3006-06110100003

CH2M HILL Mound, Inc.
1075 Mound Road
P.O. Box 750
Miamisburg, OH 45343-0750

CH2MHILL

SMO-455/06
July 26, 2006

Mr. Don Pfister, Director
Miamisburg Closure Project
U. S. Department of Energy
175 Tri-County Parkway
Springdale, OH 45246

ATTENTION: Paul Lucas

SUBJECT: **Contract No. DE-AC24-03OH20152:** Deliverable #36 Building Data Package; Section C.2.1.1 Facility Demolition; Closeout Reports for various buildings (see below), Final, Revision 1

Dear Mr. Pfister:

Attached are the following Final documents for your records:

- Building 48 Closeout Report, Final, Revision 1
- Building 128 Closeout Report, Final, Revision 1
- Buildings DS and 25 Closeout Report, Final, Revision 1
- P Building Closeout Report, Final, Revision 1

If you or members of your staff have any questions regarding the documents, or if additional support is needed, please contact Dave Rakel at 937-865-4203.

Sincerely,

Michael D. Ebben
Site Manager

ME/jg

Enclosures

cc: T. Fischer, USEPA, (1) w/attachments
B. Nickel, OEPA, (1) w/attachments
S. Helmer, ODH, (1) w/attachments
J. Crombie, ODH, (1) w/attachments
M. Wojciechowski, Tetra Tech, (1) w/attach
G. Gorsuch, DOE/MCP, (1) w/attachments
R. Tormey, DOE/OH, (1) w/attachments
G. Desai, DOE/HQ, (1) w/attachments
Public Reading Room, (1) w/attachments
ER Records, CH2M Hill, (1) w/attachs
DCC (1) w/attachments

M. Ebben, CH2M Hill, w/o attachments
K. Armstrong, CH2M Hill, w/o attachments
D. Rakel, CH2M Hill, w/o attachments
D. Kramer, CH2M Hill, w/o attachments
A. Upshaw, CH2M Hill, w/o attachments
S. Barr, CH2M Hill, w/o attachments
M. McDougal, CH2M Hill, w/o attachments
file, CH2M Hill, w/o attachments

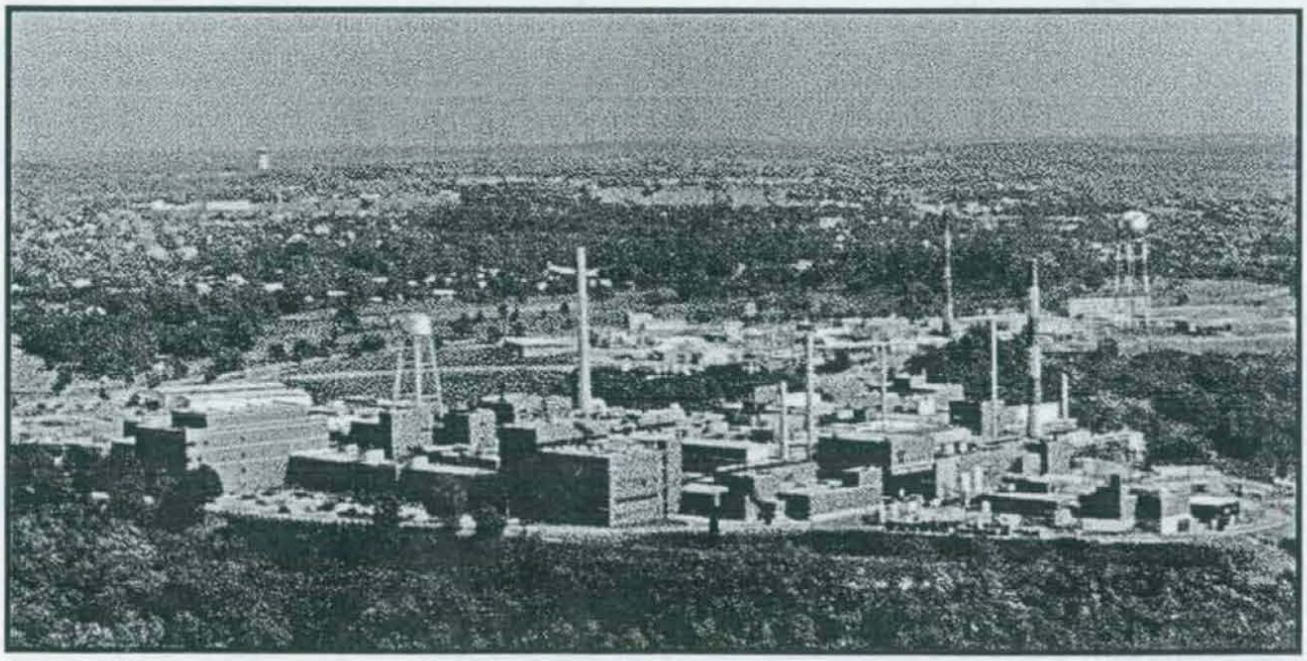
3006-0611010003

Environmental
Restoration
Program

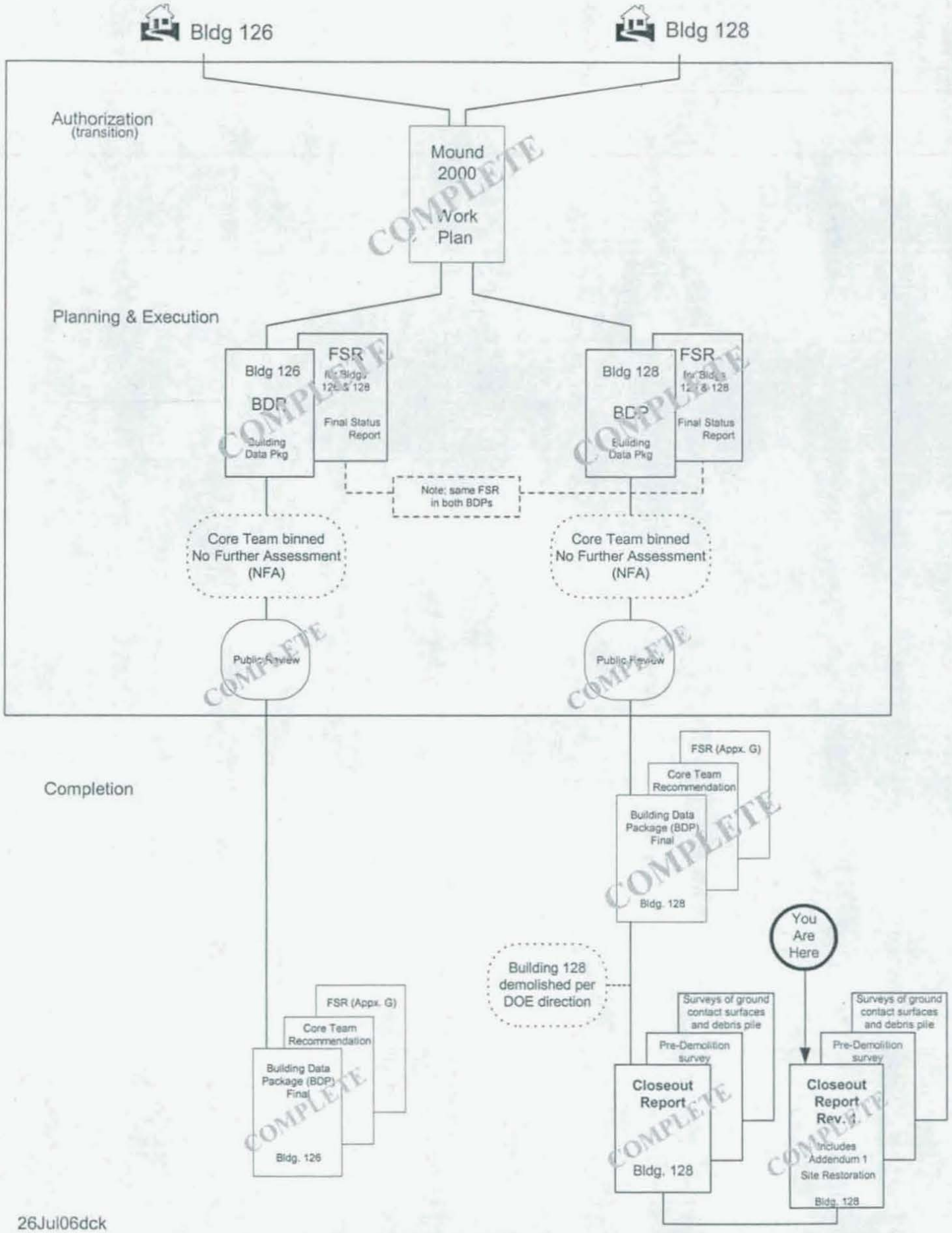
Miamisburg Closure Project
CLOSEOUT REPORT

Building 128
(Demolition)

Final, Rev. 1
July 2006



Buildings 126 & 128



26Jul06dck

Revision 1 of this Closeout Report includes the
Building 128 Closeout Report Addendum 1 in Appendix D.

