



Annual Assessment of the Effectiveness of Site-Wide Institutional Controls Applied to the Former DOE Mound Site Property

June 2007



U.S. Department of Energy

Office of Legacy Management

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Site-Wide Institutional Controls
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Work Performed by S.M. Stoller Corporation under DOE Contract No. DE-AC01-02GJ79491
for the U.S. Department of Energy Office of Legacy Management, Grand Junction, Colorado

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Acronyms

CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CRP	Comprehensive Reuse Plan
DOE	U.S. Department of Energy
EM	Office of Environmental Management
EPA	U.S. Environmental Protection Agency
IC	Institutional Controls
LM	Office of Legacy Management
MMCIC	Miamisburg Mound Community Improvement Corporation
MNA	Monitored Natural Attenuation
NESHAPS	National Emission Standards for Hazardous Air Pollutants
O&M	Operations and Maintenance
ODH	Ohio Department of Health
OEPA	Ohio Environmental Protection Agency
ROD	Record of Decision

End of current text

1.0 Introduction

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) has completed the 2007 Annual Assessment of the effectiveness of site-wide institutional controls (ICs) covering parcels that have completed the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 120(h) requirements for property transfer. The ICs are defined in the Records of Decision (RODs) for each parcel and are described in the “Operation and Maintenance (O&M) Plan for the Implementation of Institutional Controls at the 1998 Mound Plant Property, Phase I Parcel update, Rev. 0.”

The ICs are developed and presented in the ROD process which includes input from the public, City of Miamisburg, Regulators and the Miamisburg Mound Community Improvement Corporation (MMCIC). RODs require that DOE perform an annual assessment to document the effectiveness of the ICs and confirm that all site changes comply with ICs, which are in the form of deed restrictions.

This 2007 Annual Assessment reviews ICs associated with Parcels D, H, 3, 4 and Phase I (A, B, and C) of the Mound Site Property. MMCIC owns Parcels D, H, 3, and 4; and DOE still owns the Phase I land parcel. Each Annual Assessment includes a physical inspection of each land parcel, discussions with the property owner(s) and a review of applicable records. DOE will, at a minimum, review construction, street opening, occupancy or other permits, zoning modification requests and well logs issued for land parcels which have completed the CERCLA 120[h] process for property transfer.

DOE contacted the U.S. Environmental Protection Agency (EPA), Ohio EPA (OEPA) and the Ohio Department of Health (ODH) 30 days before the visual inspection. DOE must submit the draft annual assessment report to EPA and the OEPA, no later than June 13th of each year.

2.0 Overview of Parcel Transfer Process

DOE executed a sales agreement in January 1998 with a DOE-designated Community Reuse Organization. The agreement calls for transfer of discrete land parcels to the MMCIC, via a series of quitclaim deeds, after the parcels have been declared excess to DOE’s needs and all requirements of CERCLA 120(h) have been met for property transfer. When MMCIC acquires ownership of a parcel, it becomes part of the Mound Advanced Technology Center, which is a light industrial/technology park operated by the MMCIC.

The following properties were transferred to MMCIC on these dates:

- March 1999—Parcel D (formerly called Release Block D) containing approximately 12.5 acres of land and two buildings
- August 1999—Parcel H (formerly called Release Block H) containing approximately 14.3 acres of land, a large parking lot, and a site access road
- April 2001—Parcel 4 containing approximately 95 acres of undeveloped land.
- August 2002 - Parcel 3 containing approximately 5 acres of land and Buildings GH and GP-1

The following property has an approved ROD and has been offered to MMCIC:

- December 2003—Phase I (A, B and C) containing approximately 52 acres of land and several buildings. The ROD was executed, EPA approved transfer, and DOE has offered for conveyance via quit claim deed to the MMCIC.

The O&M Plan for site-wide ICs applies to all land parcels that have undergone the CERCLA 120(h) process for property transfer, whether or not title to those parcels has actually transferred to the MMCIC. Therefore, this annual assessment includes Parcels D, H, 3, 4 and Phase I land parcels, which represent approximately 60 percent of the total acreage of the original approximate 306-acre former DOE Mound Site Property. The remaining acreage still subject to completion of CERCLA 120(h) requirements has been divided into five parcels (Parcels 6, 6A, 7, 8, and 9). DOE is completing the CERCLA 120(h) requirements for Parcels 6, 6A, 7, 8, and 9.

Figure 1 shows the original boundaries of the former DOE Mound Site Property divided as follows:

- D, H, 3, 4 and Phase I (A, B, and C) have completed the CERCLA 120(h) process
- 6, 6A, 7, 8, and 9 have not completed the CERCLA 120(h) process.

3.0 Overview of Institutional Controls (ICs)

The ICs are defined in the RODs for each parcel and are described in the “Operation and Maintenance (O&M) Plan for the Implementation of Institutional Controls at the 1998 Mound Plant Property, Phase I Parcel update, Rev. 0.” The ICs are developed and presented in the ROD process which includes input from the public, City of Miamisburg, Regulators, and MMCIC.

The former DOE Mound Site Property was remediated to EPA’s risk-based standards for industrial/commercial use only. Certain restrictions called ICs, which are in the form of deed restrictions, were placed on the property and its use. ICs are legal and administrative tools used to maintain protection of human health and the environment. (See Exhibit 2, *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*).

Each parcel ROD contains deed restriction language to be embedded in the quitclaim deed and includes the “CERCLA 120(h) Summary Notice of Hazardous Substances” for the parcel. Because both the quitclaim deed and the CERCLA Summary Notice are recorded with Montgomery County, all future property owners will be cognizant of the deed restrictions imposed by the CERCLA remedy on their property.

The three deed restrictions for the five parcels are designed to:

1. **Prohibit the removal of soil** from the original DOE Mound Site Property boundaries, unless prior written approval from OEPA and ODH has been obtained.
2. **Prohibit the extraction, consumption, exposure or use in any way of the groundwater** underlying the premises, unless prior written approval from EPA and OEPA has been obtained.
3. **Limit land use to industrial/commercial 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 any activities that could result in the chronic exposure of children under 18 years of age to soil or groundwater from the premises. Restricted uses include, but are not limited to
 - Single or multi-family dwellings or rental units
 - Day care facilities
 - Schools or other educational facilities for children under 18 years of age
 - Community centers, playgrounds, or other recreational or religious facilities for children under 18 years of age

The preceding language on the deed restrictions is a summary only. RODs for individual land parcels contain the parcel-specific deed restriction language. RODs for parcels, as well as other parcel-specific CERCLA documents, are available in the CERCLA Public Reading Room located at 955 Mound Road, Miamisburg, Ohio 45342. These documents are also available electronically at the LM Mound website, CERCLA Administrative Record, <http://www.lm.doe.gov/land/sites/oh/mound/mound.htm>.

4.0 Period of Review

This annual assessment covers the period from February 22, 2006, until March 20, 2007.

Each annual assessment identifies new information, such as new construction, demolition or excavation, lot-splits or sale of parcels to new landowners, and permit applications filed by property owners or their agents since the last reporting period. Previous annual assessments are available in the CERCLA Public Reading Room and are available on line at LM Mound website, CERCLA Administrative Record, <http://www.lm.doe.gov/land/sites/oh/mound/mound.htm>.

5.0 Aerial View of the Mound Site Property

Figure 2 and the following individual parcel figures are from an April 2006 aerial photograph of the Mound Site showing Parcel and Phase boundaries. The actual photographs were taken at low altitude using a nominal negative scale of 1:4800 and were developed using 1"=100' scale planimetric mapping (scale size of figures in this assessment vary). Photographic controls points were Horizontal Datum: NAD83, Vertical Datum: NAVD88, US Survey Feet, and State Plane—Ohio South Zone.

6.0 Summary of Previous Year's Annual Assessment and Five-Year Review

The 2006 Annual Assessment concluded that the 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.

The 2006 Annual Assessment Report recommended that well 0445 in Phase IC be abandoned. Due to low flow, this downgradient well is never flushed and, therefore, is not effective. This recommendation was not directly related to the ICs.

DOE also conducted the CERCLA Five-Year Review in 2006. Table 1 lists the issues identified during that review.

Table 1. 2006 Five Year Review Report Issues

2006 Five Year Review Issues	
1	Ineffective signage at the Parcel 4 retention basin has resulted in violation of the ICs in the past (land-use inconsistent with industrial/commercial land-use).
2	Permanent ID markers are not installed on all long-term groundwater monitoring wells.
3	Protective casings of the long-term groundwater monitoring locations are in general disrepair.
4	Adequate protection from vehicular traffic is not present for long-term groundwater monitoring wells.
5	Excessive vegetation is present around the long-term groundwater monitoring locations.
6	Excessive vegetation is present around the OU-1 facility and structures and on the landfill surface.
7	Inadequate stormwater control is maintained on the southwestern corner of the landfill.
8	Inadequate documentation and interpretation of operational and monitoring data for the OU-1 remedy is maintained.

