but not removed. These were not copper cables. After that incident, LM hired a security contractor to monitor the area during the pumping test.

Figures 15 and 16 were taken during the walkdown of the OU-1 area. Participants observed the new wells and the drainage issues.



Figure 15. IC Walkdown Participants Observing the Area Around New Monitoring Wells in OU-1



Figure 16. IC Walkdown Participants Observing Drainage Repairs near OU-1 Monitoring Well

7.5.3 Tracts 1 and 2

In the sections of Parcel 6A and Parcel 7 sold to BOI Solutions Inc., now Tracts 1 and 2, LM and Stoller observed the new owners constructing a loading dock leading to the parking lot. Frank Bullock of MDC advised that he had reviewed the drawings for the dock, and he gave DOE a copy after the walkdown. He advised that the new owners were aware of the ICs.

7.5.4 T Building

The physical inspection included the areas within T Building to which special ICs apply. The special ICs prohibit the penetration of concrete in some areas, and the removal of concrete in others, unless there has been prior approval.

During the walkdown, standing water was observed in the special IC areas, rooms 57 and 58. The cause was identified as a rusted float valve on the sump pump for those rooms. Frank Bullock contacted his property maintenance contractor, who replaced the float, pumped out the water, and dried the area with fans.

Figures 17 through 21 were taken during the IC walkdown in T Building.



Figure 17. Bob Ransbottom, Bill Hertel, and Gary Weidenbach (Stoller) Observing Water on the Floor of Room 57 in T Building During the IC Walkdown



Figure 18. Standing Water Caused by Sump Pump Failure in T Building Room 57, Observed During the IC Walkdown



Figure 19. Anthony Campbell (Ohio EPA), Gwen Hooten (LM), Tim Fischer (EPA), and Greg Lupton (Stoller) Standing on Red Concrete in Front of Room 58 in the T Building During the IC Walkdown



Figure 20. Standing Water Caused by Sump Pump Failure in T Building Room 58, Observed During the IC Walkdown



Figure 21. Brian Nickel (Ohio EPA), Ellen Stanifer (City of Miamisburg), Shannon Dettmer (ODH), Larry Kelly (EMCBC), Anthony Campbell (Ohio EPA), and Gwen Hooten (LM) Standing on Red Concrete in T Building Room 44 During the IC Walkdown

The cracks in the red concrete covering Room 44 (survey unit 1C-10) were examined and discussed during the walkdown. A walkdown participant asked what size of crack would become a concern. LM will review the associated T Building documents and discuss the issue with the Core Team.

Although the location of the special IC areas is well known, there was inconsistency in the survey unit or room number descriptions used in related documents. LM researched the final survey unit reports to clarify and corrected the T Building first floor drawing. Survey unit 1C-06 covered only corridor 39 within the large bay area known as the cap. 1C-05 covered rooms 36, 36A, 37, and 38, which are not in the special IC area.

Appendix C provides information regarding the special IC areas. It includes the T Building drawing clearly showing the special IC areas and the 4-page agreement and position paper titled *T Building Special ICs Core Team Agreement and Position Paper, 6-29-09*, which provided policy guidelines. The appendix also includes the 2010 baseline photos of each room covered by the special ICs.

Appendix D contains the updated concrete crack photos taken on April 24, 2013. These photos document the crack locations and current condition. The cracks do not appear to have enlarged since 2012.

7.6 Phase I Parcel

The Phase I Parcel consists of three noncontiguous sub-parcels (A, B, and C), which were transferred to MDC in February 2009. The remedy for the Phase I Parcel includes ICs for the land and for monitored natural attenuation to address trichloroethylene-impacted groundwater.

There were no observations of noncompliance with the ICs. In particular, there was no evidence of unauthorized well installation, soil removal, or site activities inconsistent with industrial/commercial use within this parcel.

8.0 Interviews and Record Reviews

8.1 City of Miamisburg

In addition to conducting the physical inspections for the annual assessment, DOE reviewed documents from local governments to ensure that ICs are being followed. These include construction, street-opening, occupancy, or other permits; zoning modification requests; City Planning Commission requests; and well logs.

The City of Miamisburg database allows permits to be searched by keyword (e.g., permit number, date, location, nature of work). Permits issued before the database was implemented (i.e., permits documented in DOE's annual reports dating back to 2001) might not be in the City's database. However, the City retains hard copies of all permits in accordance with a records-retention plan that meets all State of Ohio requirements.

LM and Stoller personnel requested that the City of Miamisburg Engineering Department query their computer tracking system for permits issued to any addresses on Capstone Drive, on Vanguard Boulevard, on Enterprise Court, on Vantage Point, on Mound Road (between building address numbers 885 and 1195), and on Benner Road (between 799 Benner Road and Dayton Cincinnati Road, on the odd-numbered side of street). In addition, the Engineering Department checked for other construction work or other activities, such as the creation of parking lots or roads that require any City Planning approvals. Table 4 lists those permits.

Table 2 shows the DOE building identification and the Miamisburg street addresses for each building. Seven buildings (3, 87, 100, 102, 105, the MDC Flex Building, and the Guard House), five magazines (80 through 84), and a salt storage shed are in land parcels transferred to MDC. Figure 22 shows the location of site buildings.

Since City permits are filed according to address, MDC or subsequent property owners must inform DOE of changes to the street names or building addresses.

Table 2. Crosswalk of Street Addresses to DOE Building Identifications

DOE Building ID	Former Address	Current Miamisburg Street Address	Parcel
2		(Demolished in 2011)	7
28		925 Capstone Drive	6
45		930 Capstone Drive	6
61		885 Mound Road	7
63 and 63W		1070 Vanguard Boulevard (Demolished in 2011)	7
3 and 87		1100 Vanguard Boulevard	IB ^a
100		790 Enterprise Court	D ^a
102		1075 Mound Road	IA ^a
105		1195 Mound Road	D ^a
126		955 Mound Road	(6A & 7) Tracts 1 and 2
Central Operational Support (COS)		965 Capstone Drive	8
Guard House (GH)	500 Capstone Circle	500 Vantage Point	3 ^a
Operational Support East (OSE)	480 Capstone Circle	480 Vantage Point	6
Operational Support West (OSW)	460 Capstone Circle	460 Vantage Point	8
T Building		945 Capstone Drive	8
Magazines 80–84 Salt Storage (SST)	None	None	IB ^a
Trailers 1 and 16, and Building 300	None	1275 Vanguard Boulevard	9
MDC Flex Building		1390 Vanguard Boulevard (main building)	4 ^a
	1390 Vanguard Boulevard	1388 Vanguard Boulevard (lighting)	4 ^a
	1390 Vanguard Boulevard	1384 Vanguard Boulevard	4 ^a
	1390 Vanguard Boulevard	1380 Vanguard Boulevard	4 ^a
	1390 Vanguard Boulevard	1374 Vanguard Boulevard	4 ^a
1390 Vanguard Boulevard	1370 Vanguard Boulevard	4 ^a	

^a Parcel has been transferred to MDC.

On May 21, 2013, Stoller personnel and Ellen Stanifer, City of Miamisburg Public Works Department, met with Chris Fine, City of Miamisburg Development Director, to review the ICs. The discussion included the importance of the ICs and ways to maintain the institutional awareness of them within the City. Mr. Fine advised that the Mound Site's redevelopment was important to the City because of its size and the economic impact.

Table 3 lists all permits on file that were issued for the site during the period being assessed. The City of Miamisburg Building Inspection Department provided the permit summary on April 10, 2013.

Table 3. City of Miamisburg Permit Files for Mound Site (April 30, 2012, to April 10, 2013)

Permit #	Permit DT	Site Address	Owner	Est. Cost	Contractor	Work Desc. 1
20120087E	6/12/2012	965 Capstone Drive	Mound Laser (MMCIC)	0	Chapel EI	Electric
20120095E	6/27/2012	1070 Vanguard Blvd.		0	Chapel EI	Electric
20120105E	7/13/2012	1100 Vanguard Blvd.	MMCIC	0	Lightning EI	Electric
20120133B	10/26/2012	1100 Vanguard Blvd.	MMCIC	15,000	TBD	Alteration
20120142B	11/29/2012	1100 Vanguard Blvd.	MMCIC	800	Ohio Valley Fire Protection	Sprinkler/Fire
20120186E	11/13/2012	1100 Vanguard Blvd.	MMCIC	0	Kyne & Son EI	Electric
20120189E	11/21/2012	1100 Vanguard Blvd.	MMCIC	0	Kastle EI	Electric
20130017B	3/12/2013	955 Mound Road	BOI Solutions Inc.	100,000	Schumacher Dugan Construction LLC	Alteration
20130028E	3/19/2013	955 Mound Road	BOI Solutions Inc.	0	Atkins & Stang Inc.	Electric

Abbreviations:

DT = date
 Est. = estimated
 Desc. = description

Table 4 lists work requests that did not require a City permit but did require review by the City Planning Commission. These requests may include excavation and paving activities.

Table 4. City of Miamisburg Files—Planning Commission and Other Reviews

Location of Work	ID Number	Date of Application	Submitted By	Nature of Work	Parcel/ Building	Status
The City Building Inspection Department reported that no City Planning Commission reviews were performed during this period.						

Permits filed with the City of Miamisburg do not have an expiration date. To ensure that the appropriate City officials approve permit work performed since the last annual assessment, DOE and the property owner should remain knowledgeable of permits if work covered by that permit were to be postponed.

Most of the work performed by MDC or other parties (e.g., contractors to MDC) on the former DOE Mound site property that Gwen Hooten (LM) and Frank Bullock (MDC) were aware of

during the 12-month reporting period appeared to be adequately covered by permits submitted to, and approved by, the City of Miamisburg. However, there were no permits issued for construction of the northern Vanguard Boulevard extension.

In general, the permit-review process demonstrated that the City of Miamisburg's recordkeeping system is adequate to allow LM to identify site activities that could affect IC compliance.

