3006-0604190003

CH2M HILL
Mound, Inc.
1 Mound Road
P.O. Box 3030
Miamisburg, OH
45343-3030

SMO-061-05
April 27, 2005

Ms. Margaret L. Marks, Director
Miamisburg Closure Project
U. S. Department of Energy
1075 Mound Road
Miamisburg, OH 45342

ATTENTION: Paul Lucas

SUBJECT: **Contract No. DE-AC24-03OH20152;** Deliverable #36 Building Data Package; Section C.2.1.1 Facility Demolition Exhibit 1 – Buildings to be Demolished; Buildings DS and 25 Closeout Report - Final

Dear Ms. Marks:

Attached is the following document:

- Buildings DS and 25, Closeout Report, Final

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

Sincerely,

John Lehew
Site Manager

JL/ms
Enclosures

cc: T. Fischer, USEPA, (1) w/attachments
B. Nickel, OEPA, (1) w/attachments
R. Vandegrift, ODH, (1) w/attachments
M. Wojciechowski, Tetra Tech, (1) w/attach.
F. Schmaltz, DOE/MCP, (1) w/attachments
L. Rawls, DOE/MCP, w/o attachments
R. Tormey, DOE/OH, (1) w/attachments
G. Desai, DOE/HQ, (1) w/attachments
CERCLA Documents, (1) w/attachments
C. Watson, (1) w/attachments
F. Bullock, MMCIC (2) w/attachments
Public Reading Room (4) w/attachments
ER Records, CH2M Hill, (1) w/attachments
DCC (1) w/attachments
Admin Record (2) w/attachments
J. Lehew, w/o attachments
D. Rakel, w/o attachments
V. Darnell, w/o attachments
B. Wier, w/o attachments
W. Webb, w/o attachments
M. McDougal, w/o attachments
MOAT Coordinator, w/o attachments
File

