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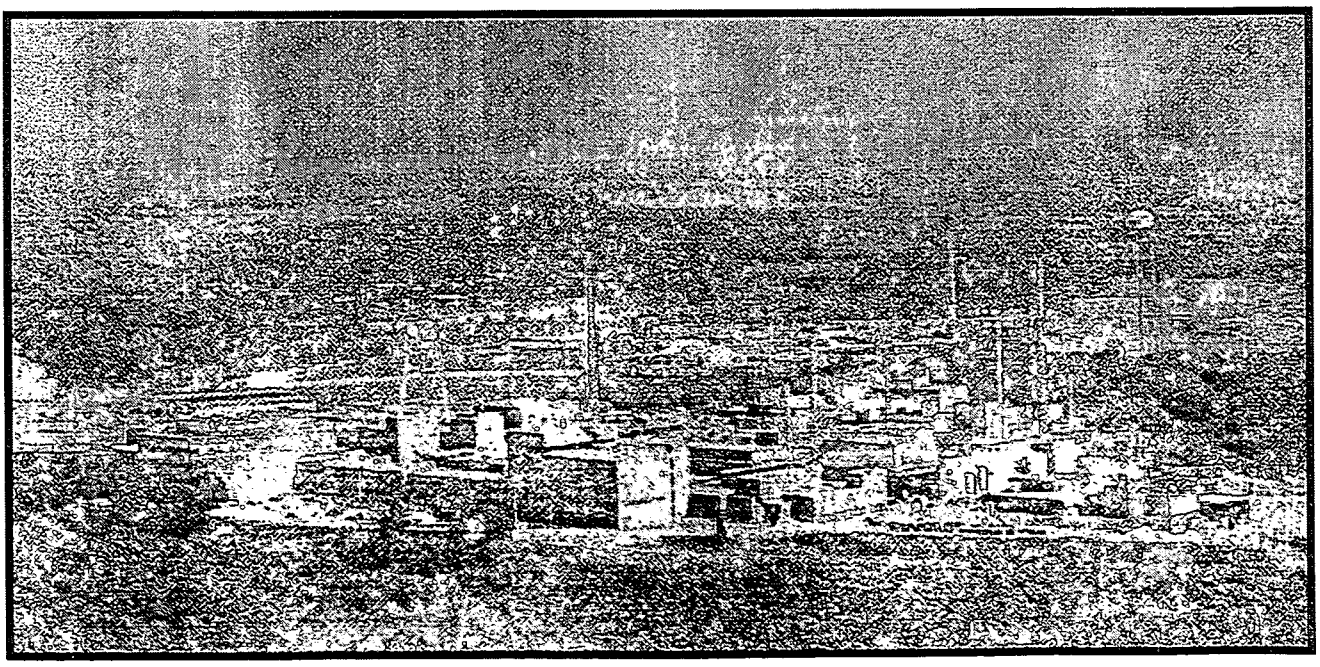
Environmental
Restoration
Program

Miamisburg Closure Project
CLOSEOUT REPORT

Building 46

(Demolition)

Final
September 2003



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Appendices

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1.0 PURPOSE

This is the final report documenting completion of the demolition of Building 46 located at the Department of Energy (DOE) Miamisburg Closure Project (MCP) Site, as shown in the figures provided in Appendix A. The building demolition, including its slab and footers, was accomplished per the Work Package for Building 46 Demolition #SMPP/TFV-36052-00, a copy of which was included in Appendix O of the Building Data Package (BDP) for Building 46. The scope of work relating to this building is considered complete.

2.0 BACKGROUND

2.1 Building 46

Building 46 was constructed in 1969 on the north central portion of the site (Figure 1). The building was a one-story, 2,439 square-foot structure, constructed of reinforced concrete block. The roof structure was of a typical metal joist (cross-bridge metal frame) and ribbed deck with a built-up asphalt membrane. The main floor was divided into five rooms: a laboratory, desk area, janitor's closet, and women's and men's toilet rooms. There was a second-floor penthouse (mechanical room) with concrete-block construction located on the southern third of the structure. Building 46 had no additions constructed onto it, and when demolished, remained at the "as constructed" square footage.