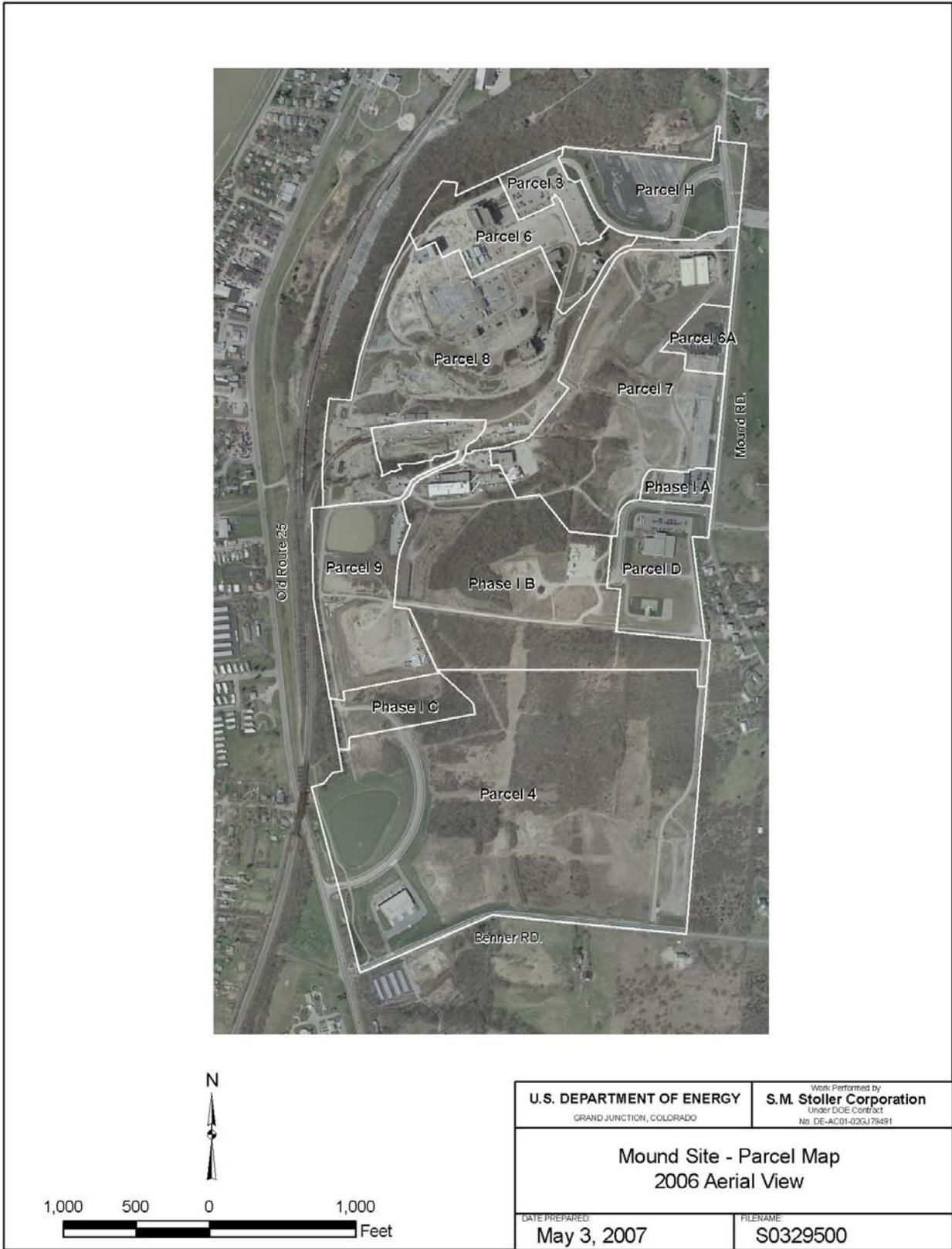


Figure 2. April 2006 Aerial View of Mound Plant Showing Parcel Boundaries

7.0 Summary of Physical Inspections Performed

DOE conducted the physical inspections in stages during February and March 2007. Art Kleinrath, DOE Office of Legacy Management (LM) Site Manager, and Stoller personnel conducted preliminary physical inspections of all areas observing changes and taking photos.

Art Kleinrath also led the annual “walkaround” of Parcels D, H, 3, 4 and the Phase I on March 20, 2007. Participants included Don Pfister, DOE EM; Tim Fisher, EPA; Brian Nickel, OEPA; Joe Crombie, ODH; Frank Bullock, MMCIC; Ellen Stanifer, City of Miamisburg; and Glenn Griffiths, Chuck Friedman, Karen Williams, Gary Weidenbach and Joyce Massie, S.M. Stoller.

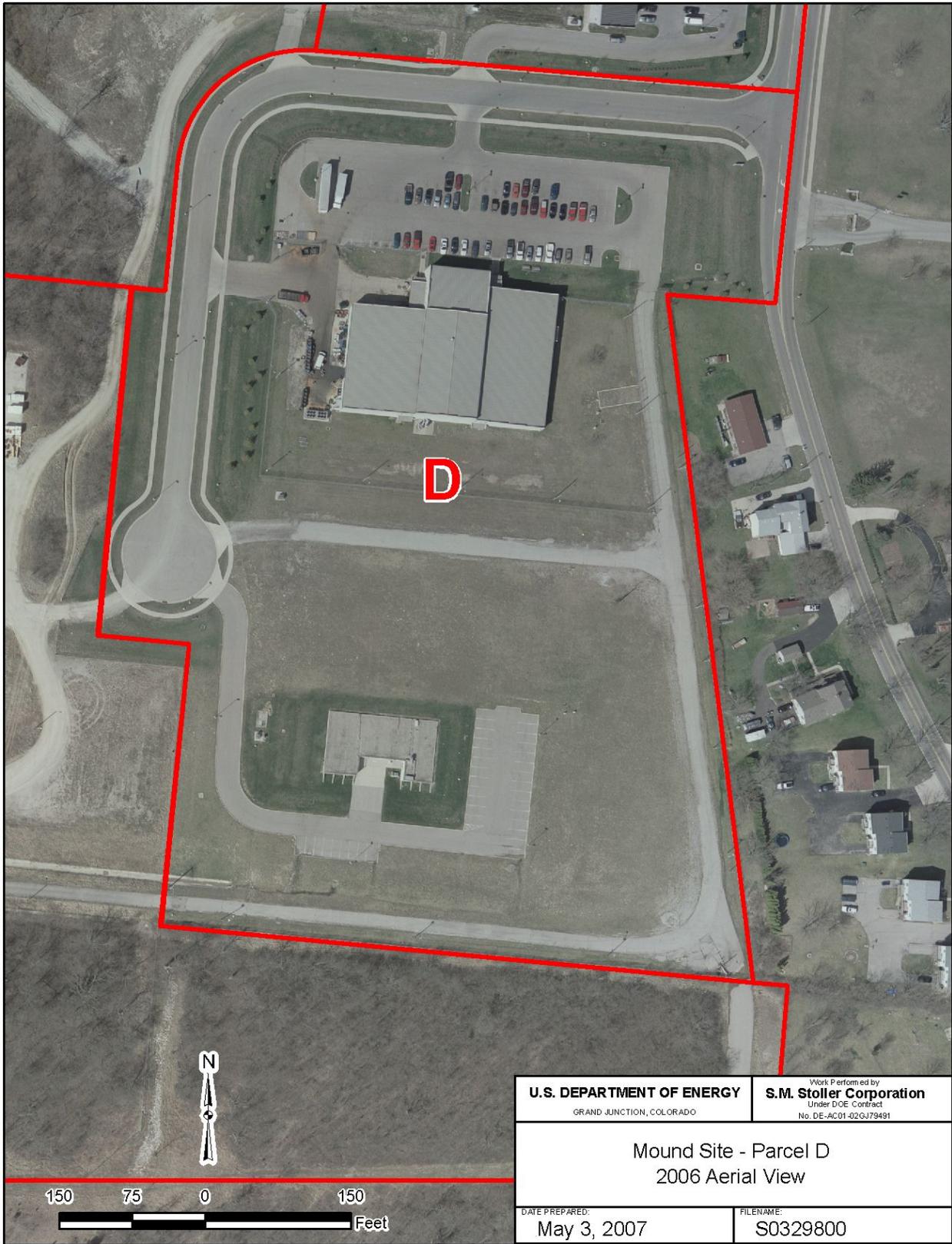
The results of the physical inspection for each parcel are summarized in the following sections. A copy of the physical inspection checklist is also included (Appendix A).

7.1 Parcel D

In Parcel D, there were no observations of non-compliance with the ICs, including no evidence of unauthorized well installation or soil removal from the original boundaries of the DOE Mound Site Property (Figure 3).

Two small piles of staged sand remain in the southeast corner of the parcel, which is fill material that MMCIC imported to the site. The piles seem smaller than described in the 2006 annual assessment, but this could be caused by flattening from rain.

Groundwater monitoring well 0351 on Parcel D has been abandoned with a permanent identification tag on the concrete pad within Parcel D (abandoned well identification shown in last year's assessment).



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Figure 3. Parcel D 2006 Aerial View

7.2 Parcel H

In Parcel H, there were no observations of non-compliance with the ICs, including no evidence of unauthorized well installation or soil removal from the original boundaries of the DOE Mound Site Property (Figure 5).