8.2 MDC

DOE reviews MDC construction contracts or easements during the annual IC assessments to ensure that the IC restrictions continue to be included.

There were no permits issued for the road construction project extending Vanguard Boulevard. However, the Vanguard Boulevard contract required adherence to all City construction requirements, and the City inspector was onsite often. LM/Stoller continued to monitor the construction work to ensure compliance with the terms of the EMCBC license, because the road was constructed on DOE property.

MDC and all future property owners must ensure that contractors performing work (e.g., landscaping, utility work that involves excavation or construction) comply with the ICs. MDC provides a pre-construction package that includes a description of the ICs, and MDC includes the following language in the "Technical Requirements" section of its requests for proposal and subsequent work orders: "Excavated soils must be managed and remain on MDC property. Soils from excavation shall be placed at an on-site location, as directed by MDC."

MDC monitors the vendor's work and conformance with technical requirements. MDC also provides the vendor with a real estate easement that includes detailed information on the ICs. Appendix B is an example of a real estate easement used for utility work that is registered with Montgomery County.

MDC's *Comprehensive Reuse Plan Update* (MMCIC 2003) is available in the CERCLA Reading Room and online at <http://www.lm.doe.gov/mound/Sites.aspx>. To coordinate the movement of soil on the site, the Comprehensive Reuse Plan (CRP) included a sitewide soil-grading plan. The CRP was incorporated into the City of Miamisburg's comprehensive plan, which is the basis for the property zoning within the city limits. When MDC subdivides and sells portions of the Mound site, the new property owners will be required to comply with the CRP and the City's comprehensive plan.

MDC plans to plat the entire DOE Mound site property. In order to receive financing (i.e., for new construction) on land parcels that make up the original DOE Mound site property, MDC will record a lot-split with the Montgomery County Recorder's Office. If MDC does not require financing for property improvements, it does not have to immediately record a Miamisburg Planning Commission-approved lot-split with the County. However, MDC has to record the changes with Montgomery County when it sells the property. The recorded real estate documentation would include the ICs in the original quitclaim deed and the ES associated with the original parcel to ensure that future property owners know the ICs.

Public education is an important component of DOE's post-closure responsibilities. Educating property owners about their responsibility to comply with the ICs is an essential element of

DOE's public-education campaign. It is also necessary to educate the general public on the importance of adhering to the sitewide ICs. When the annual report is completed and made available in the CERCLA Reading Room and on the LM website, DOE publishes a public notice that describes the ICs. Postings (such as warning signs near the MDC pond, which state that recreational use is prohibited) are crucial to teaching the public to comply with ICs.

8.3 Property Agreements

8.3.1 Sales Agreements Between the Environmental Management Consolidated Business Center (EMCBC) and MDC

In January 1998, the DOE Office of Environmental Management (EM) executed the original sales agreement with MDC. The agreement called for the transfer of discrete land parcels to MDC, via quitclaim deeds, after all requirements of CERCLA 120(h) for property transfer were met.

The sales agreement was replaced in 2008 with the *Sales Contract by and between the United States Department of Energy and the Miamisburg Mound Community Improvement Corporation, August 28, 2008* (DOE 2008).

The sales agreement was amended on November 30, 2012, with 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 Corporation)* (DOE 2012b). Under this agreement, EMCBC allows MDC to defer acceptance of all the parcels for up to 5 years.

8.3.2 General Purpose Lease Between EMCBC and MDC

During the deferral of property transfer, EMCBC will lease the Mound site in its entirety to MDC. On December 14, 2012, EMCBC signed a 5-year lease amendment, *U.S. Department of Energy Amendment Number 24 to the General Purpose Lease* (DOE 2012c), with MDC. 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.

As of June 2013, EMCBC was in the process of issuing an Amendment 25 to the General Purpose Lease to formalize the requirement to adhere to the ICs during the lease period.

8.3.3 City of Miamisburg Ordinance 6393

The City of Miamisburg passed Ordinance 6393 on April 16, 2013, that will allow the City to accept ownership of certain parcels owned by MDC temporarily until MDC can redevelop them. The Transfer Agreement included in the Ordinance states, "The City and MDC will each have the right to access the property as necessary for their own interests but the City agrees to adopt rules as needed to prohibit the use of the property by the public generally."

8.3.4 Parcel Boundaries and Current Ownership

Figure 22 shows the current parcel boundaries and ownership.

At the time of the 2013 annual IC assessment, MDC owned parcels D, H, 3, and 4 and the Phase I parcel (including sub-parcels A, B, and C). EMCBC owned parcels 6, 7, 8, and 9. BOI Solutions Inc. owned Tracts 1 and 2, which contain the former LM building at 955 Mound Road.

8.3.5 Property Ownership Changes Since Last Assessment

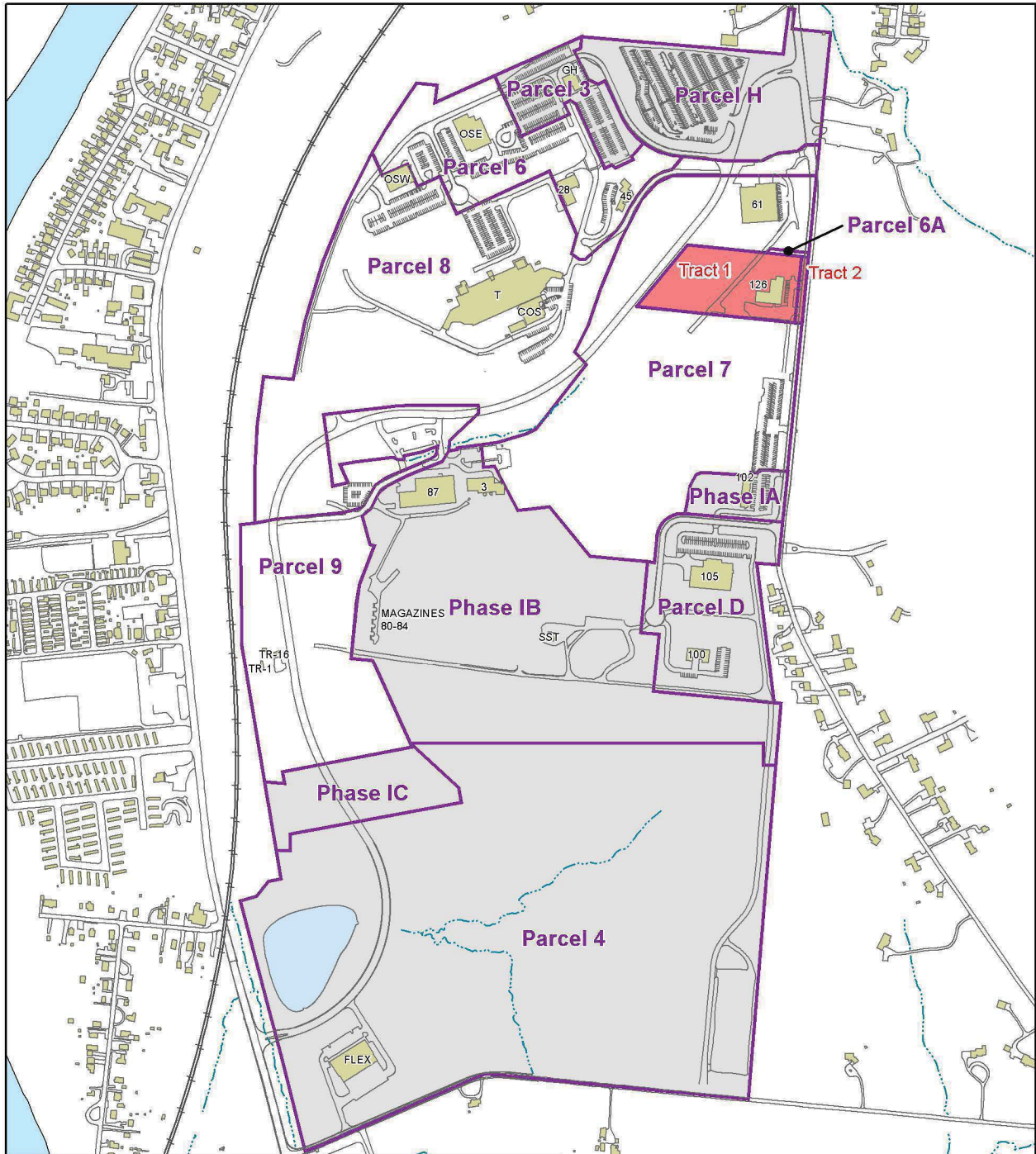
DOE Headquarters issued a quitclaim deed to EMCBC for Parcels 6A and 7. EMCBC then issued a quitclaim deed to MDC for an area called Parcel 6B, which was 5.621 acres including most of Parcel 6A and a portion of Parcel 7 (see Figure 22). EMCBC notified EPA, Ohio EPA, and ODH of that property transfer in an e-mail from Larry Kelly, “Transferred ownership of a 5.571 acre parcel of land and building (formerly known as Parcel 6A and Building 126) of the Mound Closure Project site.”

MDC then sold Parcel 6B, which was the area surrounding Building 126 at 955 Mound Road, and now described as Tracts 1 and 2, to BOI Solutions Inc. The quitclaim deed contained the IC restrictions and also referenced the Environmental Covenant.

Table 5 summarizes the existing buildings and the parcel transfer dates.