Building 46 was constructed and used as a specialized welding facility. Welding development supported the Heat Source Program through the development of joining (weld) technologies and quality programs for capsules and other metal parts, such as capsule design on the heat source capsule. Welding development was also conducted to support the energetic materials program by evaluating various metals and alloys for pieces and parts. However, no energetic materials were present in the building. Machine shop operations were also conducted in the building.

2.2 Potential Release Sites (PRSs)

As a result of the investigations and documentation accomplished to comply with the CERCLA (Superfund) cleanup process via the Federal Facilities Agreement (FFA)/DOE Environmental Restoration (ER) Program, DOE and the site contractor tabulated all the PRSs identified under the various regulatory programs in effect at the site. Of these 440 PRSs, none are at or near Building 46.

3.0 ACTIONS TAKEN

The Building 46 BDP was submitted for simultaneous Core Team and public review on 14 May 2003, and the 30-day public review period concluded on 13 June 2003.

This Closeout Report documents the completion of the demolition and removal of Building 46. All preparation and demolition activities were performed in accordance with the detailed Work Plan to perform demolition and debris removal. At the request of the Miamisburg

Mound Community Improvement Corporation (MMCIC), with DOE's concurrence, a deviation was made to the Work Plan and the site was covered with gravel rather than being seeded.

A Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) study of Building 46 was performed prior to demolition. The study report (provided in the final BDP) provides details of the survey design and results, and indicates that Building 46 met applicable surface release criteria. Post-demolition surveys showed no elevated readings (copies are provided in Appendix B).

The building debris was loaded into haulers and taken to a local sanitary landfill. The slab and footers for Building 46 was taken to the onsite concrete crusher.

The demolition of Building 46 commenced on 18 June 2003 and was completed on 2 July 2003. Site restoration was completed on 17 September 2003. Photographs taken before, during, and after demolition are provided in Appendix A.

Table 1 - Waste Disposition

Building 60 Material	Quantity	Method	Location
Asbestos Abatement (debris)	5 cubic yards	Landfill	Stoney Hill
Construction Debris (concrete and rebar)	660 cubic yards	Landfill	Stoney Hill
Concrete	300 cubic yards	Concrete Crusher	Mound

4.0 PROBLEMS ENCOUNTERED

Building 46 was successfully demolished per the Work Package, with the agreed upon deviation of covering the site with gravel rather than seeding.

5.0 RESOURCES COMMITTED

5.1 Personnel Organization

Table 2 lists the personnel organization for the demolition.

Table 2 - Personnel Organization for the Demolition

Agency or Party Involved	Contact	Description of Participation
US EPA (SR-6J) 77 W. Jackson Chicago, IL 60604 312-886-7058	David Seely	Federal agency responsible for MCP oversight.

Table 2 - Personnel Organization for the Demolition

Agency or Party Involved	Contact	Description of Participation
Ohio EPA 410 E. Fifth Street Dayton, OH 45402-2911 937-285-6468	Brian Nickel	State agency responsible for MCP oversight.
DOE/ MCP P.O. Box 66 1 Mound Road Miamisburg, OH 45343-0066 937-847-8350, ext. 304	Frank Schmaltz	DOE/ MCP Project Manager responsible for project oversight and success.
CH2M Hill Mound, Inc. SMPP-TFV Project P.O. Box 3030 1 Mound Road Miamisburg, OH 45343-3030 937-865-4169	Kurt Kehler	Provided the DOE/ MCP Project Manager with technical assistance, administrative support, sampling, decontamination, photo and site documentation, site safety, and report preparation.
CH2M Hill Mound, Inc. General Superintendent and Equipment Manager P.O. Box 3030 1 Mound Road Miamisburg, OH 45343-3030 937-865-4278	Max Edington	Provided the equipment necessary for the demolition.

5.2 Demolition Cost

Under the new site contract, CH2M Hill Mound, Inc. has elected to cluster financial data for multiple buildings together. For Building 46, the cluster includes only Building 46. The total cost for the demolition of the Building 46 cluster is provided in Table 3.