TABLE OF CONTENTS

Section — Page

Tables

Appendices

1.0 PURPOSE

This is the final report documenting completion of the demolition of Building 128 located at the Department of Energy (DOE) Miamisburg Closure Project (MCP) Site, as shown in the figures provided in Appendix A. The Building 128 demolition, including stanchions and stanchion lines, slab, and foundation/footers, except for final site restoration and capping of underground hot water system and natural gas lines, was accomplished per the Work Package for Building 128 Demolition (#SDT-42171-00). Although the a copy of the demolition work package was not included in the (Transition) Building Data Package (BDP) for Building 128, the Building 128 Demolition Work Package was reviewed by Mr. Geoffrey Gorsuch, DOE/ MCP Project Manager, prior to demolition of the building. The demolition of the structures walls/foundation walls to three feet below grade was also completed. The scope of work relating to Building 128, except for final site restoration and capping of underground hot water system and natural gas lines, is considered complete. Final site restoration and capping of underground hot water system and natural gas lines will be completed as resources become available.

2.0 BACKGROUND

2.1 Building 128

Building 128 was a 900-square foot concrete block building, constructed in 2001 as a boiler building for the PST Buildings (Buildings 36, 37, 50, and 126). Building 128 was located in the east central portion of the site (Appendix A, Figure 1). The single-room, single-story, slab on-grade structure, had walls constructed of 8-inch (in.) reinforced concrete masonry block. The north, south, and east walls were 16 feet (ft.) tall (measured from the top of the slab) and the west wall was 13 ft. tall. The west wall contained an 8 ft. X 10 ft. roll-up door. The north wall contained a 7 ft. X 13 ft. louver and a standard entrance doorway. The block walls were supported by reinforced concrete foundation wall sections (minimum 2 feet deep). The foundation wall sections were 8-inch thick poured concrete with two-inch thick rigid foam insulation sheeting on the interior sides of the foundation walls. Supporting the foundation wall sections were 24 in. X 12 in. poured concrete footers.

The majority of the floor slab was 6 in. thick reinforced concrete, except for equipment mounting pads (boilers and pumps), which were an additional 4 in. thick. The concrete slab rested on a 4" thick crushed stone base, with a 6-mil vapor barrier. A ½-inch thick pre-molded expansion joint separated the slab from the foundation wall.

Steel joists supported a built-up standing seam metal roof. The roof was constructed of standing seam metal sheeting over 1-½ in. rigid insulation on top of a layer of 1-½ in. wide, 22 Gage, ribbed metal decking. The roof was sloped from east to west for drainage. The east-west running steel support joists (spaced approximately 5 ft. apart) were tied into a bond beam in the masonry block walls and were also supported by continuous bridging which ran along the masonry brick walls.

The building contained two 100 horsepower (HP) hot water boilers and a duplex primary/secondary pumping system. A gas-fired, forced-air heating unit that was

suspended from ceiling joists provided heat for the building. A motor-driven louvered vent in the north wall of the building provided ventilation for the building and combustion air for the boilers. The building had no cooling system. Electrical service was 480 volts. The building had potable water, a fire sprinkler system, and sanitary services (drains). A natural gas line provided fuel for the boilers and the heating unit. The building had not had any major modifications.

Building 128 was used for the same purpose since construction and no research, development, or production activities using radioactive or energetic materials occurred in the building. In 2004, Buildings 36, 37, and 50 were demolished and Building 126 was provided with its own stand-alone heating system. The Building 128 equipment was deactivated at that time and has not been used since.

A utility pipe stanchion line, approximately 75 feet long, extended northward from the northeast corner of Building 128. The stanchion line provided support for the above ground portion of the hot water system piping that ran to Building 126.

2.2 Potential Release Sites (PRSs)

As a result of the investigations and documentation accomplished to comply with the CERCLA 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 PRSs, four are at or near Building 128, as identified in Table 1. The PRS locations are shown in Appendix A, Figure 2 and PRS recommendation sheets are provided in Appendix C.

Table 1: PRSs in Proximity to Building 128

PRS	CERCLA or Bldg. Related	Binning Status	Comments
269	CERCLA	NFA	Building 36 Historic Gasoline Tanks (Tanks 239 and 240)
271	Building	NFA	Building 37 Sanitary Waste Tank (Tank 100)
336	Building	NFA	Building 37 Waste Tank (AKA Low Risk Waste Tank 267)
392	CERCLA	NFA	Soil Contamination

3.0 ACTIONS TAKEN

Building 128

The Building 128 Transition BDP was submitted for simultaneous Core Team and public review on 18 March 2005 through, and the 30-day public review period concluded on 17 April 2005.

A Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) study of Building 128 was performed prior to demolition. The study reports (provided in the Final BDP) provide details of the survey design and results and indicate that Building 128 met applicable surface release criteria. In addition, confirmatory radiological surveys were performed on building interior and exterior surfaces just prior to demolition. No elevated levels were detected during the confirmatory radiological surveys of the building.

Demolition of Building 128 commenced on 05 October 2005. Demolition activities (including slab, concrete access pad, foundation/footers, sidewalks, and utility stanchion line), except for final site restoration and capping of underground hot water system and natural gas lines were completed on 19 October 2005. No post-demolition radiological surveys were performed on the Building 128 superstructure debris.

Following demolition of the building slab and foundation/footers, Radiological Control performed radiological screening surveys of the exposed concrete soil contact surfaces of the concrete debris. No elevated levels were detected during radiological screening of the building slab and foundation/footer concrete surfaces in contact with soils. No walkover survey of the exposed soil surfaces in the area of building 128 was performed because no elevated levels were detected on the building/slab surfaces prior to demolition and no elevated levels were detected during radiological screening of concrete surfaces in contact with soils. The results of radiological surveys, performed prior to and after the Building 128 demolition activities, are provided in Appendix B. Construction and concrete building debris was size-reduced, loaded into haulers, and taken to a local sanitary landfill. Recyclable metal debris was loaded into haulers and taken to a local metal recycler. Final site restoration and capping of underground hot water system and natural gas lines will be performed as resources become available and will be documented in an addendum to this closeout report. Photographs taken before, during, and after demolition are provided in Appendix A.

This Closeout Report documents the completion of the demolition and removal of Building 128. All preparation and demolition activities for Building 128 were performed in accordance with the detailed Demolition Work Plan. The Building 128 area final site restoration and capping of underground hot water system and natural gas lines will take place prior to parcel transfer and will be documented in an addendum to this closeout report.

Table 2 - Materials Disposition

Building 128 Material	Quantity	Disposal Method	Destination
Construction Debris (concrete and rebar)	490 cubic yards	Landfill	Stoney Hollow, Dayton, OH
Metal debris	130 cubic yards	Recycle	Metal Shredders, West Carrollton, Ohio
Glycol	3,465 Gal	Recycle	Clean Harbors, Cincinnati, Ohio

4.0 PROBLEMS ENCOUNTERED

Building 128 was successfully demolished per the Work Package. No problems were encountered during demolition activities and no soil staining or unusual fumes/odors were noted during slab/foundation excavations.

Final site restoration and capping of underground hot water system and natural gas lines will take place prior to parcel transfer and will be documented in an addendum to this closeout report.

5.0 RESOURCES COMMITTED

5.1 Personnel Organization

Table 3 lists the personnel organization for the demolition.

Table 3 - 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	Timothy Fischer	Federal agency responsible for MCP oversight.
Ohio EPA 410 E. Fifth Street Dayton, OH 45402-2911 937-285-6468	Brian Nickel	State agency responsible for MCP oversight.

Table 3 - Personnel Organization for the Demolition

Agency or Party Involved	Contact	Description of Participation
DOE/ MCP 175 Tri-County Parkway Springdale, OH 45246 513-246-0071	Geoffrey Gorsuch	DOE/ MCP Project Manager responsible for project oversight and success.
CH2M Hill Mound, Inc. 1075 Mound Road P. O. Box 750 Miamisburg, OH 45343-0750 937-673-2874	Allen Upshaw	Provided the DOE/ MCP Project Manager with technical assistance, administrative support, sampling, photo and site documentation, site safety, and report preparation. Provided the equipment necessary for the demolition and performed the building demolition.