Table 5. Mound Site Parcels, Buildings, and Transfer Information

Parcel	Number of Structures	DOE Building Names/Numbers (See Table 3 for current street addresses)	Date Transferred	Owner
D	2	100, 105	March 1999	MDC
H	0		August 1999	MDC
3	1	Guard House (GH)	August 2002	MDC
4	1	MDC Flex Building	April 2001	MDC
Phase I	8	3, 87, 102, Magazines 80–84, salt storage shed	February 2009	MDC
6	3	Office Support East (OSE), 28, 45	n/a	EM
7	1	61 (MDC demolished 2, 63, and 63W in 2011)	n/a	EM
8	3	Central Office Space (COS), Office Support West (OSW), T Building	n/a	EM
9	3	300, Trailers 1 and 16	n/a	EM
6A –now in Tracts 1 and 2	1	126	December 2012	BOI Solutions Inc.
Total	23			



Legend 		U.S. DEPARTMENT OF ENERGY <small>MIAMISBURG, OHIO</small>	<small>Work Performed by</small> S.M. Stoller Corporation <small>Under DOE Contract No. DE-AM01-07LM00060</small>
		Mound Site Current Parcels, Buildings, and Ownership	
<small>DATE PREPARED:</small> June 11, 2013		<small>FILENAME:</small> S1017800	

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Figure 22. Current Parcels, Buildings, and Ownership

8.4 Montgomery County

LM researched Montgomery County property records to establish a baseline of lot numbers, ownership, addresses, and other data to track ownership. The table containing this information, included in Appendix E, will be updated annually.

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

The Parcel 3 ROD (DOE 2001) parcel boundary included a 0.7325-acre area 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 lot.

8.4.2 Parcel 6A Acreage and Legal Description Differs in Parcel 6, 7, and 8 ROD

There is a discrepancy between the drawing and legal description of Parcel 6A in the Parcels 6, 7, and 8 ROD (DOE 2009). The parcel 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 has the legal description for the larger 3.320-acre parcel, but the ROD contains the drawing for the 2.352-acre original parcel. The enlarged parcel was not formally changed on Montgomery County property records, so the current parcel figures show the smaller parcel 6A boundary. The 2.352-acre legal description was used for the December 2012 property transfer to MDC.

8.4.3 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. The quitclaim deeds and legal descriptions for the DOE-owned property were withdrawn when the sales agreement was revised in December 2012, so this legal description can be corrected when the property transfers to MDC.

8.4.4 Parcel 6, 7, 8, and 9 Legal Descriptions and Boundaries Do Not Match County Records

The acreages and parcel boundary drawings for Parcels 6, 7, 8, and 9 do not match those on the Montgomery County property webpage. Appendix F details the county lot records. These issues will be resolved when the property is transferred to MDC.

9.0 Conclusions

The ICs for the Mound site continue to function as designed. Adequate oversight mechanisms appear to be in place to identify possible violations of ICs, and adequate resources are available to correct or mitigate any problems if violations occur.

10.0 Recommendations

Table 6 lists outstanding recommendations from previous inspections and the status of those recommendations. Table 7 lists new recommendations from this year's inspection.

Table 6. Outstanding Recommendations from Previous Annual or CERCLA Five-Year Review Inspections of ICs

Origin	Issue/ Recommendation	Corrected?	Current Status 2013 Report
2011 CERCLA Five-Year Review	Verify that the quitclaim deed for Parcels 6, 7, and 8 is appropriately recorded and is free and clear of all liens and encumbrances.	Yes	Complete
	Finalize the sitewide IC Management/Land Use Control Plan (with CERCLA Summary).	Yes	Incorporated draft into O&M Plan
	Finalize the sitewide O&M Plan for groundwater remedies.	Yes	Final review draft
2012 Annual IC Inspection	Install a permanent marker for well 0451.	No	Scheduled for July 2013
	Work with the City to ensure that permit and zoning systems that capture future site work involving soil removal, regardless of property ownership, will be maintained.	Yes	New City Ordinance 6393 will transfer ownership of some MDC parcels to City. LM will continue to work with City
	Complete the soil removal white paper, which will become part of the O&M Plan.	Yes	Complete

Table 7. Recommendations from 2013 Annual Inspection for ICs

Number	Issue/Recommendation	Responsible
1	Review the records regarding the purpose of the red concrete. Discuss with Core Team.	LM/EM
2	Repeat the photographs of the cracks in the red concrete in 2014.	LM

11.0 Contact Information

For further information on the content of this annual report or the DOE Mound site property in general, contact:

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Acting Mound Site Manager
U.S. Department of Energy
Office of Legacy Management
11025 Dover Street, Suite 1000
Westminster, CO 80021
Cell: (720) 880-4349
E-mail: Gwen.hooten@lm.doe.gov

For further information on the regulatory guidelines that govern the CERCLA 120(h) process for property transfer of DOE Mound site property, contact:

Tim Fischer
Remedial Project Manager
U.S. Environmental Protection Agency
77 W. Jackson Boulevard
Chicago, IL 60604-3590
(312) 886-7058

or

Brian Nickel
Remedial Project Manager
Ohio Environmental Protection Agency
401 E. Fifth Street
Dayton, Ohio 45402-2911
(937) 285-6468

12.0 References

DOE (U.S. Department of Energy), 1995. *Operable Unit 1 Record of Decision*, Final, June.

DOE (U.S. Department of Energy), 1999a. *CERCLA 120(h) Summary Notice of Hazardous Substances Release Block D, Final and Record of Decision for Release Block D*, February.

DOE (U.S. Department of Energy), 1999b. *CERCLA 120(h) Summary Notice of Hazardous Substances for Release Block H, Mound Plant, Miamisburg, Ohio*, Final, July.

DOE (U.S. Department of Energy), 1999c. *Record of Decision for Release Block D*, Final, February.

DOE (U.S. Department of Energy), 1999d. *Record of Decision for Release Block H*, Final, June.

DOE (U.S. Department of Energy), 2001a. *Parcel 3, Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances, Mound Plant, Miamisburg, OH*, Final, September.

DOE (U.S. Department of Energy), 2001b. *Parcel 3 Record of Decision*, Final, August.

DOE (U.S. Department of Energy), 2001c. *Parcel 4, Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances, Mound Plant*, Final, March.

DOE (U.S. Department of Energy), 2001d. *Parcel 4 Record of Decision*, Final, February.

DOE (U.S. Department of Energy), 2003a. *Phase I Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances, Mound Plant*, Final, December.

DOE (U.S. Department of Energy), 2003b. *Phase I Record of Decision*, Final, July.

DOE (U.S. Department of Energy), 2008. *Sales Contract by and between the United States Department of Energy and the Miamisburg Mound Community Improvement Corporation, August 28, 2008*, August.

DOE (U.S. Department of Energy), 2009. *Parcels 6, 7, 8 Record of Decision*, August.

DOE (U.S. Department of Energy), 2010. *Parcel 6, 7 and 8 Environmental Summary CERCLA 120(h) Summary Notice of Hazardous Substances*, Final, August.

DOE (U.S. Department of Energy), 2011a. *Amendment of the Operable Unit 1 Record of Decision, U.S. Department of Energy, Mound Closure Project*, Final, August.

DOE (U.S. Department of Energy), 2011b. *Parcel 9 Environmental Summary, CERCLA 120(h) Summary Notice of Hazardous Substances*, Final, August.

DOE (U.S. Department of Energy), 2011c. *Third Five-Year Review for the Mound, Ohio Site, Miamisburg, Ohio, LMS/MND/S07963*, U.S. Department of Energy Office of Legacy Management, September.

DOE (U.S. Department of Energy), 2012a. *Annual Assessment of the Effectiveness of Site-Wide Institutional Controls Applied to the Former Mound Site Property, LMS/MND/S08846*, U.S. Department of Energy Office of Legacy Management, June.

DOE (U.S. Department of Energy), 2012b. *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.

DOE (U.S. Department of Energy), 2012c. *U.S. Department of Energy Amendment Number 24 to the General Purpose Lease*, December.

DOE (U.S. Department of Energy), in preparation. *Operations and Maintenance (O&M) Plan for the U.S. Department of Energy Mound Site, Miamisburg, Ohio, LMS/MND/S08406*, June.

EPA (U.S. Environmental Protection Agency), 2005. *Institutional Controls: A Citizen's Guide to Understanding Institutional Controls at Superfund, Brownfields, Federal Facilities, Underground Storage Tanks, and Resource Conservation and Recovery Act Cleanups*, OSWER 9255.0-98, EPA-540-R-04-004, February, available online at http://www.epa.gov/fedfac/pdf/ic_ctzns_guide.pdf, accessed May 7, 2012.

MMCIC (Miamisburg Mound Community Improvement Corporation), 2003. *Comprehensive Reuse Plan Update*, December.

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Appendix A

Annual Assessment Checklist for the Mound Site

(Inspections Conducted in April 2013)

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CHECKLIST WORKSHEET – COMBINED – ALL PARCELS
Review of Effectiveness of Institutional Controls

<p>Scope of Assessment: Entire Mound Site, Miamisburg, Ohio. Checklist includes results from all inspections.</p>	
<p>Preliminary physical site inspection date: April 14, 2013</p>	
<p>Walkdown with Regulators: April 16, 2013 Lead: Gwen Hooten, DOE-LM Mound Site Manager Participants: Tim Fischer, EPA Brian Nickel, Ohio EPA Anthony Campbell, Ohio EPA Shannon Dettmer, ODH Frank Bullock, MDC</p>	<p>Ellen Stanifer, City of Miamisburg Larry Kelly, DOE-EMCBC Bill Hertel, Greg Lupton, Gary Weidenbach, Dave Hinaman, and Bob Ransbottom, Stoller Joyce Massie, J.G. Management Systems Inc.</p>
<p>Summary of property improvements since the previous review. (For example, have buildings been demolished or erected, has surface water flow been modified, has landscaping been done, etc.?)</p>	
<p>Major construction work occurred during 2012 on Vanguard Boulevard. Construction work included installing an asphalt road; installing parking areas north of Excelitas building; regrading areas and rerouting storm sewers; and installing curbs, gutters, sidewalks, utilities and street lights. EMCBC conveyed Parcel 6A and a section of Parcel 7 to MDC. MDC sold 5.621 acres from 6A and 7, named Tracts 1 and 2, to BOI Solutions Inc. This included the former LM office building at 955 Mound Road.</p>	
<p>Evidence of unauthorized soil removal? Yes () No (X)</p>	
<p>Evidence of unauthorized groundwater use? Yes () No (X)</p>	
<p>Stoller installed new wells in the OU-1 area since last year’s inspection. In addition to temporary Geoprobe excavations, LM installed one 6-inch-diameter well (well 0452) and four 2-inch-diameter Geoprobe wells in April for the integral pumping test.</p>	
<p>Evidence of land use other than “Industrial” (e.g., residential)? Yes () No (X)</p>	
<p>Observed fishing on 2 different days over a 1-week period prior to the inspection.</p>	
<p>Signage/Markers in good repair? Yes (X) No ()</p>	
<p>Previously missing signage was replaced. Three signs are located within the mulched areas around the pond.</p>	
<p>Groundwater monitoring wells maintained properly? Yes (X) No ()</p>	
<p>Observed drainage issues around wells 0346, 0402, 0410, 0451, P015, P031, and P046. MDC and the Vanguard Boulevard contractor, MILCON, are in the process of correcting these. Monitoring wells are in good condition. Stoller advised that permanent markers will be installed on wells 0451, 0452, P057, P058, P059, and P060.</p>	
<p>Other equipment associated with maintenance of the ICs in good repair?</p>	
<p>No other equipment is associated with maintenance of ICs.</p>	

CHECKLIST WORKSHEET – COMBINED – ALL PARCELS
Review of Effectiveness of Institutional Controls

T Building areas with additional institutional controls:
Have ICs been followed? Other comments. **Yes (X) No ()**

DOE maintained T Building through December 2012 prior to MDC leasing the building and accepting responsibility for maintenance.