Table 3 - Cluster 46 Total Cost

Activity	Cost
Work Planning and Regulatory	$17K
Facility Prep & Removals	$32K
Demolition	$12K
Total	$61K

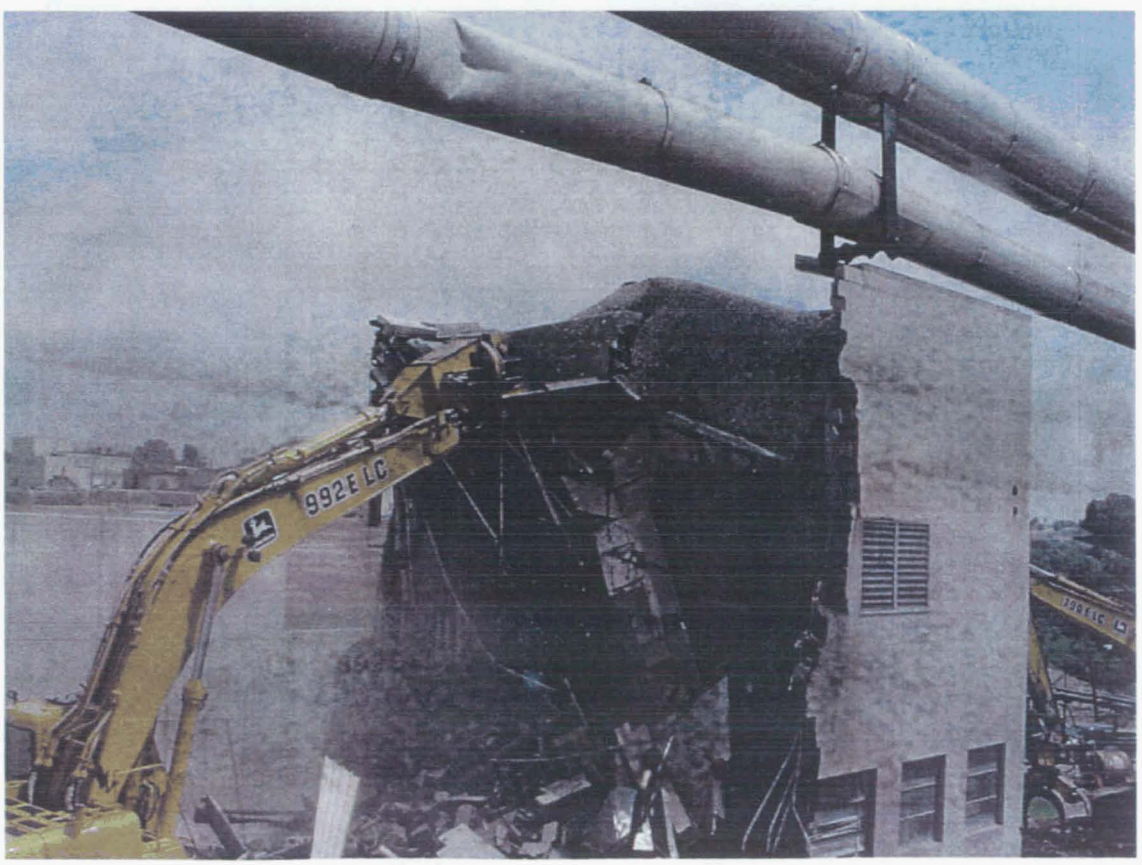
APPENDIX A

Figures

Figure 1 - Location of Building 46

Figure 2 - Building Photos

Bldg. 46



Building 46 During Demolition

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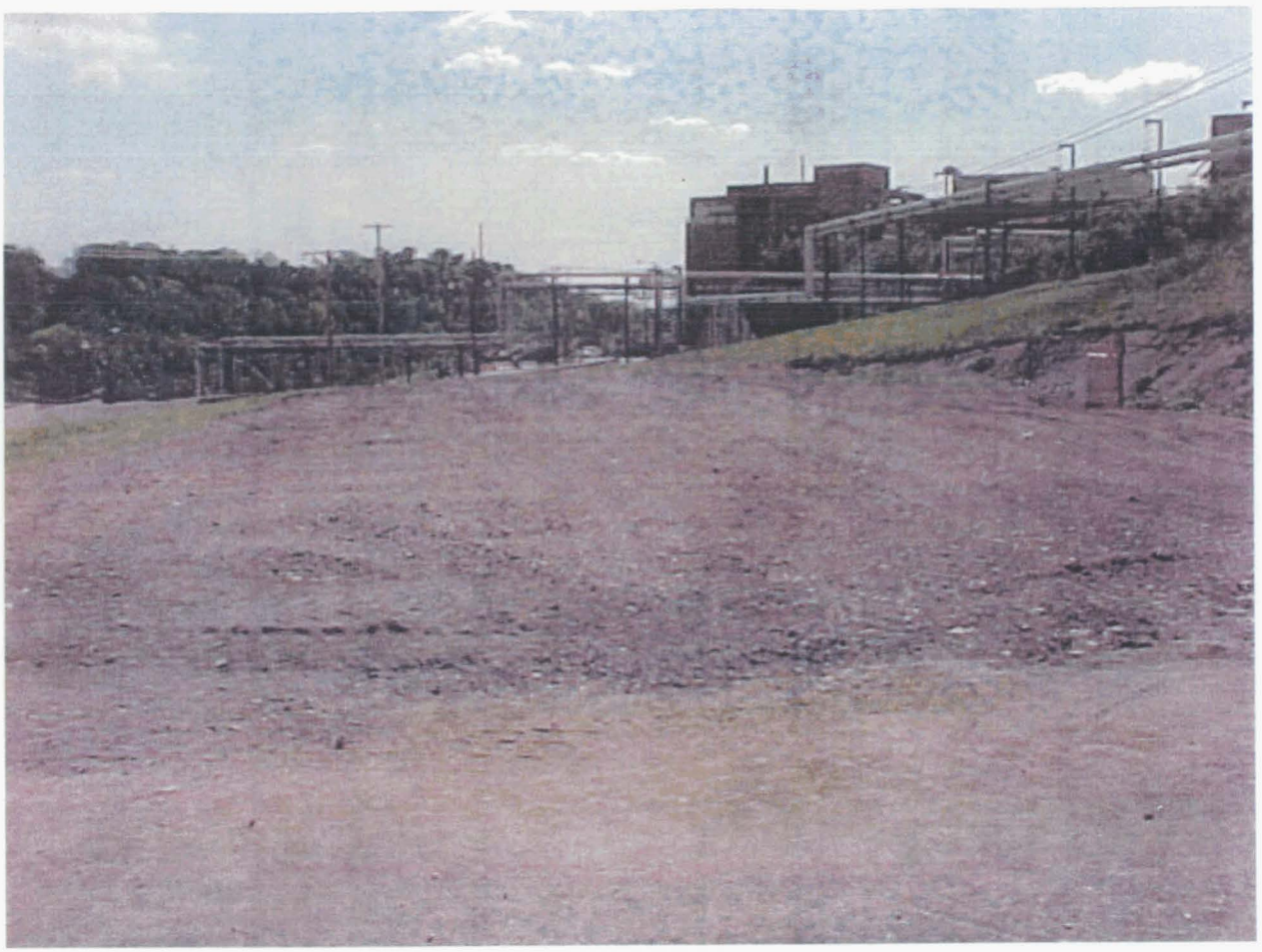
Building 46 Debris Pile

Building 46 Slab