5.2 Demolition Cost

Under the new site contract, CH2M Hill Mound, Inc. has elected to cluster financial data for multiple buildings together. Building 128 is the only building in Cluster 128. The total cluster costs for the demolition activities associated with Building 128 are presented in Table 4.

Table 4 – Cluster 128 Total Costs

Activity	Cost
Work Planning	$850
Facility Prep	$8,360
Demolition	$6,300
Total	$15,510

APPENDIX A

Figures

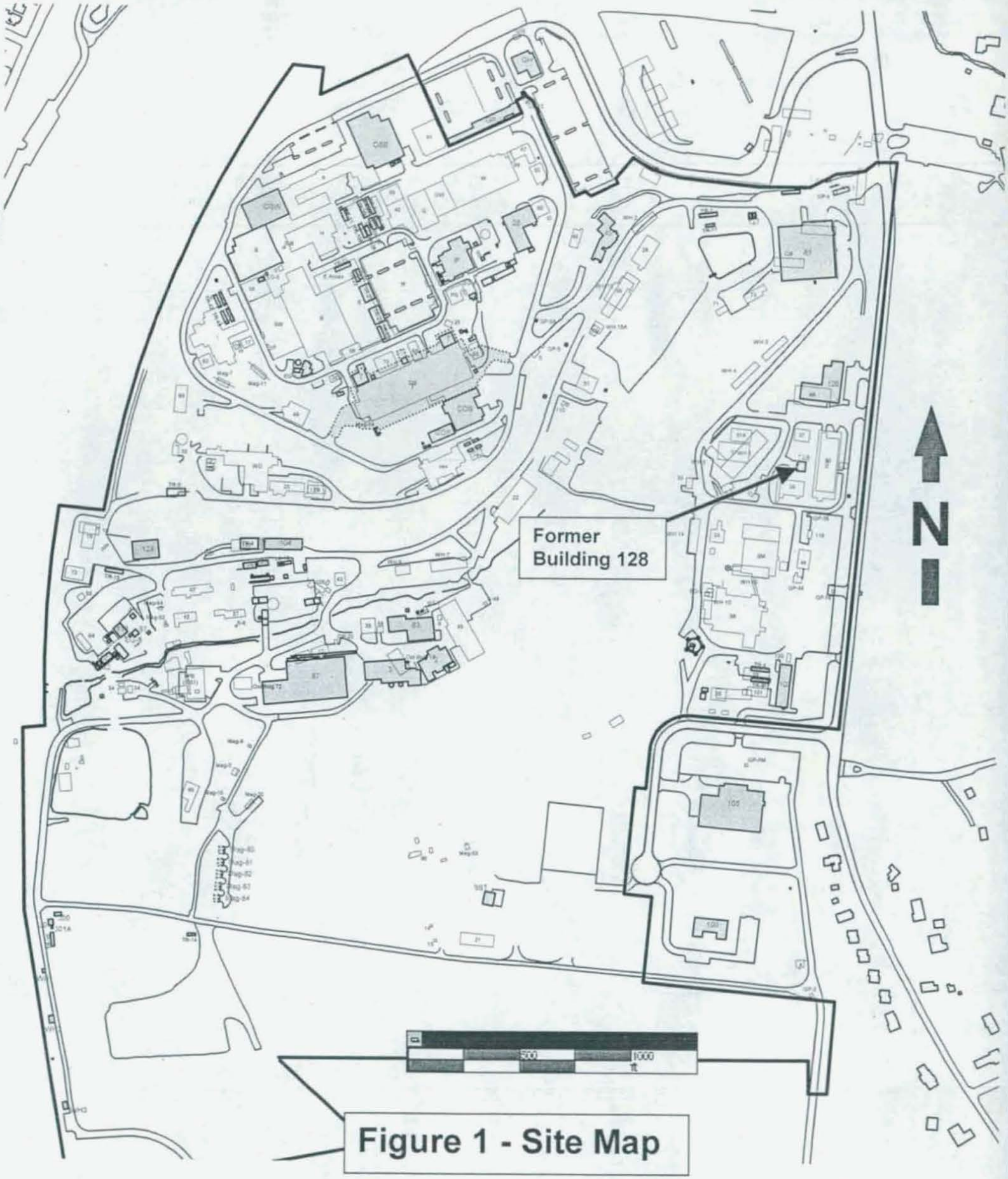


Figure 1 - Site Map

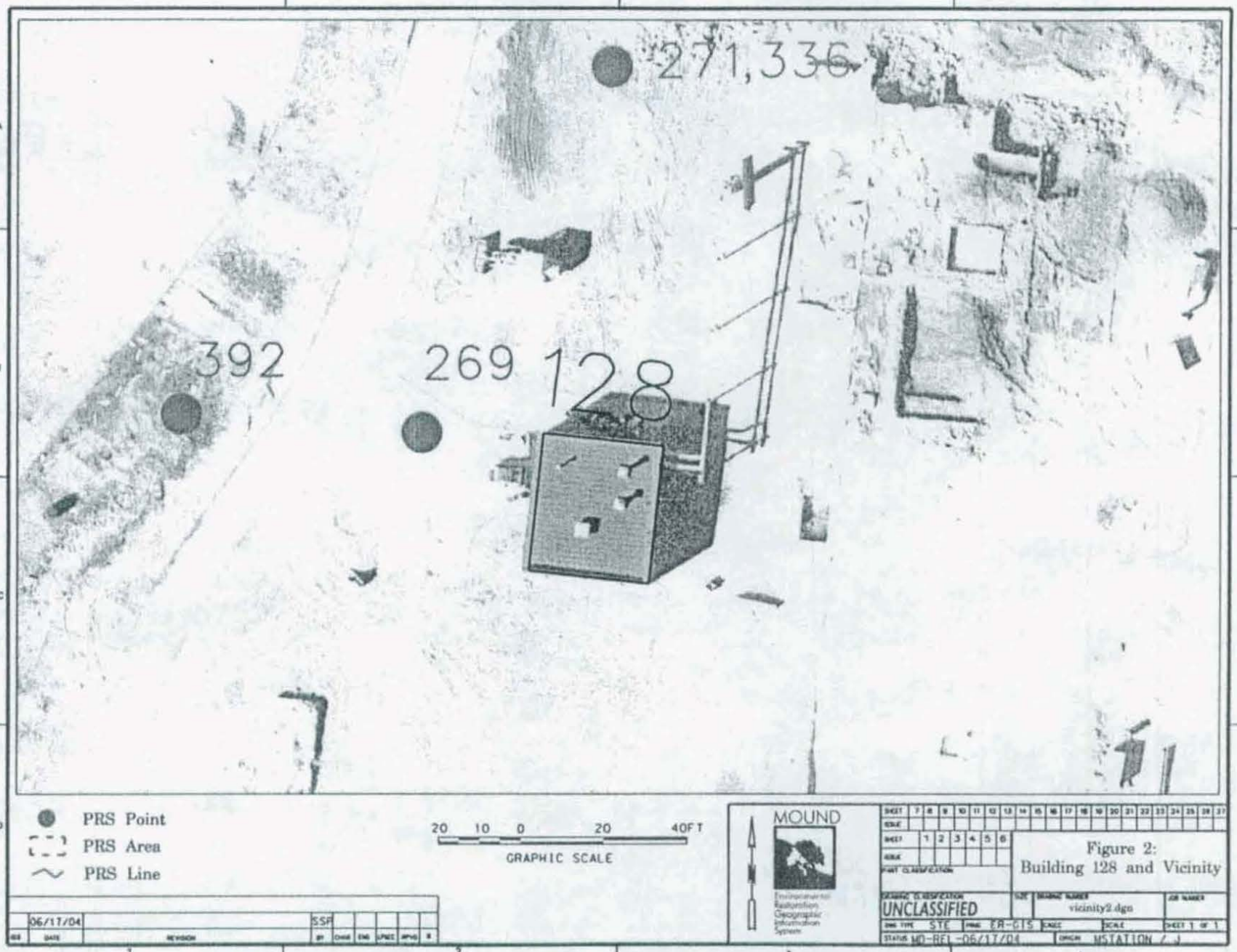
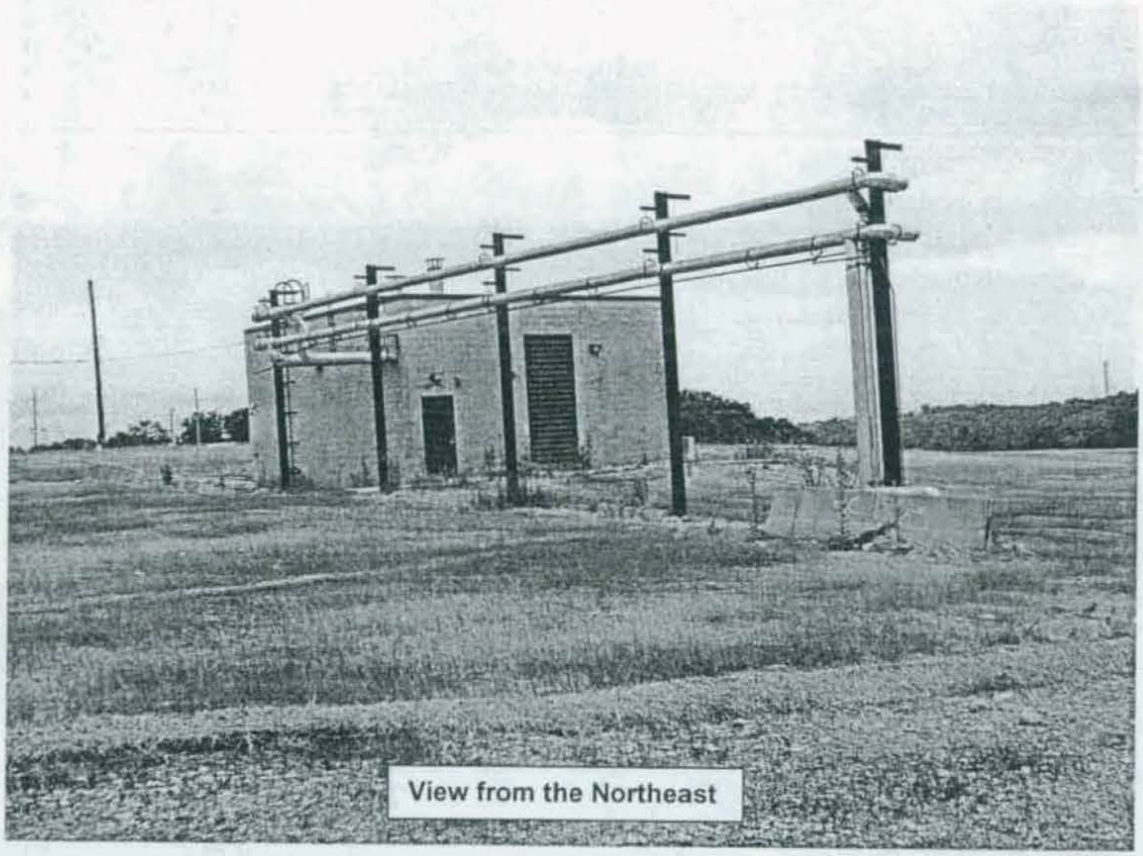
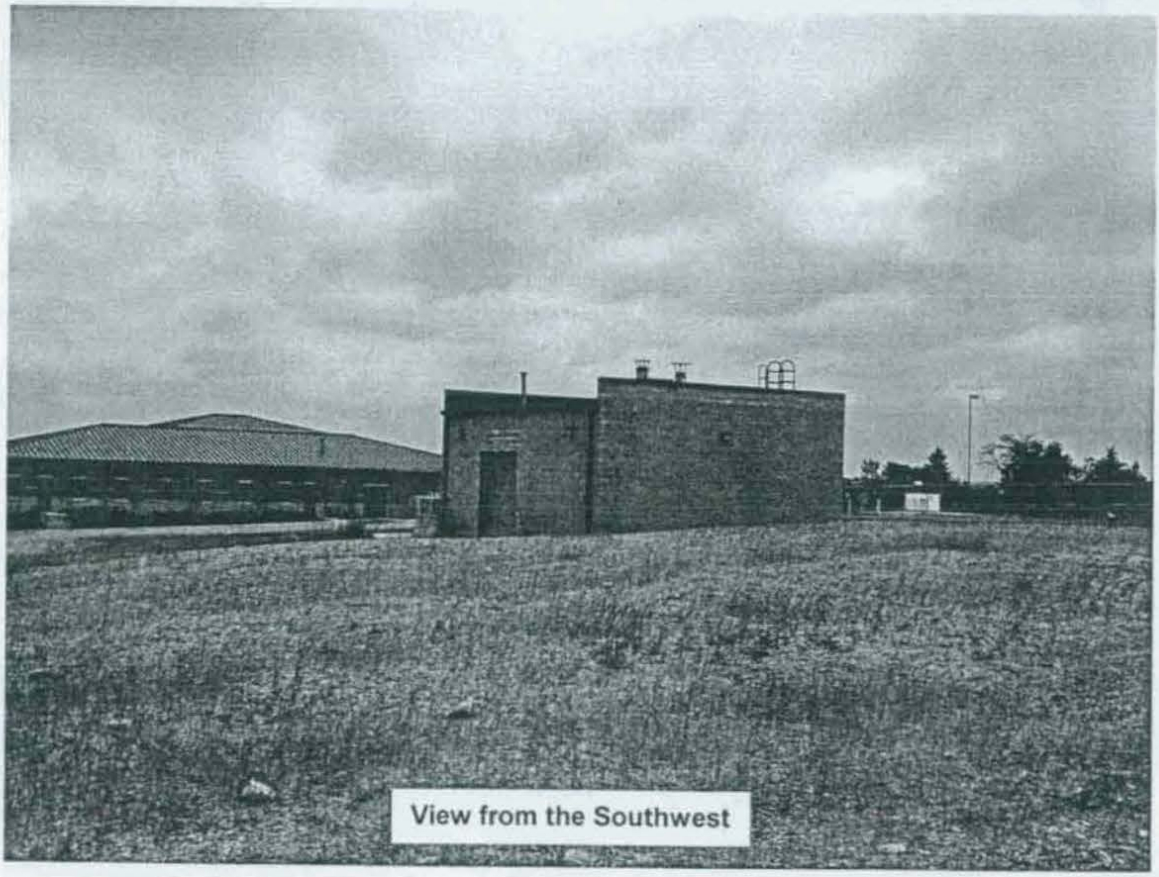