Standing water was observed during the walkdown in rooms T57 and T58. These are two of the rooms with special ICs. Stoller identified the source of the water, which was from the sump in room 99, whose float ball had rusted off.

After the walkdown, MDC instructed their property manager, Turner Property, to replace the ball float and to pump the excess water back to the drain. They also dried the area with fans. On April 18, 2013, Stoller verified with MDC that the correction had been made.

Cracks in the red concrete were again observed. Ohio EPA asked what crack width would trigger a repair action. LM advised they will review T Building documents to determine the intent of the red concrete and will discuss with the Core Team. LM photographed cracks to document any changes from the 2012 inspection. The photos did not show a significant change.

Summary and status of open issues or recommendations from previous reviews.
Dates of previous inspections and five-year reviews.

Origin	Issue/Recommendation	Current Status in the 2013 Report
2011 Five-Year Review	Verify that the quitclaim deed for Parcels 6, 7, and 8 is appropriately recorded and is free and clear of all liens and encumbrances.	All of the deeds for the property that has been transferred to MDC have been verified. Parcels 6, 7, 8, and 9 are still owned by EMCBC.
2011 Five-Year Review	Finalize the sitewide IC Management/Land Use Control Plan (with CERCLA Summary).	Final draft
2011 Five-Year Review	Finalize the sitewide O&M Plan for groundwater remedies.	Final draft
2012 Annual IC Assessment	Install a permanent marker for well 0451.	Installation planned for July 2013
2012 Annual IC	Work with the City to ensure that permit and zoning systems that capture future site-work involving soil removal, regardless of property ownership, will be maintained.	Complete
2012 Annual IC	Complete the soil removal white paper, which will become part of the O&M Plan.	Complete

CHECKLIST WORKSHEET – COMBINED – ALL PARCELS
Review of Effectiveness of Institutional Controls

Personnel interviewed during the site inspections or during review of associated documentation.

Frank Bullock participated in the physical walkdown inspection and answered all questions regarding soil movement, building activities, etc.

Obtained permit information from Leslie Karacia, City of Miamisburg Engineering Department. Chris Fine, City of Miamisburg Development Director.

List of documents reviewed (e.g., street opening permits or construction permits approved by the City of Miamisburg, engineering drawings for improvements to property, aerial photographs, maps, City Planning Commission requests, City Zoning requests, Ohio Department of Natural Resources well logs, Montgomery County property records).

Requested query of City of Miamisburg permit database by the City Engineering Department.

There were nine permits covering work at the site.

There were no permits for road construction.

Queried Ohio Department of Natural Resources website for new wells using Mound site roads (Mound Road, Capstone Drive, Vanguard Boulevard, Vantage Point, and Benner Road selected addresses). There were no new wells registered.

Reviewed online Montgomery County property records for the entire site (see discussion below). Obtained stamped copies of deeds and legal descriptions from EMCBC.

On May 6, 2013, Stoller learned that the Miamisburg City Council had approved ordinance 6393 on April 16, 2013, that allowed MDC to transfer property to the City on a temporary basis. The following text was copied from the council minutes on the City website:

“Ordinance 6393

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO ENTER INTO A PROPERTY TRANSFER AGREEMENT BETWEEN THE CITY OF MIAMISBURG AND THE MOUND DEVELOPMENT CORPORATION AND DECLARING AN EMERGENCY. Motion was made by Nicholas, seconded by Colvin to dispense with the requirement that Ordinance No. 6393 be read on two separate days, authorize its adoption on the first reading and have it read by title only. Motion carried. The Ordinance was read by title only. Motion was made by Case, seconded by McCabe to pass Ordinance No. 6393, carried by Yea Votes of Case, Clark, Colvin, McCabe, Nicholas and Stalder.

The slide presented in the meeting:

Ordinance 6393 Mound Property Transfer Agreement

- MDC and DOE have an existing agreement to transfer property ownership from DOE to MDC
- Southern half of site will transfer in 2013
 - This transfer has been in process for the last several years
 - BOI project delayed transfer
 - MDC intends to transfer this property to City for economic development purposes
 - Property will remain tax exempt until redevelopment
 - Allows more coordination between City and MDC on future projects
 - Agreement outlines roles and responsibilities of each party.”

On May 21, 2013, Stoller personnel met with Chris Fine, City of Miamisburg Development Director, and Ellen Stanifer, City Works Department, to review the ICs. The discussion included the importance of the ICs and ways to maintain the institutional awareness of them within the City.

CHECKLIST WORKSHEET – COMBINED – ALL PARCELS
Review of Effectiveness of Institutional Controls

Based upon the review of the above-listed documents and interviews, were property improvements covered by the appropriate approvals (e.g., was a construction permit approved by City?).

Yes () No ()

All permits were for building modifications. There were no permits for road construction.

No new wells were recorded on the Ohio Department of Natural Resources website.

The 2013 IC assessment inspection benefited from property record reviews for the O&M Plan.

Verified that the deeds recorded for property transfer from EMCBC to MDC and from MDC to BOI Solutions Inc. contained IC wording. Deeds recorded for the previous property transfer of Parcels 3, 4, D, and H and the Phase I Parcel (sub-parcels A, B, and C) also contained IC wording.

The Parcel 9 Environmental Covenant with IC wording was recorded at Montgomery County.

Other observations.

It was noted during review of the legal descriptions in the RODs that the 0.776-acre northwest corner of Parcel 3 covered by the Parcel 3 ROD was not sold to MDC with Parcel 3. This section north of Office Support East (OSE) is also shown in Parcel 6 and was included in the Parcels 6, 7, and 8 ROD. LM has changed the ROD parcel drawings to reflect this observation.

It was also noted that the Parcel 6A legal description in the Parcels 6, 7, and 8 ROD did not match the drawings in the ROD. Parcel 6A, regardless of configuration, is covered in the Parcels 6, 7, and 8 ROD. LM will discuss possible action with Mound Core Team.

Lastly, although the location of the special IC areas is well known, there was inconsistency in the survey unit or room number descriptions used in related documents. LM researched the final survey unit reports to clarify and corrected the T Building first floor drawing. Survey unit 1C-06 covered corridor 39 within the large bay area known as the cap. 1C-05 covered rooms 36, 36A, 37, and 38, which are not in the special IC area. The T Building drawing was corrected.

During the walkdown, was there physical evidence of movement of soil offsite or use of groundwater that was not approved by the regulators? Yes () No ()

There was a large amount of soil work observed. Vanguard Boulevard was extended from the Route 25 southwest entrance to the northeast main entrance. This work required extensive soil movement, rerouting storm and sanitary underground lines, etc. MDC oversaw all work.

Because the road was on DOE property, EM, LM, and Stoller also monitored the construction. MDC controls soil movement onsite.

The owner of 955 Mound Road building, in Tracts 1 and 2, was installing a loading dock on the building. This work was reviewed by MDC, who advised that no soil was removed from the site.

Miscellaneous items noted during walkdown or other inspections.

Ohio EPA requested a tour stop at the former Burn Area, which was the subject of a cleanup regulated by the Resource Conservation and Recovery Act.

The OU-1 drainage issues and the newly installed wells for the integral pumping test were observed.

After the day of the walkdown, vandals cut three transducer cables to be used for the integral pumping test in the OU-1 area.

Recommendations from preliminary physical inspections.

None

CHECKLIST WORKSHEET – COMBINED – ALL PARCELS
Review of Effectiveness of Institutional Controls

Recommendations from walkdown.
None
Conclusion/comments from walkdown.
None
Recommendations from IC Assessment.
None
Checklist prepared by:
U.S. Department of Energy
Gwen Hooten, DOE-LM Mound Site Manager
April 16, 2013, Walkdown Comments were submitted by:
None

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Appendix B

Example of Real Estate Easement for Utility Work Performed on MDC Property

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**SUPPLEMENTARY DECLARATION OF EASEMENT TO
REAL ESTATE EASEMENT NO. 99-OH-00011**

THIS SUPPLEMENTARY DECLARATION OF EASEMENT TO REAL ESTATE EASEMENT NO. 99-OH-00011 ("Supplementary Declaration of Easement") is made on this 17th day of March, 2003, by MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION, an Ohio non-profit corporation ("Declarant") under the terms and conditions set forth below.

RECITALS:

A. By virtue of Real Estate Easement No. 99-OH-00011 executed on September 22, 1999, and recorded at Microfiche No. 99-0702D09 (the "Original Easement"), The United States of America, acting by and through the Department of Energy ("DOE"), granted to AMERITECH an easement for the installation of communication lines over the area depicted in the Original Easement (the "Original Easement Area"), described in Exhibit A, attached hereto and incorporated herein by reference.