Building 46 After Gravel Installation

APPENDIX B

Post-Final Status Survey Report
Radiological Surveys

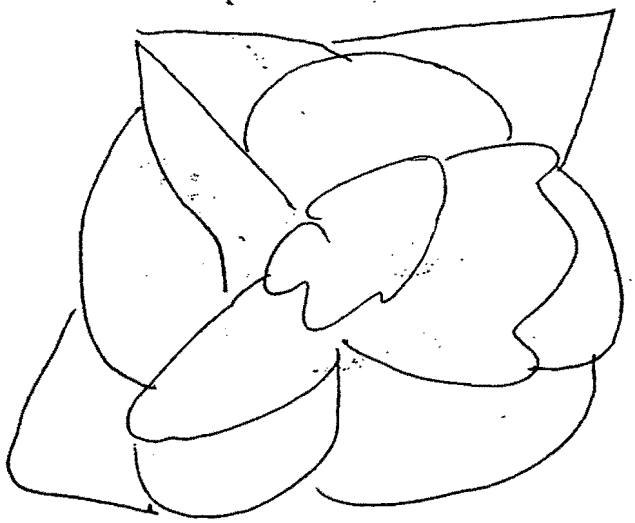
RADIOLOGICAL SURVEY DATA SHEET

Page 1 of 3

LOCATION: (BLDG./AREA/ROOM) 46	SURVEY NO. 03-TF-0150
PURPOSE: SURVEY CONCRETE FROM SLAB AT BUILDING 46 GOING TO WASTE MANAGEMENT	RWP NO. N/A
	DATE: 06-25-03
	TIME: 1545

MAP/DRAWING

14 SMEARS TAKEN ON MISC. CONCRETE



COPY

Integrated count taken IF audible detected. NO audible detected.