Figure 2: Building 128 and Vicinity

Figure 3 – Building Photos



View from the Northeast



View from the Southwest

Building 128 – Prior to Demolition

View from the Northeast

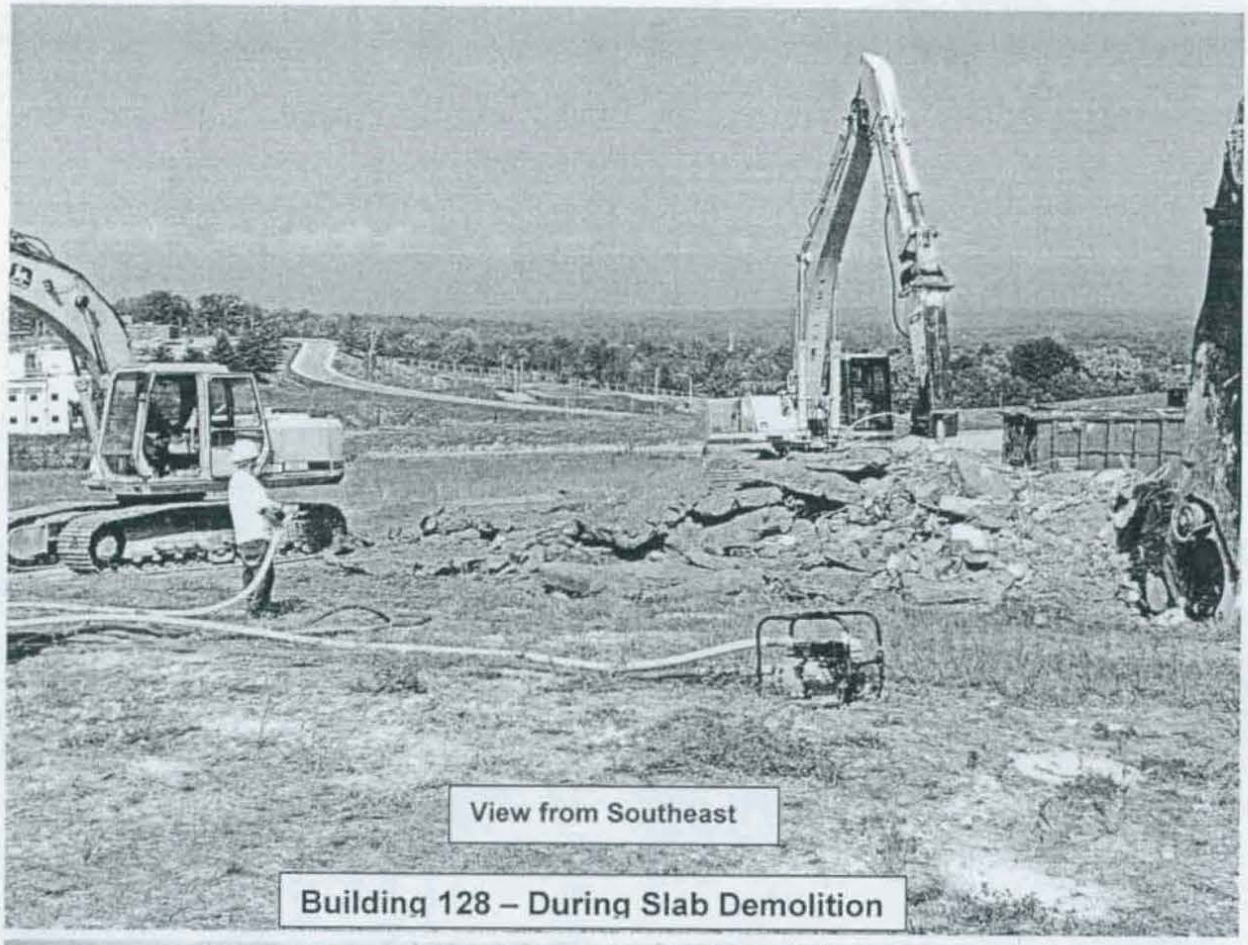
View from the Northeast

Building 128 – During Demolition Of Utility Stanchion Line

View from the East

View from Northeast

Building 128 – During Demolition of Building Superstructure



View from Southeast

Building 128 – During Slab Demolition

View from Southwest

Building 128 – Post Demolition

APPENDIX B

Post-Final Status Survey Report
Radiological Surveys

05-TF-0309 (6 Pages)
05-TF-0313 (4 Pages)

RADIOLOGICAL SURVEY DATA SHEET

LOCATION (BLDG/AREA/ROOM)	SURVEY NO.
Bldg. 128	05-TF-0309
PURPOSE	RWP NO.
Verification survey prior to demo	N/A
	DATE
	9/28/05
	TIME
	10:00

MAP / DRAWING

COPY

Bkgd.= 1.8 cpm alpha
142 cpm beta
DL= 1.8 cpm alpha
20 cpm beta

scan and pause survey performed at random and smear locations. no audible detected, therefore no intergrates taken except at smear locations denoted on pages 5 and 6.

<100 alpha

<5K beta

LEGEND:

= mrem/hr (γ) whole body
#E = mrem/hr (β+η+γ) extremity on contact
K = factor of 1000
— · — · — · · = radiological boundary

△ # - mrem/hr neutron

(#) - swipe number

□ # - air sample number

(#/α) or /β - direct contamination measurement in dpm/100cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
Lud 2360/4389	5704/5714	10/21/05
	NA	

Completed by: (Signature)	HP# [redacted]	Date 10-4-05
Completed by: (Printed)	L. Oeffner Jr. / J.M. Collins	
Counted by: (Signature) See Attached	HP#	Date
Counted by: (Printed Name)		
Reviewed/Approved by: (Signature)	H [redacted]	Date 10/4/05
Reviewed/Approved by: (Print Name)	RW Colbentz	

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
	Swipes (dpm/100cm)			
Sample #	β/γ	Alpha	Tritium	Comments
1	SEE ATTACHED RESULTS			East wall
2	↓	↓	↓	↓
3				▼
4				South wall
5				↓
6				▼
7				West wall
8				↓
9				▼
10				North Door
11				North wall
12				▼
13				I/S East wall
14				I/S South wall
15				I/S West wall
16				I/S North wall
17				Platform
18				↓
19				
20				▼
21				Floor
22				↓
23				
24	▼	▼	▼	▼
		NA		

Removable Contamination				
	Swipes (dpm/100cm^2)			
Sample #	β/γ	Alpha	Tritium	Comments
		NA		

Comments: I/S = inside. All smears field checked with 2360 prior to submiting to count lab.

NOTES:

1. See MD-80036 10002 for calculations of WEB, 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.

ML-9620A (4-98)

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR045
Batch Ended: 10/3/05 15:58

Crosstalk correction performed.

Recalibration Date: 11/03/05
Serial Number: 26966-1

Batch ID: 05-TF-0309 COLLINS [24] GWD

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A1	1	0.00	2.21		2.23	2.56	
A2	2	0.00	2.24		3.04	2.54	
A3	3	0.00	2.18		0.48	1.76	
A4	4	0.00	2.04		0.00	1.78	
B1	5	0.00	1.94		0.00	1.98	
B2	6	0.00	2.05		0.00	1.72	
B3	7	0.00	1.95		0.10	2.17	
B4	8	1.47	1.94		3.65	2.80	
C1	9	0.00	2.37		0.50	2.73	
C2	10	0.00	2.18		0.00	2.37	
C3	11	1.75	2.08		0.00	1.39	
C4	12	0.00	2.05		0.00	1.35	
D1	13	0.95	2.21		0.14	2.52	
D2	14	0.00	2.17		0.00	1.30	
D3	15	0.00	1.96		2.78	2.86	
D4	16	0.00	2.17		1.98	2.75	
A1	17	0.00	2.16		0.00	1.34	
A2	18	0.00	2.20		0.00	1.31	
A3	19	0.00	2.16		0.00	1.27	
A4	20	0.00	2.08		3.60	2.77	
B1	21	0.00	1.99		2.09	2.54	
B2	22	1.49	2.09		0.90	2.39	
B3	23	0.00	1.92		0.00	1.32	
B4	24	0.00	1.90		0.43	2.00	

MD MD

03 of 10

03 Oct 2005 16:14 ALPHA/BETA - 1.09
Protocol #: 3 PW H3 #403727 User : 5801

Time: 2.00
Data Mode: DPM Nuclide: SMGLS02 Quench Set: SMGLS02
Background Subtract: 1st Vial

	LL	UL	LCR	2S%	BKG
Region A:	0.5	18.6	0	0.0	8.49
Region B:	2.0	18.6	0	0.0	8.13
Region C:	40.0	2000	0	0.0	13.03

Quench Indicator: tSIE/AEC
Ext Std Terminator: Count
05-TF-0309 COLLINS [24] GWD
Luminescence Correction On
Coincidence Time(ns): 18
Delay Before Burst(ns): Normal
Protocol Data Filename: C:\DATA\PROT3.dat
Count Data Filename: C:\DATA\SDATA3.DAT

S#	TIME	CPMA	CPMB	CPMC	tSIE	LUM	FLAG	DPM1	2SIGMA
-1	10.00	8.49	8.13	13.03	664.55	1	B		0.00
0	2.00	498.05	474.38	0.00	602.60	0		1045.97	101.71
1	2.00	0.00	0.00	0.00	629.96	0		0.00	0.00
2	2.00	0.00	0.00	0.00	615.00	0		0.00	0.00
3	2.00	4.25	4.29	0.00	622.98	0		8.77	11.11
4	2.00	0.00	0.00	0.00	643.71	0		0.00	0.00
5	2.00	0.00	0.00	0.00	615.61	0		0.00	0.00
6	2.00	0.00	0.00	0.47	604.06	0		0.00	0.00
7	2.00	0.00	0.00	0.00	615.27	0		0.00	0.00
8	2.00	0.55	0.91	0.00	654.38	0		1.10	9.31
9	2.00	0.00	0.00	0.00	640.54	0		0.00	0.00
10	2.00	0.00	0.00	0.00	631.20	0		0.00	0.00
11	2.00	0.00	0.00	0.00	618.37	0		0.00	0.00
12	2.00	0.00	0.00	0.00	627.00	0		0.00	0.00
13	2.00	0.00	0.00	0.00	630.54	0		0.00	0.00
14	2.00	0.00	0.00	0.00	654.13	0		0.00	0.00
15	2.00	0.00	0.00	0.00	635.66	0		0.00	0.00
16	2.00	0.00	0.00	0.00	606.90	0		0.00	0.00
17	2.00	0.00	0.00	0.00	564.62	0		0.00	0.00
18	2.00	0.00	0.00	0.00	451.26	0		0.00	0.00
19	2.00	0.00	0.00	0.00	518.14	0		0.00	0.00
20	2.00	0.00	0.00	0.00	447.52	0		0.00	0.00
21	2.00	0.51	0.62	0.00	516.85	0		1.16	10.50
22	2.00	0.00	0.00	0.00	576.86	0		0.00	0.00
23	2.00	0.00	0.00	0.00	579.41	0		0.00	0.00
24	2.00	0.00	0.00	0.00	556.48	7		0.00	0.00