Three plastic sleds were seen abandoned at the bottom of the hill in the northeast corner of Parcel H. There was no evidence of continuous recreational use such as worn paths or constructed structures (Figure 4).



Figure 4. Parcel H March 2007 Sleds at bottom of Northeast Hillside

Groundwater monitoring well 0332 located in the northeast corner of Parcel H parking lot has been abandoned.

There are DOE and OEPA air monitoring stations located on the southeast corner of Parcel H. OEPA plans to abandon their air monitoring stations, which are not operational, before June 2007.

DOE air monitoring stations will remain operational in these areas until National Emission Standards for Hazardous Air Pollutants (NESHAPs) requirements are met after OU-1 work is completed. Air monitoring is not part of the CERCLA remedy for Parcel H.



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Figure 5. Parcel H 2006 Aerial View

7.3 Parcel 3

In Parcel 3, there were no observations of non-compliance with the ICs, including no evidence of unauthorized well installation or soil removal from the original boundaries of the DOE Mound Site Property (Figure 7). There are no groundwater monitoring wells located on Parcel 3.

Major changes had occurred in the Parcel since the last assessment. MMCIC has demolished GP-1 Building and replaced it with parking and landscaping (Figure 6).



Figure 6. Parcel 3 New Parking Lot and Landscaping Replace Building GP-1



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Figure 7. Parcel 3 2006 Aerial View

7.4 Parcel 4

In Parcel 4, (Figure 9) there were no observations of non-compliance with the ICs including no evidence of unauthorized well installation or soil removal from the original boundaries of the DOE Mound Site Property.

There is one abandoned well, Well 0354, located near the northern boundary of Parcel 4. Well 0158, located near the intersection of Benner Road and Old State Route 25, is still functional but not currently part of a groundwater monitoring plan. It was locked and in good repair.

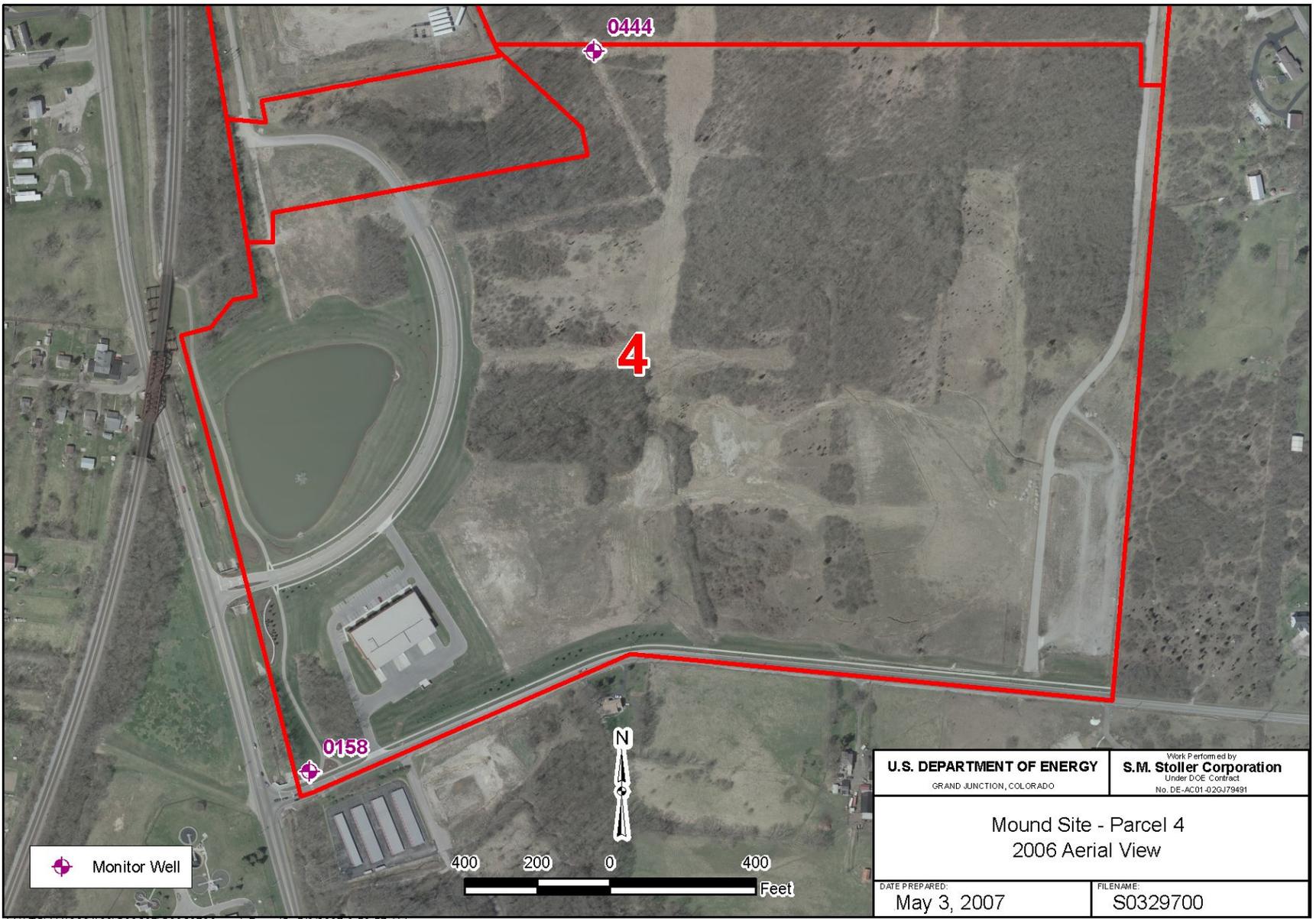
There is a United States Geological Service marker located on Parcel 4, near the intersection of Benner and Mound Roads.

The three year old “Flex” building in the southwest corner of Parcel 4 is leased to a single tenant. The tenant’s line of business is consistent with the City of Miamisburg’s I-2 General Industrial District Zoning ordinance (Figure 8).



Figure 8. Parcel 4 MMCIC Flex Building in southwest corner of Parcel 4 (near Benner Road and Old 25)

Unauthorized vehicular access to the old southeast construction road is still prohibited by a sidewalk installed along Benner Road. The northern entrance to this road is blocked by fencing and a locked gate. (Figure 10 Figure 11)



U.S. DEPARTMENT OF ENERGY GRAND JUNCTION, COLORADO	Work Performed by S.M. Stoller Corporation Under DOE Contract No. DE-AC01-02GJ79491
Mound Site - Parcel 4 2006 Aerial View	
DATE PREPARED: May 3, 2007	FILENAME: S0329700

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Figure 9. Parcel 4 2006 Aerial View



Figure 10. Parcel 4 Entry to old construction road on Benner Road



Figure 11. Parcel 4 Locked gate looking South on old construction road

There is a storm water run-off retention/detention pond located on Parcel 4 (Figure 12). This pond is posted with four signs stating, “Recreational Use Prohibited.” The signs were placed around the pond after people were observed fishing in the pond during June 2004 and in 2005. There are no indications of fishing during this year’s physical inspection.



Figure 12. Parcel 4 MMCIC Retention Pond with signage in foreground. Bike path between pond and Old Route 25

Well 0444, the only active groundwater monitoring well on Parcel 4, is located on the northern boundary of Parcel 4, near the boundary of the Phase I land parcel. Well 0444 was padlocked and in good repair, but it is not identified by an external monument. (Figure 13)

There was a log across a damaged fence along the northern boundary of Parcel 4 near well 0444. The fencing is not part of the institutional control for that parcel. (Figure 14)



Figure 13. Parcel 4 Well 0444 Locked and in Good Repair



Figure 14. Parcel 4 Fallen log across fence



Figure 15. Parcel Phase IA 2006 Aerial View



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Figure 16. Parcel Phase IB 2006 Aerial View