ALL direct readings <100dpm/100cm2 Alpha and <5000dpm/100cm2 Beta

FIDLER USED FOR INDICATION ONLY, RESULTS WERE NON-DETECTABLE

LEGEND:

- # = mrem/hr (γ) whole body
- # E = mrem/hr (β+n+γ) extremity on contact
- K= factor of 1000
- ------- = radiological boundary
- △# = mrem/hr neutron
- [#] = air sample number
- (#) = swipe number
- (# α) or /β = direct contamination measurement in dpm/100cm2

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
FIDLER	3638/3960	4-26-04
2360/4389	5175/5720	9-25-03

Completed by: (Signature) [signature]	HP# [redacted]	Date: 06-26-03
Completed by: (Print) DAUNY K. RILEY		
Counted by: (Signature)	HP#	Date:
Counted by: (Print) SEE ATTACHED		
Reviewed/Approved by: (Signature) [signature]	HP# [redacted]	Date: 6-26-03
Reviewed/Approved by: (Print) DANIEL J. HARLEY		

ML-9620

RSDS# 03-TF-0150

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
Swipes (dpm/100cm2)				
Sample#	β/γ	Alpha	Tritium	Comments
1				CONCRETE
2				CONCRETE
3				CONCRETE
4				CONCRETE
5				CONCRETE
6				REBAR
7				CONCRETE
8				CONCRETE
9				REBAR
10				CONCRETE
11				CONCRETE
12				CONCRETE
13				CONCRETE
14				CONCRETE
15				
16				
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32				
33				
34				
35				

See attached results

Removable Contamination				
Swipes (dpm/100cm2)				
Sample#	β/γ	Alpha	Tritium	Comments
36				
37				
38				
39				
40				
41				
42				
43				
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45				
46				
47				
48				
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66				
67				
68				
99				
70				

See attached results

COMMENTS: NONE

NOTES:

1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO count Room analysis for β/γ ,alpha or tritium, leave column blank. Mark column N/A if not needed. If count room printout of results are attached , write "see attached" in column.
3. Annotate special sample type (e.g., soil, water), special identifiers or otherwise in Comments. If not needed, mark N/A.

Batch ID:	Smear Unit 1 - 200306251535	**Count Date:**	6/25/2003
Group:	G	**Count Minutes:**	1.5
Serial Number:	78218-1	**Count Mode:**	Simultaneous
Batch ID:	03-TF-0150 RILEY-14 BSB	**Operating Volts:**	1440
Selected Geometry:	Swipe/Smear	**Cal Due Dates:**	6/19/2004

	Efficiency (%)				Spillover (%)			
Alpha:	34.73	±	0.13		**Alpha to Beta:**	11.39	±	0.00
Beta:	46.13	±	0.13		**Beta to Alpha:**	0.07	±	0.00

Sample ID	Carrier ID	Alpha (dpm)	σ	Beta (dpm)	σ
1	61	0.00	0.00	5.48	2.89
2	79	6.56	3.33	0.90	1.47
3	65	2.18	1.92	2.58	2.05
4	59	0.00	0.00	1.37	1.45
5	99	0.00	0.00	2.74	2.04
6	50	2.18	1.92	3.95	2.51
7	55	2.18	1.92	3.95	2.51
8	83	2.19	1.92	0.00	0.16
9	64	2.18	1.92	3.95	2.51
10	31	0.00	0.00	0.00	0.00
11	37	0.00	0.00	4.11	2.50
12	15	0.00	0.00	4.11	2.50
13	33	2.19	1.92	1.21	1.45
14	13	0.00	0.00	2.74	2.04

B J Brown

PJ 363

06-26-03