MC

GWD

RSDS#: 05-TF-0309 RCT: [redacted] RCT: [redacted]

43-89 ALPHA BKG:	1.8	Factor	8	PROBE AREA:	100	cm2	Surface Eff:	1	ALPHA
43-89 BETA BKG:	142	Factor	4	PROBE AREA:	100	cm2	Surface Eff:	1	BETA

LOCATION	2360#	RCT ID	PROBE	RAD TYPE	ITEM	DATE	TIME	CNTS	CT TIME (sec)	dpm/100cm2
East wall	5704	[redacted]	5714	ALPHA	1	9/28/05	10:00	18	120	58
East wall	5704		5714	ALPHA	2	9/28/05	10:00	21	120	70
East wall	5704		5714	ALPHA	3	9/28/05	10:00	15	120	46
South wall	5704		5714	ALPHA	4	9/28/05	10:00	10	120	26
South wall	5704		5714	ALPHA	5	9/28/05	10:00	14	120	42
South wall	5704		5714	ALPHA	6	9/28/05	10:00	7	120	14
West Wall	5704		5714	ALPHA	7	9/28/05	10:00	15	120	46
West Wall	5704		5714	ALPHA	8	9/28/05	10:00	15	120	46
West Wall	5704		5714	ALPHA	9	9/28/05	10:00	14	120	42
Door	5704		5714	ALPHA	10	9/28/05	10:00	9	120	22
North wall	5704		5714	ALPHA	11	9/28/05	10:00	18	120	58
North wall	5704		5714	ALPHA	12	9/28/05	10:00	22	120	74
I/S East wall	5704		5714	ALPHA	13	9/28/05	10:00	4	120	2
I/S South wall	5704		5714	ALPHA	14	9/28/05	10:00	10	120	26
I/S West wall	5704		5714	ALPHA	15	9/28/05	10:00	4	120	2
I/S North wall	5704		5714	ALPHA	16	9/28/05	10:00	2	120	0
Platform	5704		5714	ALPHA	17	9/28/05	10:00	18	120	58
Platform	5704		5714	ALPHA	18	9/28/05	10:00	15	120	46
Platform	5704		5714	ALPHA	19	9/28/05	10:00	4	120	2
Platform	5704		5714	ALPHA	20	9/28/05	10:00	6	120	10
Floor	5704		5714	ALPHA	21	9/28/05	10:00	6	120	10
Floor	5704		5714	ALPHA	22	9/28/05	10:00	10	120	26
Floor	5704		5714	ALPHA	23	9/28/05	10:00	5	120	6
Floor	5704		5714	ALPHA	24	9/28/05	10:00	8	120	18
East wall	5704	[redacted]	5714	BETA	1	9/28/05	10:00	415	120	262
East wall	5704		5714	BETA	2	9/28/05	10:00	412	120	256
East wall	5704		5714	BETA	3	9/28/05	10:00	433	120	298
South wall	5704		5714	BETA	4	9/28/05	10:00	375	120	182
South wall	5704		5714	BETA	5	9/28/05	10:00	405	120	242
South wall	5704		5714	BETA	6	9/28/05	10:00	371	120	174
West Wall	5704		5714	BETA	7	9/28/05	10:00	371	120	174

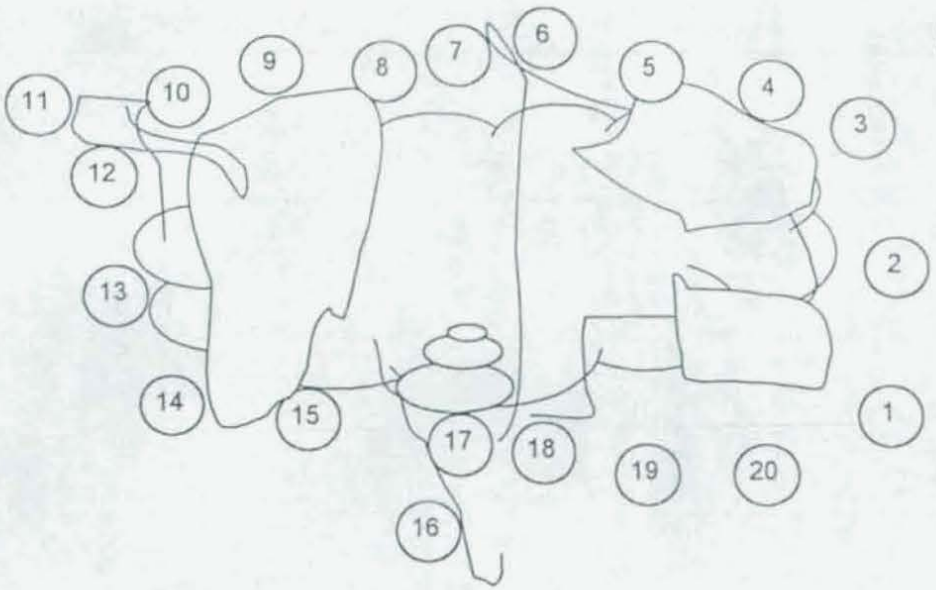
LOCATION	2360#	RCT ID	PROBE	RAD TYPE	ITEM	DATE	TIME	CNTS	CT TIME (sec)	dpm/100cm2
West Wall	5704	[redacted]	5714	BETA	8	9/28/05	10:00	337	120	106
West Wall	5704		5714	BETA	9	9/28/05	10:00	361	120	154
Door	5704		5714	BETA	10	9/28/05	10:00	264	120	0
North wall	5704		5714	BETA	11	9/28/05	10:00	390	120	212
North wall	5704		5714	BETA	12	9/28/05	10:00	381	120	194
I/S East wall	5704		5714	BETA	13	9/28/05	10:00	338	120	108
I/S South wall	5704		5714	BETA	14	9/28/05	10:00	377	120	186
I/S West wall	5704		5714	BETA	15	9/28/05	10:00	319	120	70
I/S North wall	5704		5714	BETA	16	9/28/05	10:00	255	120	0
Platform	5704		5714	BETA	17	9/28/05	10:00	501	120	434
Platform	5704		5714	BETA	18	9/28/05	10:00	424	120	280
Platform	5704		5714	BETA	19	9/28/05	10:00	461	120	354
Platform	5704		5714	BETA	20	9/28/05	10:00	419	120	270
Floor	5704		5714	BETA	21	9/28/05	10:00	460	120	352
Floor	5704		5714	BETA	22	9/28/05	10:00	472	120	376
Floor	5704		5714	BETA	23	9/28/05	10:00	471	120	374
Floor	5704		5714	BETA	24	9/28/05	10:00	476	120	384

RADIOLOGICAL SURVEY DATA SHEET

LOCATION (BLDG /AREA/ROOM)	SURVEY NO
Bldg. 128	05-TF-0313
PURPOSE	HWP NO
	N/A
Characterization survey of concrete slab	DATE
	10/6/05
	TIME
	16:00

MAP / DRAWING

COPY



Bkgd. 1.8 cpm alpha
185 cpm beta
D.L. 1.8 cpm alpha
20 cpm beta

Direct scan and pause survey conducted at each smear location and other various locations
No audible clicks in required time, therefore no integrated counts required.

LEGEND:
- # = mrem/hr (γ) whole body
- #E = mrem/hr (β+η+γ) extremity on contact
- K = factor of 1000
- — · — · — · · = radiological boundary

△ # - mrem/hr neutron
(#) - swipe number
□ # - air sample number
(#/α) or /β - direct contamination measurement in dpm/100cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
2360-89	5704/5714	10/21/05
	A	
	N	

Completed by: (Signature) Jamie M. Collins	H.P.# [redacted]	10/10/05
completed by: Jamie M.Collins		
Counted by: (Signature) see attached	HP#	Date:
Counted by: (Printed Name)		
Reviewed/Approved by: (Signature) RM Collentz	HP# [redacted]	Date: 10/27/05
Reviewed/Approved by: (Print Name) RM Collentz		

Survey No.
05-TF-0313

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination							
Swipes (dpm/100cm)							
Sample #	β/γ		Alpha		Tritium		Comments
1	SEE ATTACHED RESULTS						concrete
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
			A				
			N				

Removable Contamination				
Swipes (dpm/100cm^2)				
Sample #	β/γ	Alpha	Tritium	Comments
		A		
		N		

Comments: All smears field checked with 2360 prior to submiting to count lab.