B. By virtue of a Quitclaim Deed dated August 4, 1999, and recorded at Microfiche No. 99-0852B11 of the Montgomery County, Ohio Recorder's office, and by virtue of a Quitclaim Deed dated November 19, 1999, and recorded at Microfiche No. 99-0852B05 of such Recorder's office, The United States of America, acting by and through the Secretary of the DOE, conveyed to Declarant the real property described on Exhibit B, attached hereto and incorporated herein by reference ("Declarant's Property"), which property is burdened by the Original Easement.

C. Declarant now desires to expand the Original Easement Area on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the recitals set forth above and the terms and conditions set forth below, Declarant hereby declares as follows:

1. Grant. Declarant hereby grants to AMERITECH, its successors and assigns, a permanent, non-exclusive easement upon, over and under the area of the Declarant's Property described in Exhibit C, attached hereto and incorporated herein by reference ("Expanded Easement Area"). By making use of the Expanded Easement Area, AMERITECH shall be deemed to have agreed to be bound by the terms and conditions of this Declaration.

2. Compliance With Restrictions. AMERITECH shall have reviewed the restrictions and covenants set forth in the Deeds by which DOE conveyed to Declarant the Declarant's Property prior to the construction or installation of any of AMERITECH's equipment. AMERITECH agrees that, as set forth in the Deeds, its use of the Expanded Easement Area is subject to the terms thereof, and further agrees to be bound to comply with the restrictions and covenants set forth therein, including without limitation, the following:

2.1 Excepting those soils in an area approximately 40 feet wide and 218.17 feet long, bounded on the east by the centerline of Mound Road as described above, Grantee covenants that any soil from 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,

3:12:27
EASE-03-03151 0023
Montgomery County
Judy Dodge Recorder

page 45; Deed Book 1258, pages 56 and 74; Deed, 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. AMERITECH warrants that it will make its officers, agents, contractors, employees, and others for whom it is responsible aware of the restriction on soil removal and contractually obligate agents and contractors to abide by this restriction.

2.2 Each utility provider covenants not to use, or allow the use of, the Declarant's Property for any residential or farming activities, or any other activities that could result in the chronic exposure of children under eighteen years of age to soil or groundwater from the Declarant's Property. Restricted uses shall include, but not be limited to:

- (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; and
- (4) community centers, playgrounds, or other recreational religious facilities for children under eighteen years of age.

Declarant shall be contacted to resolve any questions that may arise as to whether a particular activity would be considered a restricted use.

2.3 AMERITECH covenants not to extract, consume, expose, or use in any way the groundwater underlying the Declarant's Property without the prior written approval of the United States Environmental Protection Agency (Region V) and the OEPA.

If there is any conflict between the terms of the Deeds and this Supplementary Declaration of Easement, the terms of the Deeds shall control.

3. Incorporation of Original Easement. This Supplementary Declaration of Easement incorporates by reference all of the terms, conditions and covenants of the Original Easement Agreement. By its acceptance of the easement granted in this Supplementary Declaration of Easement, AMERITECH hereby covenants to comply with and observe the terms, conditions and covenants of the Original Easement for the benefit of Declarant, its successors and assigns forever, and agrees that Declarant, its successors and assigns forever, shall have the right to enforce such terms, covenants and conditions. As used in the Original Easement, the term "premises" shall mean Declarant's real property, whether or not burdened by the easements granted herein or in the Original Easement, and all surrounding Government-owned real property. All notices required to be provided to the DOE under the Original Easement shall be provided to Declarant at 720 Mound Road, COS Bldg., Suite 480, Miamisburg, Ohio 45342-6714, Attn: Planning Manager, or such other address as provided by Grantor.

4. Reservation. Declarant reserves for itself, its successors and assigns forever, the right to use the Expanded Easement Area for any purpose not inconsistent with the rights conveyed to AMERITECH herein; provided however, that Declarant shall not use the Expanded Easement Area in a manner that will prevent or hinder its use by AMERITECH for the purposes provided herein.

5. Covenants Run with the Land: All covenants, agreements and conditions contained in this Supplementary Declaration of Easement shall be considered as running with the land.

IN WITNESS WHEREOF, the undersigned has executed this Supplementary Declaration of Easement on behalf of Declarant as of the day and year first set forth above.

DECLARANT:

MIAMISBURG MOUND COMMUNITY
IMPROVEMENT CORPORATION

By: Michael J. Grawielman

Printed Name: Michael J. Grawielman

Title: President

STATE OF OHIO, COUNTY OF MONTGOMERY, SS:

The foregoing instrument was acknowledged before me this 18th day of March, 2003, by Michael J. Grawielman the President of MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION, an Ohio non-profit corporation, on behalf of said corporation.

Joan Wysocki
NOTARY PUBLIC

Joan Wysocki, Notary Public
In and for the State of Ohio
My Commission Expires June 28, 2004

This instrument prepared by:
Sharon L. Costello, Esq.
Coolidge Wall Womley & Lombard Co., L.P.A.
33 W. First Street, Suite 600
Dayton, Ohio 45402

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Appendix C

T Building Rooms with Special ICs—Core Team Guidance and 2010 Baseline Photos

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T Building Rooms with Special ICs

In addition to the ICs for the entire site, T Building has the following additional IC restrictions as described in the Parcel 6, 7, and 8 Record of Decision.

1. Prohibit the removal of concrete floor material in specified rooms of T Building (Figure C-1) to offsite locations without prior approval from EPA, Ohio EPA, and ODH.
2. Prohibit the penetration of concrete floors in specified rooms of T Building (Figure C-1) without prior approval from EPA, Ohio EPA, and ODH.

On June 29, 2009, the Mound Core Team signed an agreement for the position paper which provided policy guidelines for limited activities in these rooms which should not result in unacceptable risk to workers in the building.

The four-page agreement and position paper, T Building Special ICs Core Team Agreement and Position Paper, 6-29-09, are included in the CERCLA administrative record, in this appendix, and will be included in subsequent annual IC assessment reports.

Photos of T Building Rooms

The photos in this appendix show the baseline conditions of the rooms in April 2010. No changes have occurred since those photos were taken. Appendix D of this IC Assessment Report documents the condition of the cracks in the red concrete cap in room 44 survey area 1C-10.

MDC took over maintenance of T Building in December 2012 under the lease amendment #25 to the General Purpose Lease.

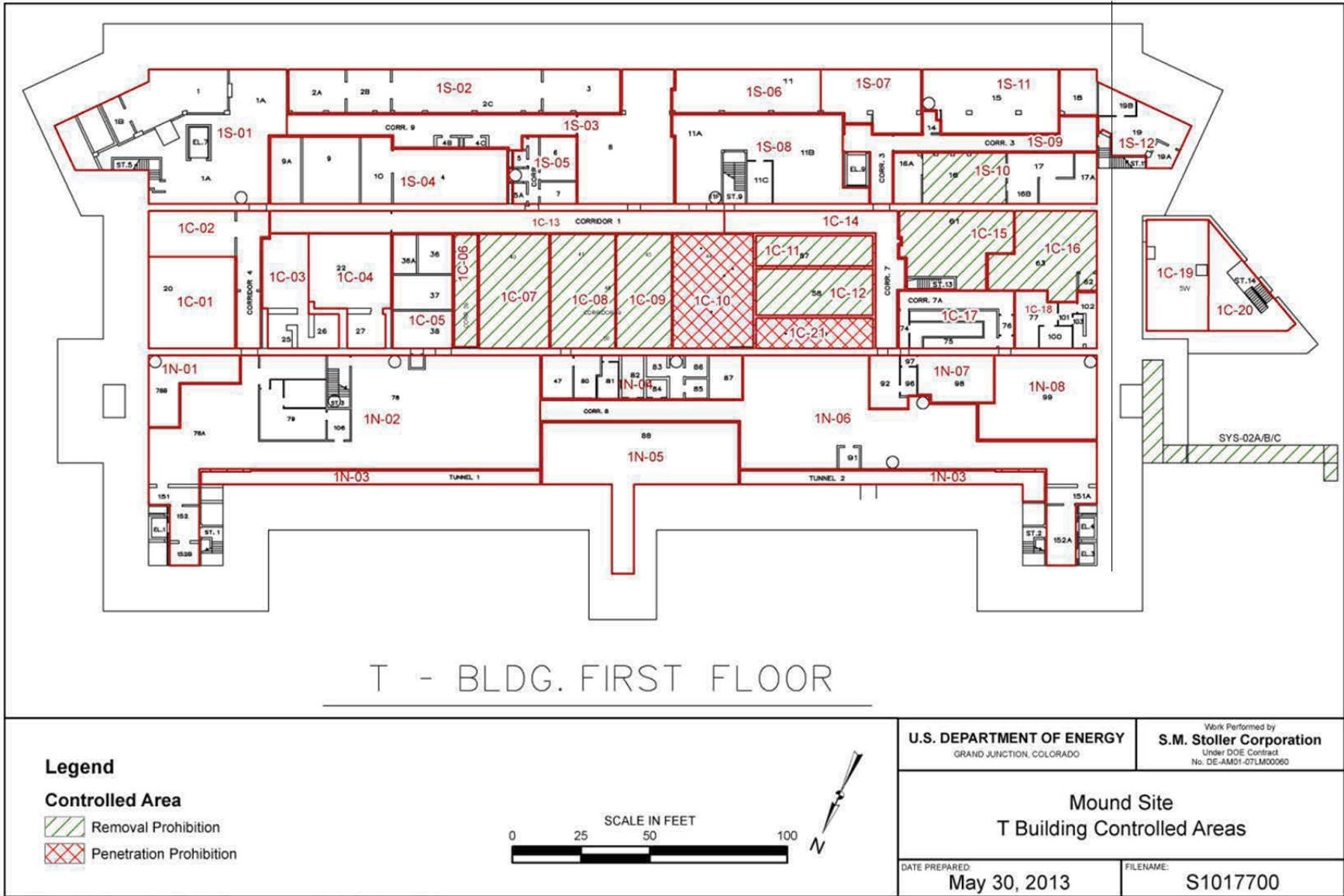


Figure C-1. T Building Rooms with Special ICs



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.