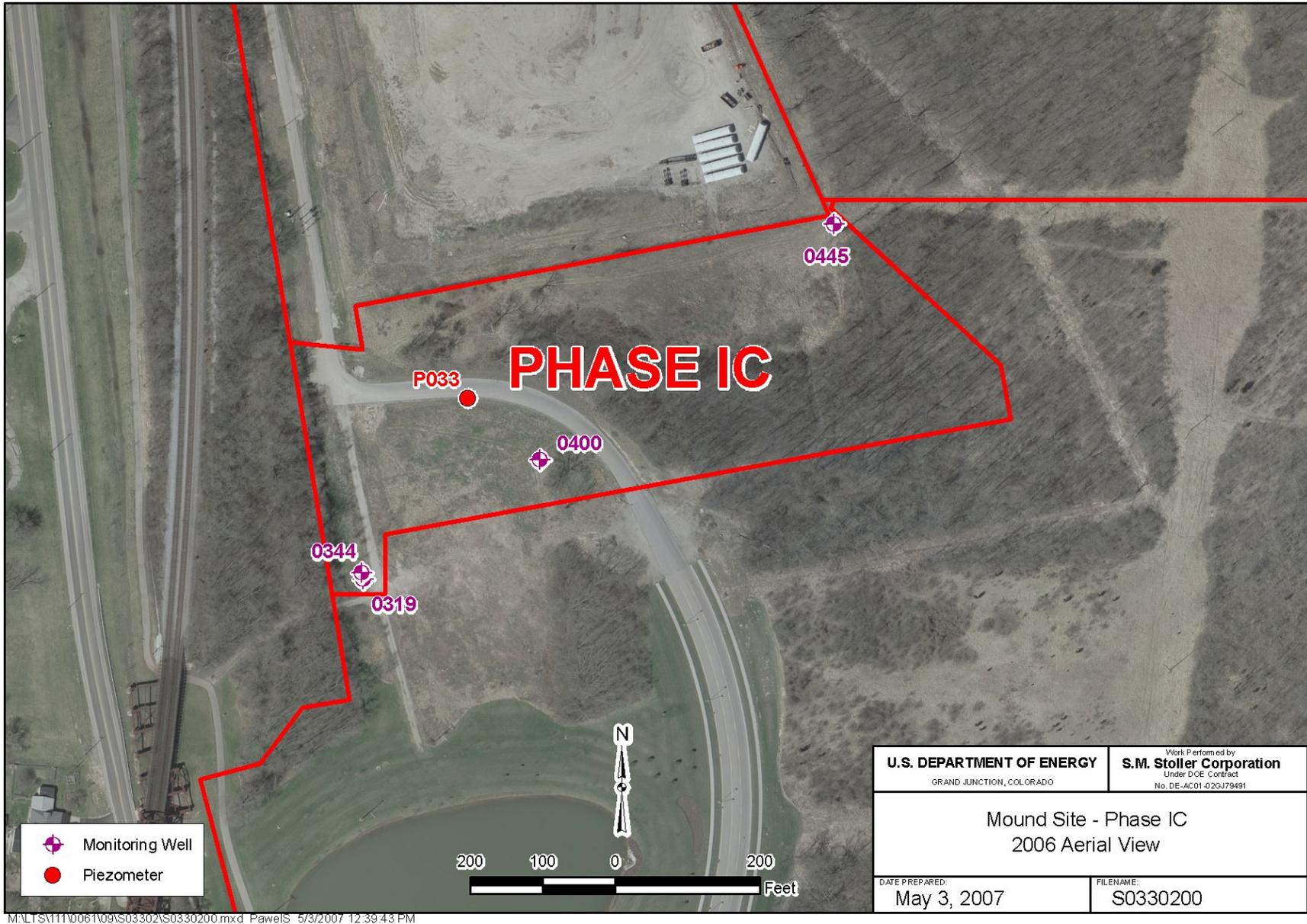


Figure 17. Parcel Phase IC 2006 Aerial View

7.5 Phase I Parcel

Phase I land parcel consists of three, noncontiguous sub-parcels A, B and C, which have not transferred to the MMCIC (Figure 15, Figure 16, and Figure 17). The Phase I land parcel includes both an IC Remedy and a Monitored Natural Attenuation (MNA) Remedy.

In the Phase I land parcel, there were no observations of non-compliance with the ICs, including no evidence of unauthorized well installation or soil removal from the original boundaries of the DOE Mound Site Property. However, there was a new well drilled near the NW boundary of Parcel 1C with Parcel 9. The OU-1 excavation contractor, aRc, drilled the well for process water used for excavation. Per Paul Lucas, DOE EM, the contractor had completed the well log and was filing it with the Ohio Department of Natural Resources (ODNR) at the time of the inspection.

The Phase I Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan, Final, September 29, 2004, contains eight Groundwater monitoring wells and one groundwater seep. Table 2 describes the locations of the wells and seeps.

Table 2. Monitoring Wells and Seeps in Parcels Inspected

Monitoring Requirement		Well/Seep #	Located in Parcel			
Remedy (MNA)	Confirmatory		4	IA	1B	IC
X	X	P033				X
	X	0319				X
X		0353				
X	X	0400				X
X	X	0402				
X		0411			X	
	X	0442			X	
X	X	0443			X	
X		0444	X			
X	X	0445				X
X		Seep 0617			X	
Still functional, but not used for current long term monitoring program		0158	X			
		0344				X

This annual assessment report documents the effectiveness of the ICs remedy applied to the Phase I land parcel (and Parcels D, H, 4 and 3). This does not include a determination of the effectiveness of the various groundwater remedies including the MNA remedy associated with the Phase I land parcel. All the monitoring wells shown in Table 2 are in operable condition. The Phase I Remedy MNA Groundwater Monitoring Annual Report can be found in the in the CERCLA Public Reading Room at 955 Mound Road, Miamisburg, OH 45342.

Last year's recommendation to abandon well 0445 located in Phase IC will be included in a site wide well closure effort after the final groundwater monitoring plan is developed. This planning will occur after OU-1 excavation work is completed.

The salt storage shed and concrete pad in Parcel 1B are empty as shown in Figure 18 and Figure 19.



Figure 18. Phase IB Empty salt storage shed



Figure 19. Phase IB Empty concrete pads

Wells 0411, 0442 and 0443 were locked and in good repair. Seep 0617 was in good condition. (Figure 20, Figure 21, Figure 22, and Figure 23)

Well 0445 was locked and in good repair. (Figure 24)



Figure 20. Phase IB Well 0411 locked and in good repair



Figure 21. Parcel IB Well 0442, locked and in good repair



Figure 22. Parcel IB Well 0443, locked and in good repair



Figure 23. Parcel IB Groundwater Seep 0617



Figure 24. Parcel IC Well 0445 locked and in good repair

Wells 0400, P033, and 0319 were locked and in good repair. Well 0400 had some vegetation growing between the casing and the concrete pad. (Figure 25, Figure 26, and Figure 28)

Well 0344 was locked and in good repair, but is not part of any current monitoring program. (Figure 27)



Figure 25. Parcel IC Well 0400 locked and in good repair. Weeds growing between casing and concrete pad.



Figure 26. Parcel IC Well P033



Figure 27. Parcel IC Well 0344, locked and in good repair



Figure 28. Parcel IC Well 0319, locked and in good repair

8.0 Interviews and Records Reviews

8.1 Interviews with City Personnel and Review of City or MMCIC Records

In addition to the physical inspections for the Annual Assessment, DOE reviews, at a minimum, construction, street opening, occupancy or other permits, zoning modification requests, planning commission requests and well logs issued for land parcels which have completed the CERCLA 120[h] process for property transfer. Documents may be located at the City of Miamisburg, at Miami Township, Montgomery County or Ohio Department of Natural Resources (ODNR) (well log) files.

Art Kleinrath and Stoller personnel visited the City of Miamisburg Engineering and City Planning Departments on February 21, 2007, and reviewed permits maintained by those departments for all work performed by MMCIC and/or its tenants or subcontractors, on Parcels D, H, 4, 3 and the Phase I land parcel.

The following tables do not repeat information on permits included in previous year's DOE assessment reports on the effectiveness of the site-wide ICs. Nor will each year's report necessarily list permits filed by the MMCIC and/or its tenants or subcontractors for work performed on DOE-owned/MMCIC-leased property. Instead, the following tables are typically limited to permits filed after a ROD has been executed for a particular parcel, since DOE is responsible for O&M of the site-wide ICs remedy (regardless of whether or not DOE has conveyed title of that parcel, in whole or in part, to the MMCIC).

Until DOE conveys a land parcel to the MMCIC, in whole or in part, the property is not subject to City of Miamisburg permitting requirements. The MMCIC has proactively used the City-permitting process in order to familiarize the City with the properties that will eventually belong to the MMCIC. This familiarity can greatly reduce the amount of time it takes for the MMCIC to receive City approval (e.g., for a Building Occupancy Permit), once the MMCIC acquires title of that property from DOE. Since DOE first began performing annual assessments of City records in May 2001, DOE has performed spot-checks of all permits located within a particular City file (City files are maintained by street address) in order to confirm that the entire set of permits is maintained in chronological order (most-recent at front of file). These spot-checks have consistently shown that the City maintains its permit files under configuration control.

Table 3 provides the DOE building identification and the Miamisburg street addresses for each building except for those former DOE buildings that the MMCIC plans to demolish. Not all of the listed buildings reside in a land parcels that DOE have conveyed, in whole or in part, to the MMCIC via quitclaim deed. The City of Miamisburg does not maintain files on buildings that the MMCIC plans to demolish. City files do exist on buildings that have already been demolished; however, those files are now considered obsolete.

Table 3. Crosswalk of Street Addresses to former DOE Building Identifications

Former DOE Building	New Miamisburg Street Address
2	To be demolished
28	925 Capstone Drive
45	930 Capstone Drive
61	885 Mound Rd.
63	1070 Vanguard Blvd.
87 and 3	1100 Vanguard Blvd.
100	790 Enterprise Court
102	1075 Mound Rd.
105	1195 Mound Rd.
126	955 Mound Road
COS	965 Capstone Drive
GH	500 Capstone Circle
OSE	480 Capstone Circle
OSW	460 Capstone Circle
T	945 Capstone Drive

None of the permits reviewed pertained to work performed on, or potentially impacted transferred parcels since the date of DOE's last assessment. All permits on file for the site are detailed in Table 4.