NOTES:

1. See MD-80036 10002 for calculations of WEB, 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.

ML-9620A (4-98)

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Green
Data file name: SMEAR013
Batch Ended: 10/10/05 8:34
Cal. Due Date: 11/17/05
Serial Number: 26966-3

Batch ID: 05-TF-0313 COLLINS [20] GWD

Detector ID	Sample ID	Alpha Activity DPM	Alpha σ	Alpha flags	Beta Activity DPM	Beta σ	Beta flags
A1	1	0.00	2.22		0.99	2.27	
A2	2	0.00	2.03		1.59	2.02	
A3	3	0.00	2.27		0.00	1.27	
A4	4	0.00	2.12		0.32	1.71	
B1	5	0.00	1.88		0.00	1.20	
B2	6	0.00	1.85		0.00	1.14	
B3	7	0.00	2.20		0.31	1.88	
B4	8	0.00	1.99		0.37	1.70	
C1	9	0.00	2.05		0.00	1.23	
C2	10	0.00	1.92		0.47	1.59	
C3	11	0.00	2.06		0.00	1.22	
C4	12	0.00	1.95		0.00	1.12	
D1	13	0.00	2.06		0.29	1.77	
D2	14	0.00	2.18		1.58	2.06	
D3	15	0.00	2.10		0.18	1.75	
D4	16	0.00	2.05		0.20	1.66	
A1	17	1.74	2.22		0.81	2.27	
A2	18	1.57	2.02		0.26	1.65	
A3	19	0.00	2.27		0.00	1.27	
A4	20	0.00	2.12		0.32	1.71	

MD MC

89 of 10

10/10/05

DAR 2 of 4

10 Oct 2005 08:36 ALPHA/BETA - 1.08
Protocol #: 2 PW H3 405828 User : 2138

Time: 2.00
Data Mode: DPM Nuclide: SMGLS02 Quench Set: SMGLS02
Background Subtract: 1st Vial

	LL	UL	LCR	2S%	BKG
Region A:	0.5 -	18.6	0	0.0	7.78
Region B:	2.0 -	18.6	0	0.0	7.32
Region C:	40.0 -	2000	0	0.0	9.14

Quench Indicator: tSIE/AEC
Ext Std Terminator: Count
05-TF-0313 J.COLLINS (20) AG
Luminescence Correction On
Coincidence Time(ns): 18
Delay Before Burst(ns): Normal
Protocol Data Filename: c:\data\PROT2.DAT
Count Data Filename: c:\data\SDATA2.DAT
Spectrum Data Drive & Path: c:\data

S#	TIME	CPMA	CPMB	LUM	FLAG	tSIE	DPM1	2Sigma	CPMC
-1	10.00	7.79	7.32	1	B	635.67		0.00	9.14
0	2.00	507.22	477.63	0		570.61	998.13	98.77	1.36
1	2.00	0.00	0.00	0		491.58	0.00	0.00	0.00
2	2.00	0.00	0.00	0		568.29	0.00	0.00	5.36
3	2.00	0.21	0.18	0		588.44	0.41	8.47	0.00
4	2.00	0.00	0.00	0		512.92	0.00	0.00	1.36
5	2.00	0.00	0.00	0		561.14	0.00	0.00	0.00
6	2.00	0.21	0.42	0		592.01	0.41	8.45	5.36
7	2.00	0.00	0.00	0		589.44	0.00	0.00	0.00
8	2.00	1.38	1.84	0		618.83	2.60	8.75	0.00
9	2.00	0.00	0.00	0		423.94	0.00	0.00	6.36
10	2.00	0.00	0.00	0		577.14	0.00	0.00	0.00
11	2.00	3.21	2.91	0		597.43	6.17	9.65	0.00
12	2.00	0.00	0.20	0		539.89	0.00	0.00	0.00
13	2.00	0.00	0.00	0		584.02	0.00	0.00	0.00
14	2.00	1.71	1.91	0		588.41	3.29	9.04	0.00
15	2.00	0.21	0.68	0		604.32	0.40	8.36	0.00
16	2.00	0.00	0.00	0		462.58	0.00	0.00	1.36
17	2.00	0.00	0.00	0		465.44	0.00	0.00	0.00
18	2.00	0.00	0.00	0		418.08	0.00	0.00	1.86
19	2.00	0.71	0.00	0		525.19	1.45	9.19	1.36
20	2.00	0.42	0.08	0		621.51	0.80	8.33	1.86

MC

APPENDIX C

PRS Recommendation Sheets

MIAMISBURG CLOSURE PROJECT
PRS 269

RECOMMENDATION:

Potential Release Site (PRS) 269 is an area of land where two underground fuel storage tanks were shown to be located in support of original plant construction in a 1948 construction drawing that indicated a fueling facility existed near the northwest corner of Building 50. No documentation of the tanks having been removed has been found, although it is believed that they were removed as part of construction demobilization. PRS 269 was binned Further Assessment (FA) by the Core Team in December 1996 based on the suspected presence of the tanks. FA included an assessment to locate the tanks, and if the tanks were found to be present, sampling should be conducted. If the tanks were determined to be no longer present, PRS 269 would be re-binned.

FA has been successfully completed by means of a ground penetrating radar (GPR) survey that did not identify any underground tanks at PRS 269.

Therefore, the Core Team recommends **No Further Assessment** for PRS 269.

A PRS Package with an NFA recommendation signed by the Core Team will be placed in the Public Reading Room for a 30-day review period. Upon closure of the public review comments, if any, the PRS Package will be issued as a final document and made available in the Public Reading Room.

CONCURRENCE:

DOE/MCP: _____ 3/19/03
Robert S. Rothman, Remedial Project Manager (date)

USEPA: David P. Seely 3/26/03
David P. Seely, Remedial Project Manager (date)

OEPA: _____ 3/19/03
Brian K. Nickel, Project Manager (date)

MIAMISBURG CLOSURE PROJECT
PRS 271/PRS 336

RECOMMENDATION:

PRS 271 and PRS 336 are the locations of two underground tanks that once received waste water from the former Building 37. PRS 271 received sanitary waste water, while PRS 336 was designed to receive low risk radiological waste water. An historic review and recent sampling have found no evidence to suspect actual presence of radiological contamination in Building 37. Both tanks were removed during a sanitary system upgrade in 2000/2001. Sampling of soils near the two tanks showed no activity exceeding 10^{-6} risk-based Soil Screening Level criteria. Surveys within the PRS 336 tank found no radiological contamination above DOE Order 5400.5 criteria. Remaining underground portions of by-pass and sanitary sewer pipeline to or from these tanks are considered less contaminated than the inside of the PRS 336 tank and have thus been capped and abandoned in place.

The Core Team recommends **No Further Assessment** for PRS 271 and PRS 336.

A PRS Package with an NFA recommendation signed by the Core Team will be placed in the Public Reading Room for a 30-day review period. Upon closure of the public review comments, if any, the PRS Package will be issued as a final document and made available in the Public Reading Room.

The final Core Team recommendation sheet from this evaluation will be included in the Building 37 Closeout Report.

CONCURRENCE:

DOE/MCP: Paul Lucas 11/17/04
Paul Lucas, Remedial Project Manager (date)

USEPA: Timothy J. Fischer 11/17/04
Timothy J. Fischer, Remedial Project Manager (date)

OEPA: Brian K. Nickel 11/17/04
Brian K. Nickel, Project Manager (date)

MOUND PLANT
PRS 389/392
SOIL CONTAMINATION

RECOMMENDATION:

PRSs 389 and 392 are located in the eastern sector of the original Mound plant. These soil locations were identified as PRSs due to qualitative hydrocarbon detections found during the PETREX soil gas portion of the *OU5, Non Area of Concern* investigation.

In 1996, the Soil Gas Confirmation sampling effort sampled the locations with the highest ion counts (confirmation sample locations 5, 6 and 9) in the eastern sector and discovered no contamination above the 2×10^{-6} risk range. PRSs 389 and 392 were not sampled as part of the *Soil Gas Confirmation Sampling* but the PRSs had lower ion counts than confirmation sample locations 5, 6, and 9. This implies that these PRSs will have similar or lower health risk.

All radiological samples collected near these PRSs indicate that radionuclides are below their applicable 10^{-5} Risk Based Guideline Criteria or regulatory levels. Therefore, NO FURTHER ASSESSMENT is recommended.