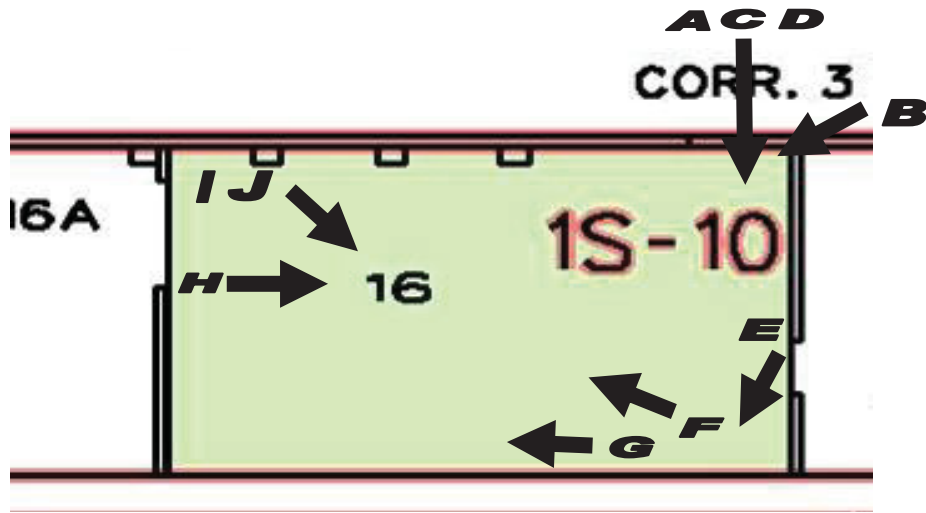


Figure C-2. T Bldg. Room 16 View A



Figure C-3. T Bldg. Room 16 View B



Figure C-4. T Bldg. Room 16 View C



Figure C-5. T Bldg. Room 16 View D



Figure C-6. T Bldg. Room 16 View E



Figure C-7. T Bldg. Room 16 View F



Figure C-8. T Bldg. Room 16 View G



Figure C-9. Room 16 View H



Figure C-10. T Bldg. Room 16 View I



Figure C-11. T Bldg. Room 16 View J

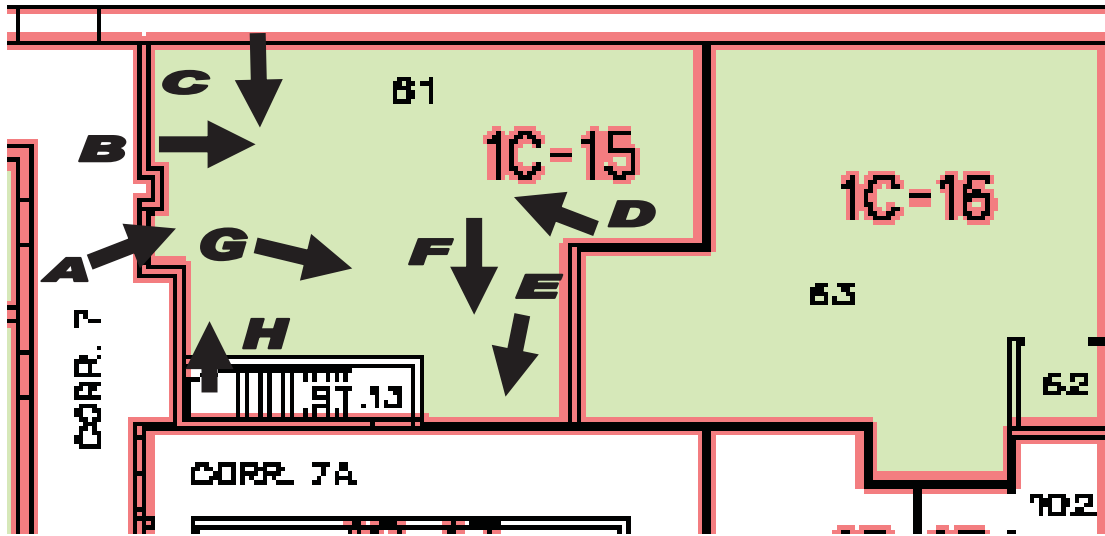


Figure C-12. T Bldg. Room 61 View A



Figure C-13. T Bldg. Room 61 View B



Figure C-14. T Bldg. Room 61 View C



Figure C-15. T Bldg. Room 61 View D



Figure C-16. T Bldg. Room 61 View E



Figure C-17. T Bldg. Room 61 View F



Figure C-18. T Bldg. Room 61 View G



Figure C-19. T Bldg. Room 61 View H

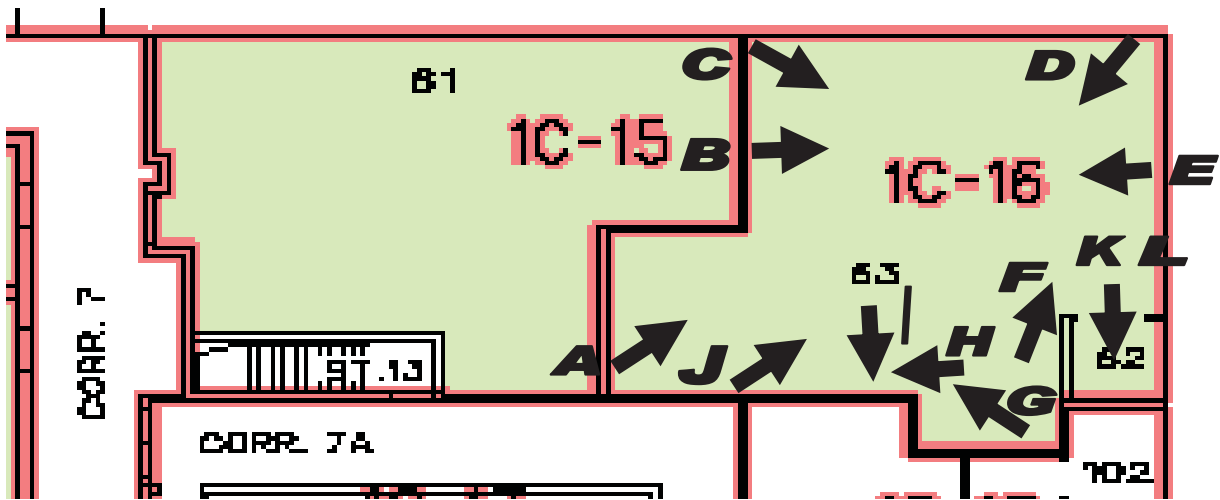


Figure C-20. T Bldg. Room 63 View A



Figure C-21. T Bldg. Room 63 View B



Figure C-22. T Bldg. Room 63 View C



Figure C-23. T Bldg. Room 63 View D



Figure C-24. T Bldg. Room 63 View E



Figure C-25. T Bldg. Room 63 View F



Figure C-26. T Bldg. Room 63 View G



Figure C-27. T Bldg. Room 63 View H



Figure C-28. T Bldg. Room 63 View I



Figure C-29. T Bldg. Room 63 View J



Figure C-30. T Bldg. Room 62 View K



Figure C-31. T Bldg. Room 62 View L

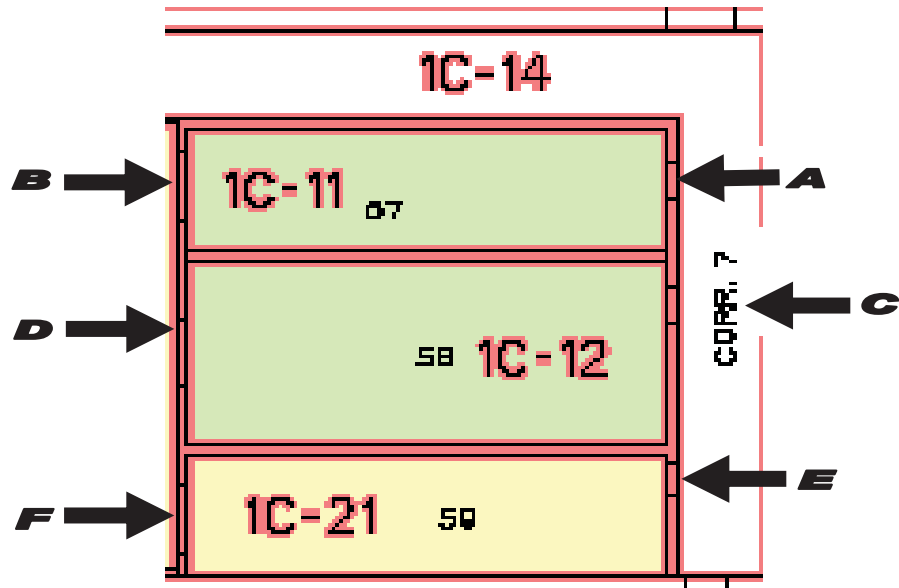


Figure C-32. T Bldg. Room 57 View A



Figure C-33. T Bldg. Room 57 View B