Table 4. City of Miamisburg Permit Files on Mound Site

Location of work	Permit number	Date of Permit Application	Submitted by	Nature of Work	Parcel/ Building	Work Performed by
480 Capstone Circle	20060117	04/22/2006	QOB Electric	Parking lot electric work. Install lighting	Parcel 6 Building OSE	QOB Electric, Inc.
965 Capstone Circle	20060192B	07/18/2006	Turner Property Services	Build divider wall	Parcel 8 Building COS	Turner Property

The assessment of City permits did not locate any permits or planning requests to demolish GP-1 in Parcel 3. Ms. Sue Baker, Building Inspection Department with the City of Miamisburg, advised that the Development Director said the building was not sufficient in size to require a demolition permit. The City does not issue demolition permits for a building of that size.

Table 5 lists work requests that did not require a City permit, but did require review by the City Planning Commission. These requests included excavation activities.

Table 5. City of Miamisburg Files—Planning Commission Meetings

Location of Work	Id Number	Date of Application	Submitted by	Nature of Work	Parcel/ Building	Status
360 Capstone Circle and 935 Vanguard Blvd.	SP 01-07	2/19/2007	MMCIC	Parking lot changes, repaving for COS and Bldg 45 (storm sewers, curb and gutter, sidewalks, asphalt, landscaping)	Parcels 6 & 8 Building 45 and COS	Work underway
480 Capstone Circle	SP-05-06	4/18/2006	MMCIC	Parking Lot, roads for OSE	Parcel 3 and 6	Work completed

MMCIC contracted and oversaw the parking lot, repaving, road construction work and the demolition of GP-1, assuring that the work complied with the deed restrictions for that parcel. See the following description of MMCIC’s oversight of work.

Furthermore, all work performed by the MMCIC or other parties (e.g., contractors to the MMCIC) on the former DOE Mound Site Property, that Art Kleinrath and Frank Bullock were cognizant of during the 12-month reporting period, appeared to be adequately covered by permits submitted to, and approved by, the City of Miamisburg. As noted in DOE’s 2005 annual report on the effectiveness of site wide ICs, in 2003, the City of Miamisburg implemented an electronic permits database, which allows permits to be queried via key word searches (e.g., permit number, date, location, nature of work). Permits issued by the City prior to implementation of the City’s new database (e.g., permits documented in DOE’s annual reports dating back to 2001) may not be input in the City’s database. However, paper copies of all permits are retained by the City in accordance with a Records Retention Plan that meets all State of Ohio requirements.

Given that permits filed with the City of Miamisburg do not have a set expiration date, DOE and the property owner (at present, the MMCIC) should remain cognizant of permits filed with the City of Miamisburg, where work covered by that permit may have been postponed for performance at a later date. Maintaining this cognizance will provide a checks-and-balance that work requiring a permit and which was performed since the date of the last DOE Annual Assessment was, indeed, approved by the appropriate City officials.

In general, the permit review process demonstrated that the City of Miamisburg’s record-keeping system is adequate. All permits that were expected to be on file with the City were on file except for a demolition permit for GP-1. No building permit was required for roads, parking lots, repaving, but they were controlled through the City Planning Commission.

8.2 Records, Other Than Permits, Issued by the City of Miamisburg

The property-owner’s adherence to the site-wide ICs imposed on a land parcel is critical to DOE’s effective maintenance of the CERCLA Remedy. The MMCIC, including all future property owners, are required to comply with the ICs associated with parcels at the former DOE Mound Site Property. To facilitate compliance, the MMCIC ensures that all parties performing work on behalf of the MMCIC (e.g., landscaping, utility work involving excavation, construction) are aware of, and subject to compliance with, the ICs. The MMCIC accomplishes

this by consistently embedding the following language in the Technical Requirements section of all Requests for Proposal and subsequent Work Orders:

“Excavated soils must be managed and remain on MMCIC property. Soils from excavation shall be placed at an on-site location, as directed by MMCIC.”

The MMCIC Project Manager who oversees work performed on-site also monitors the vendor’s work and conformance to all Technical Requirements in the Work Order. In addition to the Technical Requirement requiring compliance with the ICs, the MMCIC provides a real estate easement to the vendor, and this easement is recorded with Montgomery County as a matter of public record. A copy of the real estate easement used for utility work on MMCIC property is included as Exhibit 1. Note that Section 2 of the easement provides detailed information to the utility provider/vendor on the ICs associated with the MMCIC’s property. This requires compliance with restrictions, which are the ICs.

Continuing public education is an important component of DOE’s post-closure responsibilities. Exhibit 2 is a document produced by the EPA to provide information concerning ICs to citizens. Educating all future property owners on their responsibility to comply with the ICs will be an important element of DOE’s public education campaign. It is more difficult, for DOE and the property-owner (currently, the MMCIC), to educate the general public on the importance of adhering to the site-wide ICs. Therefore, postings such as warning signs near the MMCIC pond that recreational use is prohibited is important to properly educate the public regarding required compliance with ICs.

Prior to initiating construction on any land parcel, the MMCIC provides the builder with a pre-construction package that includes a description of the ICs associated with that particular parcel. This is how the MMCIC ensures that the builder is aware of the ICs applied to that parcel. In a new construction scenario, probably the most important IC to educate builders on is the prohibition against removing any soils from the original boundaries of the approximate 306-acre former DOE Mound Site Property.

MMCIC’s Comprehensive Reuse Plan (last updated in December 2003) identifies each building at the Mound Advanced Technology Center with its own lot. Eventually, the MMCIC plans to plat the entire former DOE Mound Site Property. In order for the MMCIC to receive financing (e.g., for new construction) on land parcels that comprise the original DOE Mound Site Property, the MMCIC records a lot split with the Montgomery County Recorder’s Office. If the MMCIC does not require financing for property improvements it conducts within a parcel, the MMCIC does not have to immediately record a Miamisburg Planning Commission-approved lot split with the County. However, if the MMCIC decides to sell the property, the MMCIC has to record the lot split with the County at that time. The recorded real estate documentation would include the original quitclaim deed that DOE issued to the MMCIC for the parcel, as a whole, as well as the “CERCLA 120(h) Summary Notice of Hazardous Substances” associated with the original parcel. This will ensure that future property-owners, of individual lot splits, remain aware of the site-wide ICs imposed on acreage that lays within the boundaries of the parcels as originally conveyed by DOE to the MMCIC.

The property-owner’s adherence to the IC’s imposed on a land parcel is vital to the effective maintenance of those IC’s. MMCIC currently coordinates the movement of soil and site grading,

as DOE completes remediation of individual soil contamination sites. Once DOE's EM mission is complete, managing the movement of soil throughout the site should be an effective way for the property owner(s) to ensure that soil is not being removed from the site, as a whole. To accomplish this task, the MMCIC's Comprehensive Reuse Plan (CRP) establishes locations where future construction/property improvements will occur on the former DOE Mound Site Property. The CRP also includes a site-wide soil-grading plan. The CRP was adopted by the City of Miamisburg, and incorporated in the City's Comprehensive Plan. The City's Comprehensive Plan is the basis for zoning of properties that fall within the city limits. If the MMCIC decides to subdivide the property and sell portions (or all) of the former DOE Mound Site Property, the new property owners would be required to comply with the requirements stipulated in the CRP and the City's Comprehensive Plan.

9.0 Conclusions

The ICs for Parcels D, H, 3, 4 and the Phase I land parcel continue to function as designed, adequate oversight mechanisms appear to be in place to identify possible violations of those controls, and adequate resources are available to correct or mitigate any problems in the event that a violation were to occur.

10.0 Recommendations

The following tables list recommendations and status from previous inspections and new recommendations from this year's Annual Inspection for ICs.

Table 6. Recommendations from Previous Inspections of ICs

	Origin	Issue/Recommendation	Status/Disposition or Action
1	2006 Annual	Abandon Well 0445 in Parcel I.	Will include with other wells abandoned in Post OU-1 work Monitoring Plan.
2	Five Year	Ineffective signage at the Parcel 4 retention basin has resulted in violation of the ICs in the past (land-use inconsistent with industrial/commercial land-use)	Signs have not been changed in accordance with the 5-Year Review recommendations. No indications of recreational use has been observed.
3	Five Year	Permanent ID markers are not installed on all long-term groundwater monitoring wells.	Determine which wells will be included in Post OU-1 work Monitoring Plan. Install permanent ID markers on those wells.
4	Five Year	Protective casings of the long-term groundwater monitoring locations are in general disrepair.	Determine which wells will be included in Post OU-1 work Monitoring Plan.
5	Five Year	Adequate protection from vehicular traffic is not present for long-term groundwater monitoring wells.	Identify remaining wells included in Post OU-1 work Monitoring Plan. Protect at that time.
6	Five Year	Excessive vegetation is present around the long-term groundwater monitoring locations.	Has improved. Include wells in Post OU-1 work Monitoring Plan.
7	Five Year	Excessive vegetation is present around the OU-1 facility and structures and on the landfill surface.	OU-1 area being excavated. Will review issue after work is completed.
8	Five Year	Inadequate stormwater control is maintained on the southwestern corner of the landfill.	OU-1 area being excavated. Will review issue after work is completed.
9	Five Year	Inadequate documentation and interpretation of operational and monitoring data for the OU-1 remedy is maintained.	Gradient info now included in ER monthly reports.