CONCURRENCE:

DOE/MB: Arthur W. Kleinrath, Remedial Project Manager — 11/20/96 (date)

USEPA: Timothy J. Fischer, Remedial Project Manager — 11/20/96 (date)

OEPA: Brian K. Nickel, Project Manager — 11/20/96 (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from 12/19/96 to 1/23/97

☒ No comments were received during the comment period.

☐ Comment responses can be found on page _____ of this package.

APPENDIX D

Building 128 Closeout Report Addendum 1

Building 128

Closeout Report

Addendum 1

July 2006

PURPOSE

The purpose of this addendum is to document the final site restoration associated with the demolition of Building 128.

REFERENCES

Building 128 Closeout Report, Final, January 2006

BACKGROUND

Section 3.0 of the Building 128 Closeout Report, Final, January 2006, states that all preparation and demolition activities associated with the demolition and removal of Building 128 were complete except for the capping of underground hot water system and natural gas lines and final site restoration of the Building 128 area. After the building structure, foundations, and footings were demolished, the capping of lines and final site restoration was postponed due to allocation of personnel.

ACTION TAKEN

The underground hot water system and natural gas lines to Building 128 were cut-off and capped approximately three-foot below grade. Soil from the site "spoils" area was applied over the demolition area and then graded and seeded.

Photographs taken after capping of lines and final site restoration are provided at the end of this addendum.

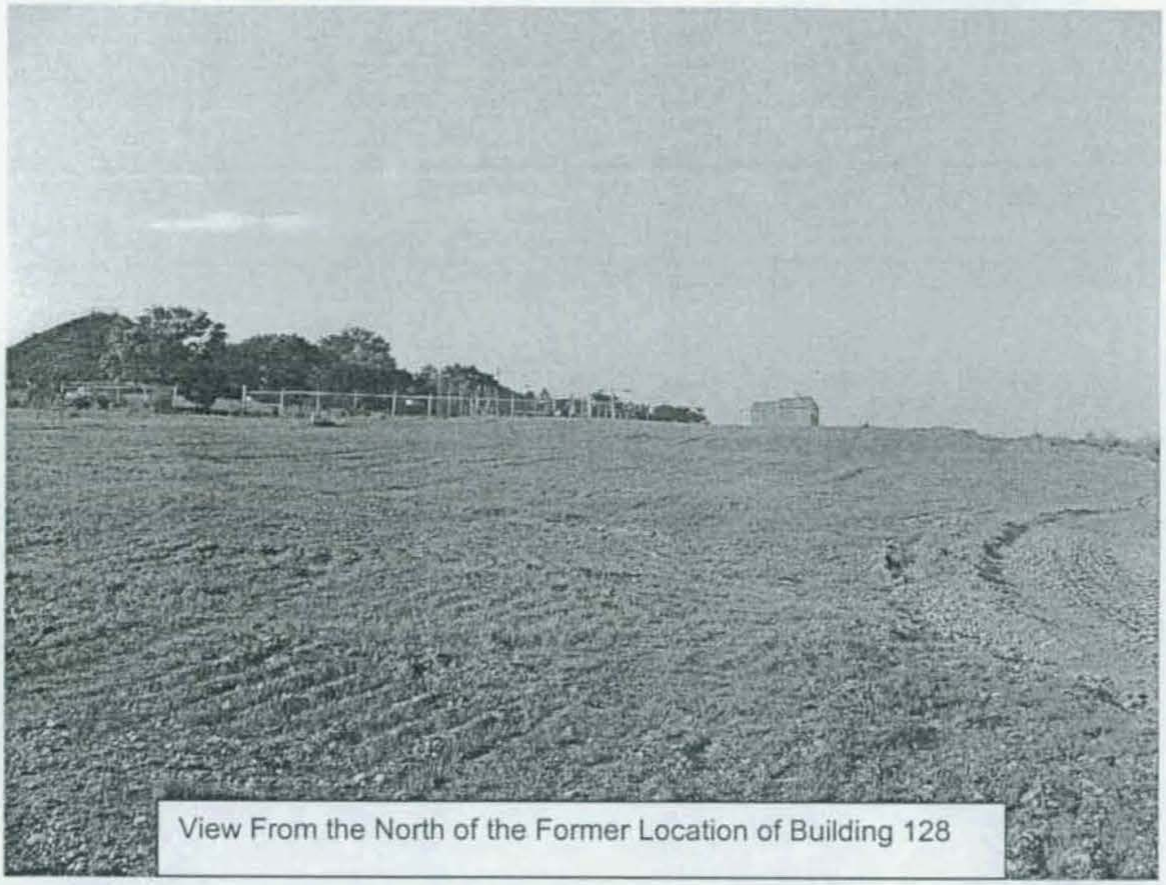
DEMOLITION COST

Under the new site contract, CH2M Hill Mound, Inc. has elected to cluster financial data for multiple buildings together. Building 128 is the only building in Cluster 128. The total cluster costs for the demolition activities associated with Building 128 are presented in Table 1.

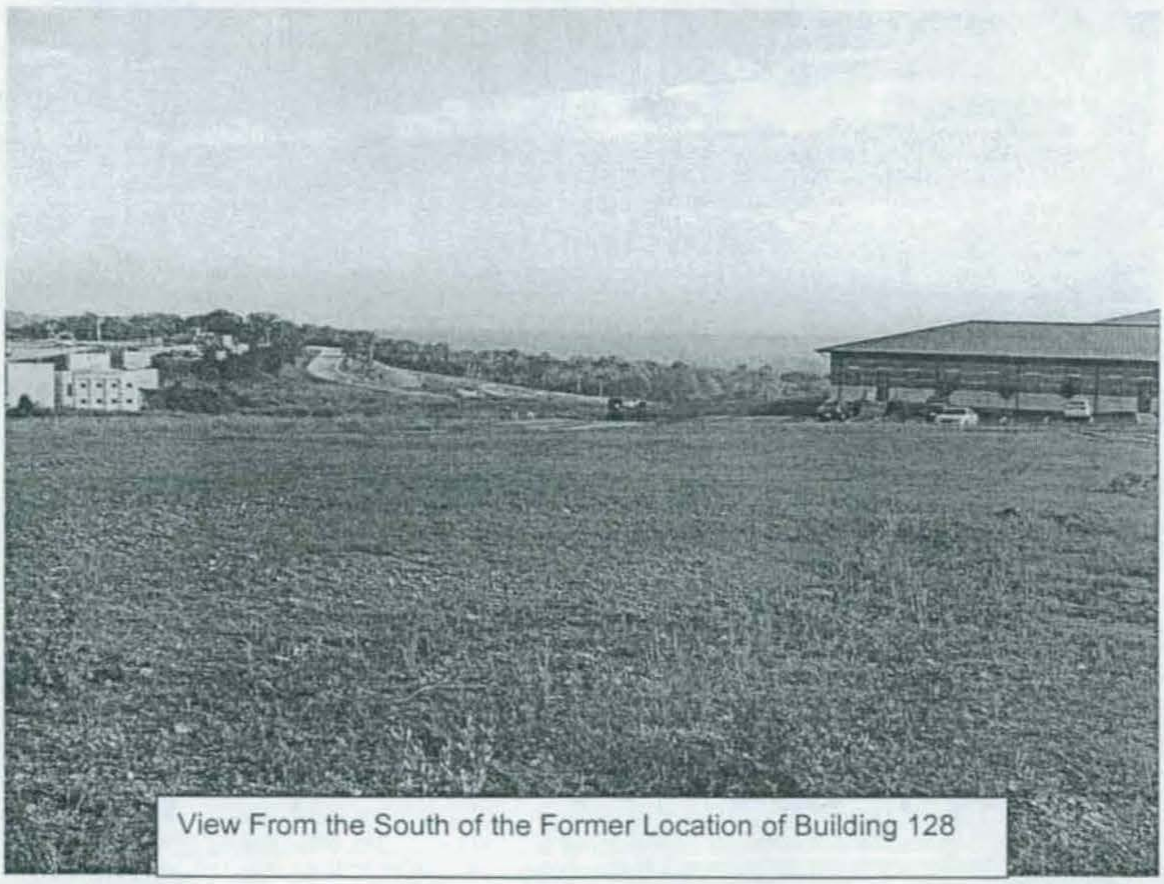
Table 1 – Cluster 128 Total Costs

Activity	Cost
Work Planning	$850
Facility Prep	$10,490
Demolition	$19,230
Total	$30,570

Building 128 Area After Final Site Restoration



View From the North of the Former Location of Building 128



View From the South of the Former Location of Building 128