Figure C-34. T Bldg. Room 58 View C



Figure C-35. T Bldg. Room 58 View D



Figure C-36. T Bldg. Room 59 View E



Figure C-37. T Bldg. Room 59 View F

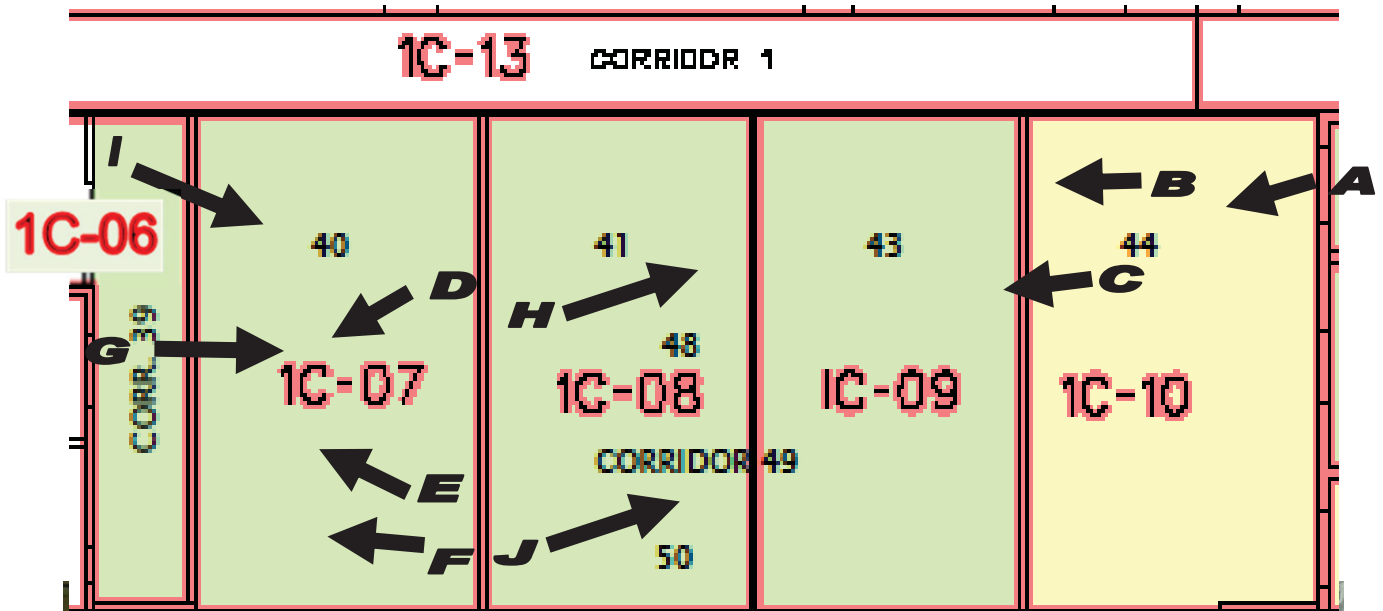


Figure C-38. T Bldg. Rooms 39-44, 48-50 View A

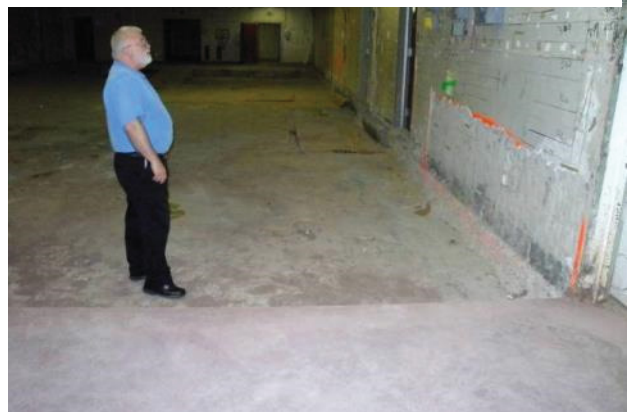


Figure C-39. T Bldg. Rooms 39-44, 48-50 View B

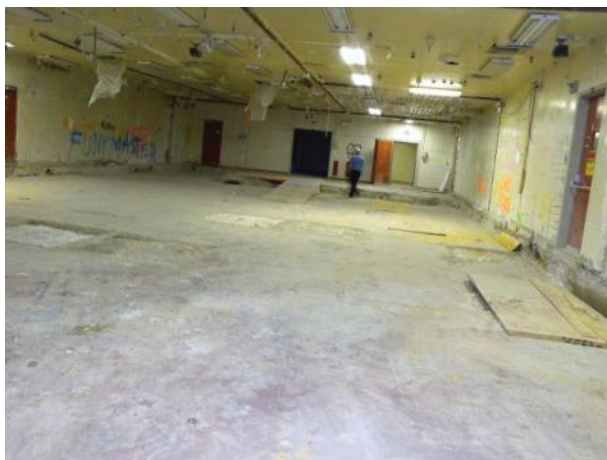


Figure C-40. T Bldg. Rooms 39-44, 48-50 View C



Figure C-41. T Bldg. Rooms 39-44, 48-50 View D



Figure C-42. T Bldg. Rooms 39-44, 48-50 View E



Figure C-43. T Bldg. Rooms 39-44, 48-50 View F

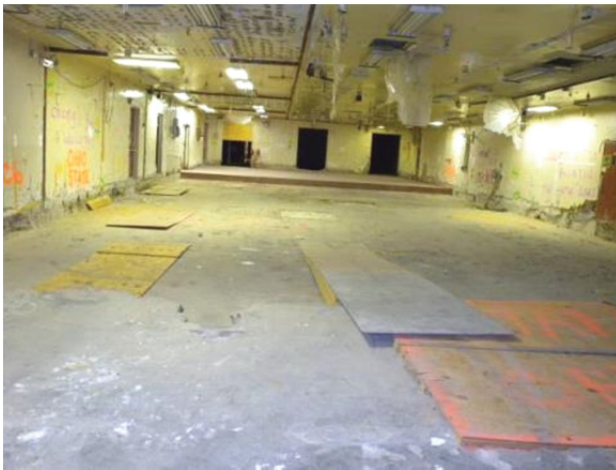


Figure C-44. T Bldg. Rooms 39-44, 48-50 View G



Figure C-45. T Bldg. Rooms 39-44, 48-50 View H



Figure C-46. T Bldg. Rooms 39-44, 48-50 View I



Figure C-47. T Bldg. Rooms 39-44, 48-50 View J

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Appendix D

Photos of T Building Red Concrete Cracks 2013

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2013 T Building Red Concrete Cracks Photos

The following photographs were taken for the 2013 Mound Site Annual IC Assessment to document the current condition of the cracks in the red concrete in specified rooms in T Building. Figure D-1 room diagram shows the location of the crack monitoring points labeled A through I.

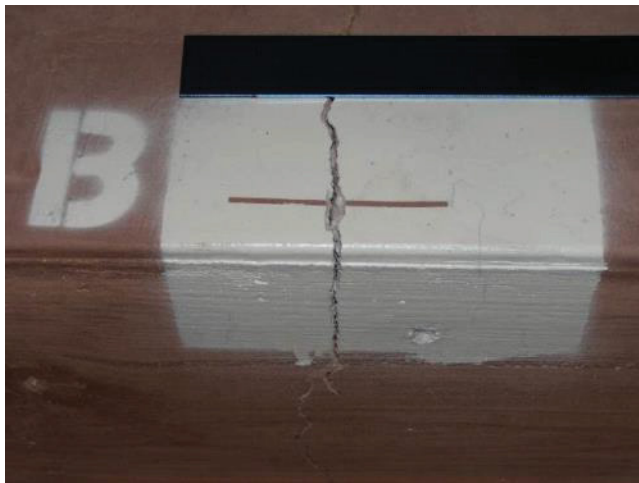
Table D-1. 2013 T Building Red Concrete Area Monitoring Points