Table 7. Recommendations from 2007 Annual Inspection for ICs

	Origin	Issue/ Recommendation	Status/Disposition
1.	New	Add City Planning commission requests to list of documents examined for Annual Assessments	
2.	New	Add Ohio Department of Natural Resources well logs to list of documents examined for Annual Assessments	
3.	New	When will Ohio EPA remove air monitoring station in Parcel H?	

11.0 For Further Information

For further information on the content of this annual report or the former DOE Mound Site Property, in general, contact either:

Mr. Paul Lucas
 Remedial Project Manager
 DOE Office of Environmental Management
 175 Tri County Parkway
 Springdale, OH 45246
 (513) 246-0071

Mr. Art Kleinrath
 Project Manager
 DOE Office of Legacy Management
 955 Mound Road
 Miamisburg, Ohio 45342
 (513) 847-8350 X318

For further information on the regulatory processes governing the CERCLA 120(h) process for property transfer at the former DOE Mound Site Property, contact:

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

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

12.0 References

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

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

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

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

DOE (U.S. Department of Energy), 2003. *Operation and Maintenance (O&M) Plan for the Implementation of Institutional Controls at the 1998 Mound Plant Property, Phase I Parcel update*, Rev. 0.

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

DOE (U.S. Department of Energy), 2004. *Phase I Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan*, Final, September.

DOE (U.S. Department of Energy), 2006. *Annual Assessment of the Effectiveness of Site-Wide Institutional Controls Applied to the Former Mound Site Property*, Final, August.

DOE (U.S. Department of Energy), 2006. *Phase I Remedy (Monitored Natural Attenuation) Groundwater Monitoring Annual Report*, June.

DOE (U.S. Department of Energy), 2006. *Second Five-Year Review for the Mound, Ohio, Site, Miamisburg, Ohio*, September.

End of current text

Appendix A

Annual Assessment Checklists For Parcels D, H, 4, 3, and Phase I

(Physical Walkover conducted on March 20, 2007)

CHECKLIST WORKSHEET
Review of Effectiveness of Institutional Controls

Parcels reviewed: D, H, 3, 4, Phase I (A, B and C)	
Date(s) Performed: February 21 and March 20, 2007	
Review led by: Art Kleinrath, DOE LM	Phone #: 937-847-8350 X318
Participants in Physical Inspection Walkaround on March 20, 2007:	
Don Pfister, DOE EM; Tim Fisher, US EPA; Brian Nickel, Ohio EPA; Joe Crombie, Ohio Department of Health; Frank Bullock, MMCIC; Ellen Stanifer, City of Miamisburg; and Glenn Griffiths, Chuck Friedman, Karen Williams, Gary Weidenbach and Joyce Massie, S.M. Stoller.	
Summary of property improvements since DOE's sale of parcel or since the previous Review (whichever is most recent). For example, have buildings been demolished or erected? Has surface water flow been modified? Has landscaping been done?	
Parcel D	There was no evidence of property changes since last inspection
Parcel H	There was no evidence of property changes since last inspection
Parcel 3	Building GP-1 was demolished by MMCIC. The footprint was replaced with a Parking lot, sidewalks, and landscaping,
Parcel 4	There was no evidence of property changes since last inspection
Phase 1A	There was no evidence of property changes since last inspection. CH2M HILL vacated Building 102 in December 2006. MMCIC was refreshing the exterior of Building 102 for leasing.
Phase 1B	There was no evidence of property changes since last inspection
Phase 1C	There was no evidence of property changes since last inspection
Evidence of Soil removal from the "1998 Mound Plant Property"? Yes/No. Explain	
Parcel D	No
Parcel H	No
Parcel 3	No
Parcel 4	No
Phase 1A	No
Phase 1B	No
Phase 1C	No
Evidence of (non-DOE) Groundwater use? Yes/No. Explain	
Parcel D	No
Parcel H	No
Parcel 3	No
Parcel 4	No
Phase 1A	No.
Phase 1B	No
Phase 1C	No.
However, there was a new well drilled near the NW boundary of Parcel 1C with Parcel 9. The OU-1 excavation contractor, aRc, drilled the well for process water used for excavation. Per Paul Lucas, DOE EM, the contractor had completed the well log and was filing it with the Ohio Department of Natural Resources.	

CHECKLIST WORKSHEET
Review of Effectiveness of Institutional Controls

Evidence of land use other than “Industrial” (e.g., residential)?	Yes/No. Explain
Parcel D	No
Parcel H	Yes. Three snow sleds were found discarded at the bottom of hill by the concrete stairs. This area has a steep hillside that ends in a concrete drain and parking lot dividers. The sleds were plastic and all cracked.
Parcel 3	No
Parcel 4	No
Phase 1A	No
Phase 1B	No
Phase 1C	No
Signage/Markers in good repair (if applicable)?	Yes/No. Explain
Parcel D	N/A. Signage is not an IC for this parcel
Parcel H	N/A. Signage is not an IC for this parcel
Parcel 3	N/A. Signage is not an IC for this parcel
Parcel 4	Signage is a part of the ICs for the retention pond, signs were in good repair and visible.
Phase 1A	N/A. Signage is not an IC for this parcel
Phase 1B	N/A. Signage is not an IC for this parcel
Phase 1C	N/A. Signage is not an IC for this parcel
Fencing in good repair (if applicable)?	Yes/No. Explain
Parcel D	N/A. Fencing is not an IC for this parcel
Parcel H	N/A. Fencing is not an IC for this parcel
Parcel 3	N/A. Fencing is not an IC for this parcel
Parcel 4	N/A. Fencing is not an IC for this parcel
Phase 1A	N/A. Fencing is not an IC for this parcel
Phase 1B	N/A. Fencing is not an IC for this parcel
Phase 1C	N/A. Fencing is not an IC for this parcel
Groundwater Monitoring Wells maintained properly?	Yes/No. Explain
Parcel D	There are no monitoring wells in this parcel, Well 0351, mentioned in 2006 Annual Assessment, was abandoned in place. There is an ABN log showing the well was filled with grout.
Parcel H	N/A. There are no monitoring wells in this parcel. Well 0332 has been abandoned. Confirmed by Frank Miller of Stoller. There is no ABN log for this well.
Parcel 3	N/A. There are no monitoring wells in this parcel
Parcel 4	Well 0444 at northern boundary of Parcel 4 was padlocked and in good repair. Well 0158 (near intersection of Benner Road and Old State Route 25) was padlocked and in good repair. This well is not currently being sampled as part of the site monitoring plans. Well 0350, mentioned in previous assessment, is abandoned. No evidence of the well remains. There is an ABN log showing the casing was removed and it was filled with bentonite.
Phase 1A	N/A. There are no monitoring wells in this parcel

CHECKLIST WORKSHEET
Review of Effectiveness of Institutional Controls

Phase 1B Wells 0411, 0442 and 0443 were all padlocked and in good repair. Seep 0617 drain pipe was in good condition. Well 0399 in the SE corner was filled with bentonite and abandoned in place in 2005. The concrete slab is still there.	
Phase 1C Well 0445 is still functional, padlocked and in good repair. Well 0319 is still in place. This well is not currently being sampled as part of the site monitoring plans.	
Air Monitoring Stations maintained properly (if applicable)? Yes/No. Explain	
Parcel D N/A Air monitoring is not an IC for this parcel	
Parcel H N/A Air monitoring is not an IC for this parcel. However, there are two air monitoring stations physically located in the parcel at the NE corner of the parking lot. EPA plans to remove its station this year. DOE will maintain its station until the NESHAPs monitoring requirements are satisfied following the work in Parcel 9 on OU-1 excavation.	
Parcel 3 N/A. Air monitoring is not an IC for this parcel	
Parcel 4 N/A. Air monitoring is not an IC for this parcel	
Phase 1A N/A. Air monitoring is not an IC for this parcel	
Phase 1B N/A. Air monitoring is not an IC for this parcel	
Phase 1C N/A. Air monitoring is not an IC for this parcel	
Containment system(s) in good repair (if applicable)? Yes/No. Explain	
Parcel D N/A	
Parcel H N/A	
Parcel 3 N/A	
Parcel 4 N/A	
Phase 1A N/A	
Phase 1B N/A	
Phase 1C N/A	
Site Surveillance equipment in good repair (if applicable)? Yes/No. Explain	
Parcel D N/A	
Parcel H N/A	
Parcel 3 N/A	
Parcel 4 N/A	
Phase 1A N/A	
Phase 1B N/A	
Phase 1C N/A	
Other equipment associated with maintenance of the Institutional Controls in good repair (if applicable)? Yes/No. Explain	
Parcel D N/A	
Parcel H N/A	
Parcel 3 N/A	
Parcel 4 N/A	
Phase 1A N/A	
Phase 1B N/A	
Phase 1C N/A	

CHECKLIST WORKSHEET
Review of Effectiveness of Institutional Controls

Summary of items discovered during previous Review (and disposition of same):

Date of previous Review: February 22, 2006 Annual; August 2006 5-Year Review

	Issue from 2006 Annual Review	Disposition
	Recommended we abandon Well 0445. Low flow	Will include with other wells abandoned in Post OU-1 work Monitoring Plan.
	Issue from 2006 Five-Year CERCLA Review	
1	Ineffective signage at the Parcel 4 retention basin has resulted in violation of the ICs in the past (land-use inconsistent with industrial/commercial land-use).	Signs have not been changed
2	Permanent ID markers are not installed on all long-term groundwater monitoring wells.	Identify remaining wells to be included in Post OU-1 work Monitoring Plan. Install permanent ID markers on those wells. Per Frank Miller, most wells have tags inside the casing and/or an ID peg on the concrete surrounding the well.
3	Protective casings of the long-term groundwater monitoring locations are in general disrepair.	Identify remaining wells to be included in Post OU-1 work Monitoring Plan. Paint/improve casings at that time.
4	Adequate protection from vehicular traffic is not present for long-term groundwater monitoring wells.	Identify remaining wells to be included in Post OU-1 work Monitoring Plan. Protect at that time.
5	Excessive vegetation is present around the long-term groundwater monitoring locations.	Has improved. Include wells in Post OU-1 work Monitoring Plan.
6	Excessive vegetation is present around the OU-1 facility and structures and on the landfill surface.	OU-1 area being excavated. Will review issue after work is completed.
7	Inadequate stormwater control is maintained on the southwestern corner of the landfill.	OU-1 area being excavated. Will review issue after work is completed.
8	Inadequate documentation and interpretation of operational and monitoring data for the OU-1 remedy is maintained.	Gradient info now included in ER monthly reports.

Item # 1: **Corrected?** Yes () No ()

Item # 2: **Corrected?** Yes () No ()

Item # 3: **Corrected?** Yes () No ()

Item # 4: **Corrected?** Yes () No ()

Personnel interviewed during the physical walk-over of parcel, or during review of documentation associated with the parcel:

Sue Baker, City of Miamisburg Engineering Department

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, Ohio Department of Natural Resources well logs):

City of Miamisburg building permits and City Planning Commission requests.

Based upon the review of the above-listed Documents, were property improvements covered by the appropriate approvals (e.g., construction permit approved by City? Movement of soil or use of groundwater approved by the regulators?). Yes/No. Explain

CHECKLIST WORKSHEET
Review of Effectiveness of Institutional Controls

Parcel D
 No permits filed since last inspection. No evidence of work performed since last inspection

Parcel H
 No permits filed since last inspection. No evidence of work performed since last inspection

Parcel 3
 No demolition permit was found for MMCIC's demolition of GP-1. Per Sue Baker, the building was not of sufficient size to require a permit.
 No building permit was required for installation of parking lots or roads. This work did require review by the City Planning Commission. (see table of requests to City Planning commission below)

Location of Work	Id Number	Date of Application	Submitted by	Nature of Work	Parcel/ Building	Status
480 Capstone Circle	SP-05-06	4/18/2006	MMCIC	Parking Lot, roads for OSE	Parcel 3 and 6	Work completed

Parcel 4
 No permits filed since last inspection. No evidence of work performed since last inspection

Phase 1A
 No permits filed since last inspection. No evidence of work performed since last inspection other than general cleanup around Building 102 (1075 Mound Road) after CH2M HILL vacated in December 2006

Phase 1B
 No permits filed since last inspection. No evidence of work performed since last inspection

Phase 1C
 No permits filed since last inspection. No evidence of work performed since last inspection

Miscellaneous items noted during review:

Parcel D
 Fill material is still lying by roadway. Small piles of sand/gravel.

Parcel H None

Parcel 3 None

Parcel 4
 Fallen tree crushed fencing along northern boundary. Fencing is not an IC

Phase 1A None

Phase 1B
 Salt shed is empty. Concrete pad, which contained waste containers at last year's physical inspection, was empty.

Phase 1C
 Well 0400 had some weeds growing between casing and concrete.
 Observed new water well in Parcel 9 at edge of NW boundary. Per Paul Lucas, DOE EM, the contractor has completed the paperwork to file a well log with the ODNR.
 This well is noted because the process used to install this well should be examined to verify that we can detect future wells.

Recommendations:

General: Review City Planning Commission requests and Ohio Department of Natural Resources well logs in addition to City building permits. Repaving, parking lots and landscaping work do not require a City building permit.

Parcel D None

Parcel H MMCIC may wish to monitor hillside for sledders to determine if this is a reoccurring event.

Parcel 3 None

Parcel 4 None

Phase 1A None

Phase 1B None

Phase 1C None

CHECKLIST WORKSHEET
Review of Effectiveness of Institutional Controls

Conclusion:

Parcel D

IC's continue to function as designed with adequate oversight mechanisms in place to identify IC violations.

Parcel H

IC's continue to function as designed with adequate oversight mechanisms in place to identify IC violations.

Parcel 3

IC's continue to function as designed with adequate oversight mechanisms in place to identify IC violations.

Parcel 4

IC's continue to function as designed with adequate oversight mechanisms in place to identify IC violations.

Phase 1A

IC's continue to function as designed with adequate oversight mechanisms in place to identify IC violations.

Phase 1B

IC's continue to function as designed with adequate oversight mechanisms in place to identify IC violations.

Phase 1C

IC's continue to function as designed with adequate oversight mechanisms in place to identify IC violations.

Checklist prepared by: Arthur K. Lemwatt Date: June 13 2007
U.S. Department of Energy

Exhibit 1

**Real Estate Easement for Utility Work
Performed on MMCIC Property**

**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 18th 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,

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 Wysong
NOTARY PUBLIC

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

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

Exhibit 2

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



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

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Terms that appear in **bold** can be found in a glossary at the end of the document. Many of these terms describe some types of ICs.

PURPOSE

The purpose of this guide is to provide community members with general information about the role of *institutional controls* (ICs) in Superfund, Brownfields, Federal Facilities, Underground Storage Tanks (UST) and Resource Conservation and Recovery Act (RCRA) cleanups occurring in their neighborhoods. This guide will also discuss the community’s role in providing input for the selection of ICs and helping to monitor them to ensure that human health and the environment remain protected in the future.

Key Points

- ICs are legal and administrative tools used to maintain protection of human health and the environment at sites.
- ICs are often an important part of the overall cleanup at a site.
- ICs can be used for many reasons and come in different types. These include restricting site use, modifying behavior, and providing information to people.
- There are 4 general types of ICs: *governmental, proprietary, enforcement, and informational.*

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- ICs are designed to lower the potential for people and the environment to be exposed to contamination.
 - ICs are usually most effective when layered and used in series to improve protectiveness.
 - ICs should fit the needs of the specific site and community.
 - The community can play an important role in identifying potential future uses of the site.
 - A cooperative relationship should be established early between government, the entity doing the cleanup and the community.
 - Seeking community input and involvement can maximize the effectiveness of ICs.
 - Communities can play a vital role as “eyes and ears” for monitoring ICs.
 - Federal, state, tribal, and local governments and parties responsible for the cleanup should keep the public informed of cleanup decisions that may affect them.
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What Are Institutional Controls?

ICs are generally administrative and legal tools that do not involve construction or physically changing the site. ICs are generally divided into four categories:

1) **Government Controls**- include local laws or permits (e.g., county zoning, building permits, and Base Master Plans at military facilities);

2) **Proprietary Controls**- include property use restrictions based on private property law (e.g., *easements* and covenants);

3) **Enforcement Tools**- include documents that require individuals or companies to conduct or prohibit specific actions (e.g., environmental cleanup *consent decrees, unilateral orders*, or permits); and,

4) **Informational Devices**- include *deed notices* or public advisories that alert and educate people about a site.

In many site cleanups, ICs help reduce the possibility that people will come in contact with contamination and may also protect expensive cleanup equipment from damage. The use of ICs is not a way “around” treatment, but rather part of a balanced, practical approach to site cleanup that relies on both engineered and non-engineered remedies.

When Are ICs Used?

ICs are normally used when waste is left onsite and when there is a limit to the activities that can safely take place at the site (i.e., the site cannot support unlimited use and unrestricted exposure) and/or when cleanup equipment remains onsite. ICs are often used throughout a site cleanup, including when:

- contamination is first discovered (i.e., to protect people from coming in contact with potentially harmful materials while the contamination is being investigated)
- cleanup work is ongoing (in some cases it may take many years to complete cleanup)
- some amount of contamination remains on-site as part of a cleanup remedy.

ICs can play an important role when a cleanup is conducted and when it is too difficult or too costly

to remove all contamination from a site. ICs are rarely used alone to deal with contamination at a site. Typically, ICs are part of a larger cleanup solution and serve as a non-engineered layer of protection. ICs are designed to keep people from using the site in a way that is not safe and/or from doing things that could damage the cleanup equipment, thus, potentially jeopardizing protection of people and the environment. For example, an IC may be necessary at a former landfill to notify the community and guard against excavators digging through a clay barrier that is meant to stop rain water from entering the landfill.

It is also important to remember that ICs are frequently used to protect cleanup equipment while the cleanup is being conducted. For example, sites may require complex technologies that remove, treat, and discharge groundwater. Operation of these systems may be needed for a long time in order to reach the cleanup goals.