Monitoring point A



Monitoring point A



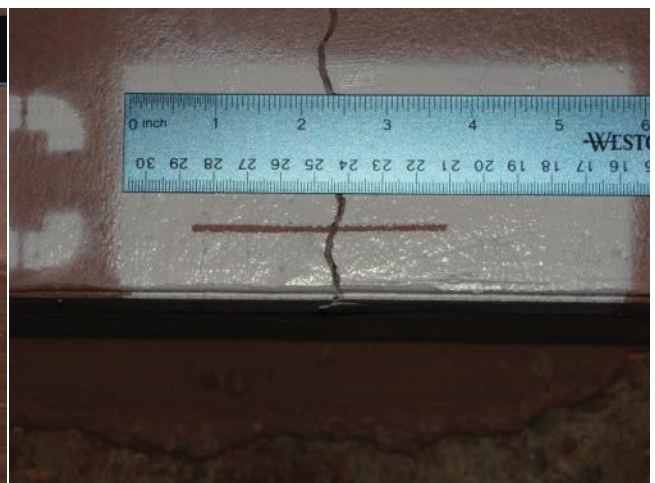
Monitoring point B



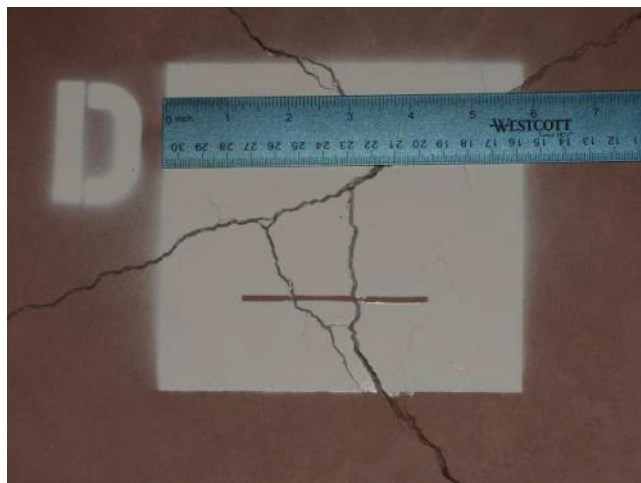
Monitoring point B



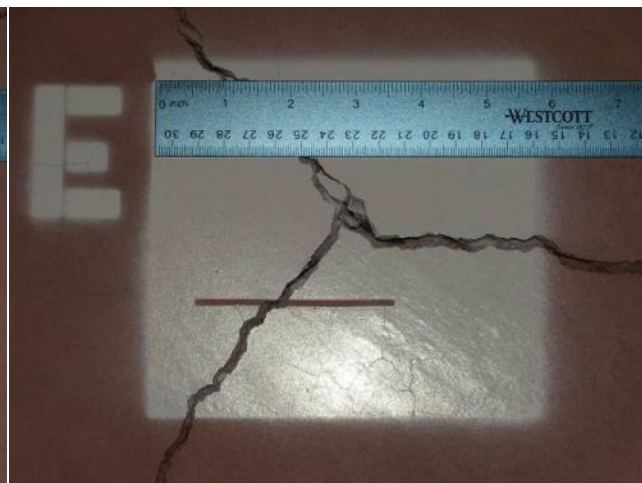
Monitoring point C



Monitoring point C



Monitoring point D



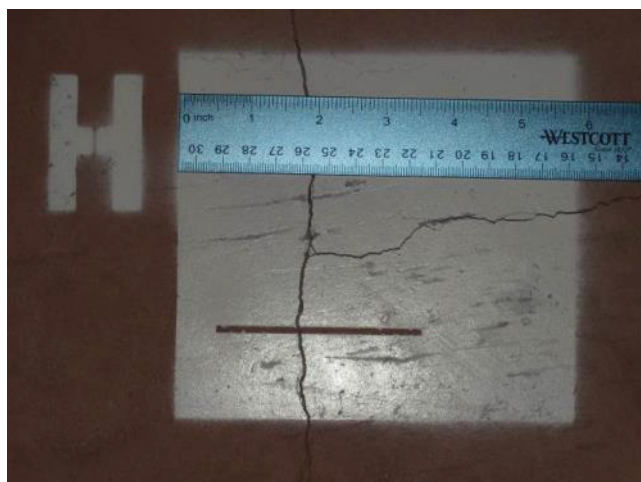
Monitoring point E



Monitoring point F



Monitoring point G



Monitoring point H



Monitoring point I

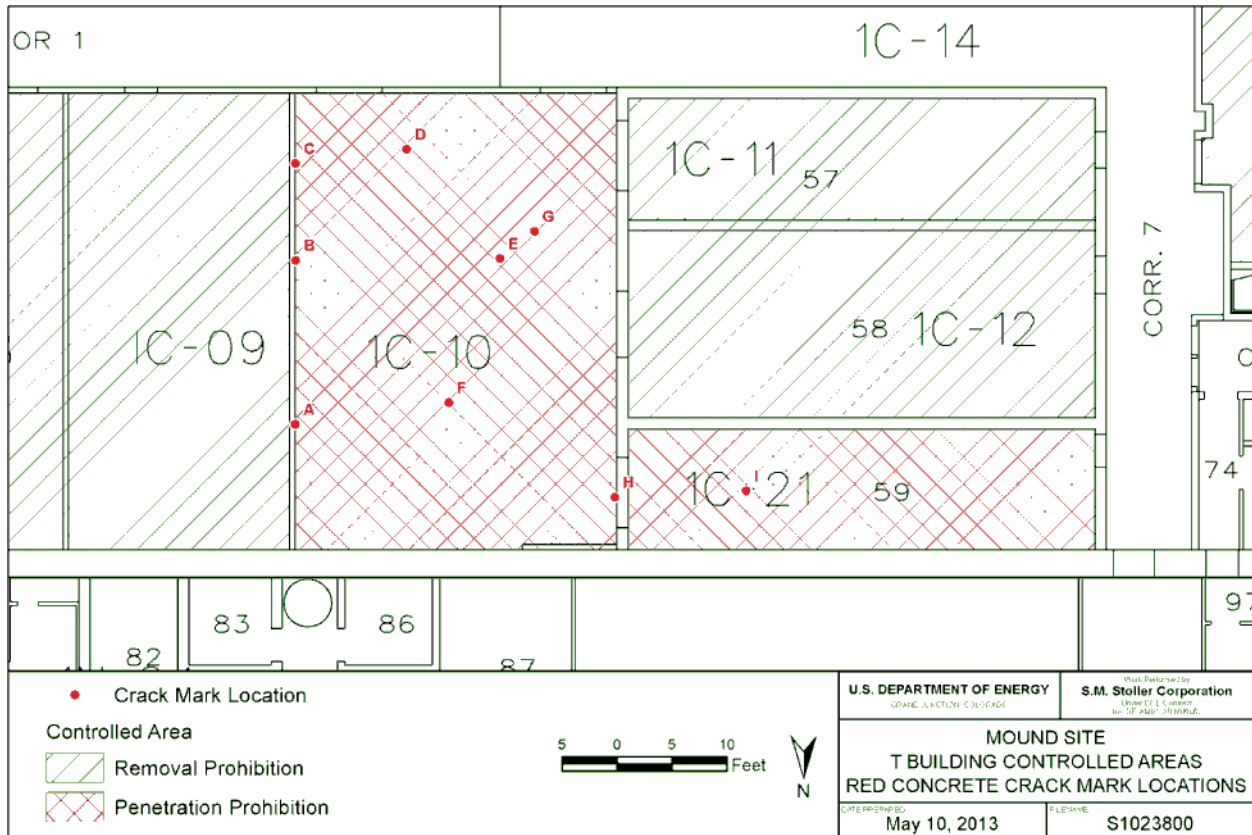


Figure D-1. Room Diagram

Appendix E

Table of Mound Site Property Information on Montgomery County Auditor's Website

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Mound Site Parcel IDs from Montgomery County Property Records

May 15, 2013

PARID	PARCEL LOCATION on record	Legal Description	Land Use	Acres	Deed	Sale	Conveyance	Owner per record	General Location	Notes
MDC OWNED PROPERTY										
K46 00501 0010	MOUND RD	5-2-30,36	C - OTHER COMMERCIAL STRUCTURES	12.3068	1999-00852 B011		1999-00852B011	Miamisburg Mound Community Improvement Corp.	Parcel H	
K46 00501 0011	MOUND RD	5-2-30	C - OTHER COMMERCIAL STRUCTURES	12.4290	1999-00852 B005			Miamisburg Mound Community Improvement Corporation	Parcel D, part of Lot 2259	
K46 00501 0012	Mound Rd	2259PT 5-1-9	C - OTHER COMMERCIAL STRUCTURES	1.9520	09-011643	17-Oct-02	200200128206	Miamisburg Mound Community Improvement Corporation	Part of Parcel 3 pkg lot dwg	
K46 00501 0013	1075 MOUND RD	2259PT 5-1-9	C - OTHER COMMERCIAL STRUCTURES	2.5420	09-011643	24-Feb-09	200900011643	Miamisburg Mound Community Improvement C	Parcel Phase 1A	
K46 00503 0028	MOUND RD	2290	C - OFFICE BUILDING 1-2 STORIES	2.8530	02-128206		2002-020488	Miamisburg Mound Community Improvement Corporation	Part of Parcel 3	
K46 01109 0002	BENNER RD	4778 11-9-10	C - COMMERCIAL VACANT LAND	6.5680	09-011643			Miamisburg Mound Community Improvement Corporation	former Phase IC	
K46 01109 0007	1390 Vanguard Dr	5-2-30, 5-2-36 ABATEMENT 11-9-8, 15-7-21,22	I - INDUSTRIAL WAREHOUSES LIGHT	94.8380	2002-00128007		2002-020485	Miamisburg Mound Community	Parcel 4	
K46 01109T0007	1390 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	think this in record because of abatement. No acreage	
K46 01507 0001	1100 BENNER RD	6127, 6128, 2, 5-3-29; 5-1-14; 11-9-9	I - MANUFACTURING & ASSEMBLY MEDIUM	42.8820	09-011643			Miamisburg Mound Community Improvement C	Phase IB	
Total MDC owned & showing on county web				176.3708						

Mound Site Parcel IDs from Montgomery County Property Records

May 15, 2013

PARID	PARCEL LOCATION on record	Legal Description	Land Use	Acres	Deed	Sale	Conveyance	Owner per record	General Location	Notes
BOI SOLUTIONS I N C . OWNED PROPERTY										
K46 00501 0017	Not on county website 5-15-13. 955 Mound Road	2259		5.3500	2012-00084260			BOI Solutions, Inc.	most of former 6A + parts of Parcel 7	
K46 00501 0018	info not on line now. 955 Mound Road	2259		0.2710	2012-00084260			BOI Solutions, Inc.	Part of 6A road front	
Total BOI Solutions Inc. owned & showing on county web				5.6210						
DOE OWNED PROPERTY										
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	
K46 00501 0002	MOUND RD	2259PT 5-1-9	E - EXEMPT PROPERTY OWNED BY USA	47.8000	01214 P00017			United States of America	most of Parcel 6	Wrong acreage
K46 00503 0013	Old Main St	2290PT	E - EXEMPT PROPERTY OWNED BY USA	66.1790	01258P00056			United States of America	combo parts of Parcels 6 8 9	
K46 01109 0001	BENNER RD	4777PT	E - EXEMPT PROPERTY OWNED BY USA	10.2040	1981-00376A001			United States of America	OU1	
K46 01109 0003	S Dixie Dr	4779	E - EXEMPT PROPERTY OWNED BY USA	1.6000	01258P000074			US of America	road w of laydown area	
Total acreage DOE owned & showing on county web				126.507						
K46 00501 0015	Parcels are shown on county parcel map but parcel information is not on county website. 5-15-13	2259		0.1170			2012-00082086 DOE to MDC	United States of America	northern slice of 6A	
K46 00501 0016		2259		36.9990			2012-00082087 DOE to MDC	United States of America	approximate Parcel 7	
Total acreage DOE owned & NOT showing on county web				37.1160						
Total site acreage showing on county web (DOE, MDC, BOI)				308.4983						
Historical acreage				305.0630						
Difference				3.435						

Appendix F

Aerial Photo with ROD Parcel Boundaries March 2011

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U.S. DEPARTMENT OF ENERGY MIAMISBURG, OHIO	Work Performed by S.M. Stoller Corporation Under DOE Contract No. DE-AM01-07UM0000
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**March 2011 Aerial View
of the Mound Site
Showing ROD Parcel Boundaries**

DATE PREPARED: May 2, 2013	FILENAME: S1017500
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Mound Site March 2011 Aerial Photo Showing ROD Parcel Boundaries

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