Most cleanups will need to use a combination of engineered remedies and ICs. ICs provide an additional level of safety and help to make sure the remedy remains securely in place. Also, it is important to understand that a cleanup is not finished until all necessary action has been taken to protect people and the environment from contamination at the site.

Why Can't All The Contamination Be Removed?

Removing all traces of contamination from a site is often not possible or practicable because of the types and location of contamination. However, the presence of some residual contamination does not mean that a site can't be used safely.

Use of a site with residual contamination is considered safe if exposure to contamination is prevented. ICs can help a site be reused. A common example of a site reuse is when a surface barrier layer is installed over contaminated soil and the area is used for athletic fields, a golf course, or a park because ICs are in place to prevent disturbance of the barrier layer.

Are ICs Reliable?

All ICs have strengths and weaknesses. With this understanding, it is important to choose the best combination of ICs that will be protective of human health and the environment. One key challenge is that ICs are often implemented, monitored, and enforced by various levels of federal, state, tribal, or local governments. Therefore, it is critical to make sure there are enough IC safeguards and overlaps so no significant risk to human health or the environment or damage to the remedy occur.

EPA guidance encourages the use of ICs in "layers" and/or in "series" to enhance overall protectiveness. Layering ICs means using more than one IC at the same time, all with the same goal (e.g., a consent decree, deed notice, and covenant stopping the use of drinking water wells). Using ICs in series uses different ICs over time when site circumstances or IC processes change. For example, restrictions can gradually be reduced as progress is made toward cleanup goals. Used in such overlapping ways ICs can be more securely relied upon to provide an important measure of safety. Thus, usually more than one kind of IC is put in place at a single site.

How Many ICs Are Required?

The decisions about how many and what types of ICs are needed are usually very site-specific. There are many important factors to consider when deciding how many ICs are required at a site. A few common considerations include:

- the level of experience and resource capacities of the party doing the cleanup
- who the intended ICs will affect and how
- the type of enforcement mechanism used (consent decree, order, permit, ordinance)
- who will enforce the mechanism (i.e., EPA, another federal agency at sites it owns, the State, a local agency)
- the likelihood of future redevelopment and/or reuse of the site
- the degree of cooperation exhibited by the different levels of government and community involved in the cleanup.

Who Is Responsible For Making Sure ICs Work As Intended?

The responsibility for making sure that ICs work depends largely on the type of IC and who is conducting the cleanup. Overlapping responsibilities sometimes make it difficult to identify the person or entity responsible for the IC. For example, zoning is often the responsibility of a local zoning board, easements are based on state law, and permits or orders can occur at the federal, state, tribal and local level. It is also common for several entities to have some overlapping responsibility for an IC. For example, an agency that approves a cleanup frequently has some responsibility for making sure that the ICs work. However, the actual implementation steps may be completed by the cleanup party and/or another agency (i.e., local zoning board). Exceptions are active military facilities; the

authority for regulating and enforcing ICs typically lies with the commanding officer.

Regardless of who is responsible, ICs should be regularly monitored to make sure all the requirements are still in place and the ICs continue to work effectively. Because federal, state, and tribal government officials are not always located in the neighborhood of the site, local governments and community members can contribute to ensure that ICs work properly. One way to improve the use of ICs is to make sure that roles and responsibilities are clearly stated early in the process of choosing the ICs.

Will ICs Hinder The Reuse of the Site?

In many ways, ICs can help return a site to a safe and productive reuse. ICs can identify possible uses for a site and communicate use limitations to present and future users. For example, a site may be fit for industrial reuse, but not for residential development. To determine the appropriate types of ICs, it is important to make sure that the preferred future use of the land is taken into account. It is important to recognize that ICs can affect future development at a site. For this reason, the appropriate mix of ICs is key. The objective is not to have as many ICs as possible, but to strike a balance that gives reasonable assurance that the site remedy will remain protective over time while being consistent with the site's future use. In most cases, the ICs can help shape the reuse of the site to one that is suitable, safe, and positive for the community.

Communities should be proactive in communicating with appropriate decision-makers about the types of land use they think will be best for their community. Because each community has a different history and different development

needs, it is critical that these needs are effectively communicated to elected officials and the cleanup agency so they can be taken into consideration during selection of the cleanup method and reuse plan for the site. Opportunities for involvement include attending public meetings, commenting on documents which state potential cleanup methods, and participating in local groups.

How And When Can The Community Get Involved?

Community input can be essential to selecting, using, and monitoring ICs that are the best fit for the community and the protectiveness of the remedy. The cleanup agency or private party and other stakeholders should develop a working relationship with the community early in the cleanup process. Mutual respect, trust, and open and timely communication can greatly enhance the ability of all involved to ensure that the most effective ICs are used at the site.

The first time the community can get involved is during master planning meetings, zoning hearings, land use planning meetings to name a few. The community can also be involved in the site investigation and remedy selection process. Federal, state, tribal, and local authorities should make information available to the public so community members can provide informed input into the remedy selection process. EPA, States, Tribes, local governments and cleanup parties should evaluate ICs as thoroughly and rigorously as all remedy components. This analysis will help to identify potential strengths and weaknesses and to develop the appropriate balance of ICs and ultimately increase the long-term viability of the remedy. Because ICs are remedy components, they should be presented to the community in documents and at meetings. This is especially

important for ICs that may impose land use restrictions on property(ies) next to the site. The potential impacts of the ICs should be presented in a manner that can be understood by the local community.

The second way in which the community can be of great benefit is in assisting with monitoring ICs. Individual residents and business owners are the eyes and ears of a community. They are often the first to notice uses or excavation that appear inconsistent with the site's future use or remedy restrictions. By contacting the appropriate party, an important series of checks and balances can be developed. Cleanup parties should work with the community to establish an effective and user-friendly system for reporting and monitoring information about the site and ICs.

CONCLUSION

The institutional controls discussed in this guide can be essential components of environmental cleanups. It is important for citizens to understand ICs and have the opportunity to take an active role in their selection, use, and monitoring. Because institutional controls are often in place long after physical cleanup is finished, community knowledge and input can be important in assuring that the ICs remain protective of human health and the environment. Working relationships between governments, stakeholders and communities are vital ingredients in the successful application of cleanups, especially the IC components.

For additional information about ICs, refer to the EPA web page at:

<http://www.epa.gov/superfund/action/ic/index.htm>.

For site specific information contact the Office of Superfund Remediation and Technology Innovation (OSRTI), the Federal Facilities Restoration and Reuse Office (FFRRO), the Office of Solid Waste

(OSW or RCRA), the Office of Brownfields Cleanup and Redevelopment (OBCR), or the Office of Underground Storage Tanks (OUST) and/or the respective state or local agency. Information about EPA program offices can be found online at <http://www.epa.gov/oswer/>.

This document provides guidance to EPA Regions and States involved in Superfund, Brownfields, Federal Facilities, Underground Storage Tanks, and RCRA corrective action cleanups. It also provides guidance to the public and the regulated community on how EPA intends to evaluate and implement ICs as part of a cleanup decision. The guidance is designed to implement national policy on these issues. The document does not, however, substitute for CERCLA, RCRA or EPA's regulations, nor is it a regulation itself. Thus, it does not impose legally-binding requirements on EPA, States, or the regulated community, and may not apply to a particular situation based upon the circumstances. EPA and State decision-makers retain the discretion to adopt approaches on a case-by-case basis that differ from this guidance where appropriate. Any decisions regarding a particular facility will be made based on the applicable statutes and regulations. Therefore, interested parties are free to raise questions and objections about the appropriateness of the application of this guidance to a particular situation, and EPA will consider whether or not the recommendations or interpretations in the guidance are appropriate in that situation. EPA may change this guidance in the future.

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OSWER 9355.0-98
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<http://www.epa.gov/superfund/action/ic/guide/index.htm>
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GLOSSARY

Consent Decree: Legal document approved by a judge that formalizes an agreement reached between EPA and companies, governments, or individuals associated with contamination at the sites (potentially responsible parties (PRPs)) through which PRPs will take certain actions to resolve the contamination at a Superfund site.

Deed Notice: Non-enforceable, informational document filed in land records to alert the public to important information pertaining to a land parcel.

Easement: Property right conveyed by the land owner to another party, giving the second party certain rights to the land.

Enforcement Tools: Types of institutional controls that include orders compelling a party to limit certain site activities as well as ensure the performance of affirmative obligations (e.g., consent decree, RCRA permit, unilateral administrative order).

Governmental Controls: Types of institutional controls that impose land or resource restrictions using the authority of an existing unit of government (e.g., state legislation, local ordinance, well drilling permit, etc.).

Informational Devices: Type of institutional controls that provide information or notification to the public of contamination remaining in place.

Institutional Controls: Non-engineered instruments, such as administrative and/or legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use (e.g., easement, fish advisory, local permit).

Proprietary Control: Type of legal instrument that has its basis in real property law and is unique in that it generally creates legal property interests placed in the chain of title of a site property (e.g., easement, restrictive covenant).

Unilateral Administrative Order: Legal document signed by EPA directing a responsible party to take corrective action or refrain from an activity; it may describe the violations and actions to be taken, and can be enforced in court.