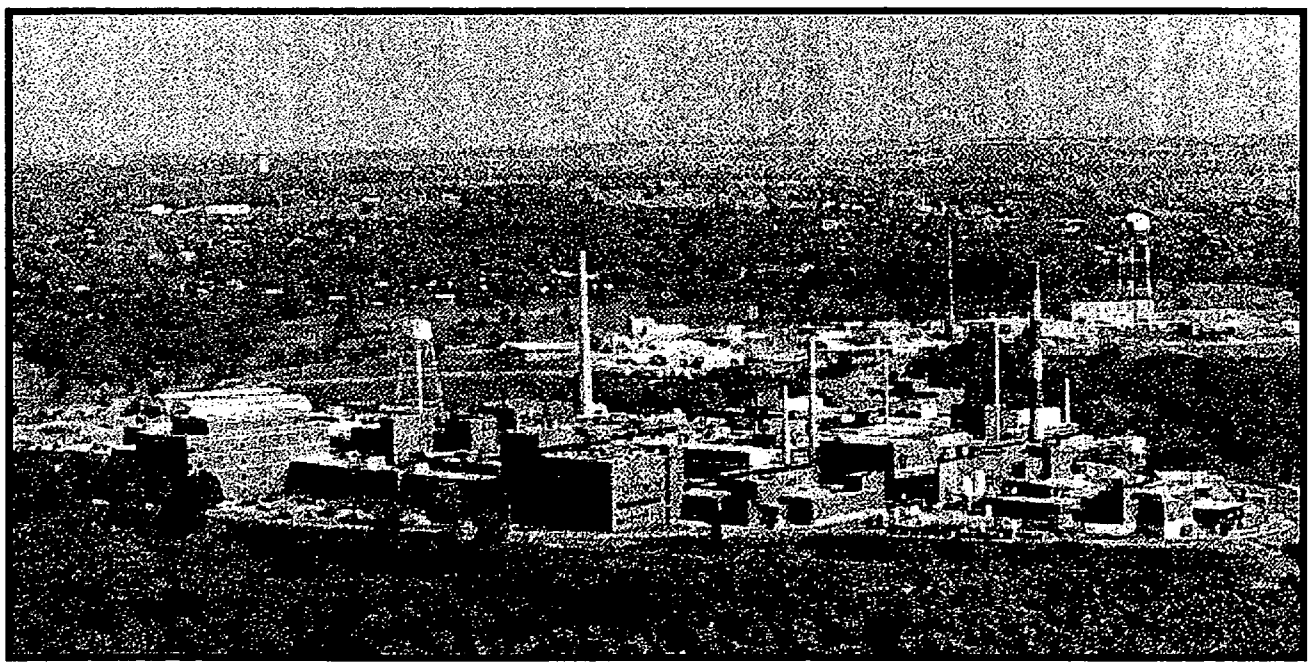
3006-060419003

Environmental
Restoration
Program

Miamisburg Closure Project
CLOSEOUT REPORT

Buildings DS and 25
(Demolition)

Final
April 2005



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Section Page

Tables

Appendices

1.0 PURPOSE

This is the final report documenting completion of the demolition of Buildings DS and 25 located at the Department of Energy (DOE) Miamisburg Closure Project (MCP) Site, as shown in the figures provided in Appendix A. The building demolitions, including their slabs and footers, was accomplished per the Work Package for Buildings DS and 25 Demolition (#BOSS-37556), a copy of which was included in Appendix O of the Building Data Package (BDP) for Buildings DS and 25. The scope of work relating to these buildings is considered complete. Final site restoration will be completed after access to the Group 9 work areas is no longer needed.

2.0 BACKGROUND

2.1 DS Building and Building 25

DS Building

DS Building was a one-story structure constructed of reinforced concrete, concrete block, and structural steel, with a built-up membrane roof and three penthouses. The concrete block exterior walls were covered with a brick veneer. Originally built in 1965, the building has had two major adjoining additions: one on its western end, constructed in 1968; and the other on its eastern end, constructed in 1969. The western addition added 24 rooms, four corridors, and a utility penthouse to the original building. The addition to the eastern end of the building added 9 rooms, two corridors, and included another utility penthouse. Along the south wall of the building were a series of five contiguous test cells (Rooms 221 A through E). The exterior walls of these test cells were aluminum blowout panels. DS Building was constructed on piers that measure six feet in height and were set on the top of the roof of T Building (located beneath DS Building). The height of the piers included the six-inch thickness of the DS Building floor slab. The top of the DS Building floor was six feet above the top of the T Building roof, however the floor in the eastern addition to DS Building was raised two feet above the underlying concrete slab, which was four feet above the T Building roof. The void space between the top of the T Building roof and the underside of the DS Building slab was filled with compacted granular fill. A sanitary waste line and a high-risk waste line, which were encased in concrete on the top of the T Building roof, extended through this void space from the eastern to the western side of the building along the northern part of DS Building. Since its original construction, a large majority of the rooms in the original building, as well as the two major adjoining additions, have been reconfigured or have been altered by the addition or removal of walls. An access corridor, which was built into the south side of DS Building as an extension to Corridor 3, connected DS Building to COS Building, which was constructed in 1986. DS Building contained 47,810 square-feet of floor space.

DS Building was originally constructed and used as the Component Development and Standards Facility. The building was used as a laboratory for metrology and for the development and production of explosive components and inert components for defense programs. DS building was divided into two main areas of operations – the Inert Area and the High Explosive (HE) Area. Table 1 provides a list of building uses since its 1965

construction. Many rooms in DS Building have been modified over the building's history to support the changing uses.

Table 1: Functions and Processes In DS Building

Period	Function or Process
1960s	shipping and receiving, thermometry, testing, cable layup, inert gassing, standards and calibration lab, X-ray processing, film reading, inert assembly, high explosive (HE) assembly, welding development, non-destructive testing, inspection and disassembly, environmental testing, gaging, encapsulation, transducer fabrication, solvent cleaning, packing and storage, cable surveillance, package repair and inspection
1970s	component development, standards and calibration lab, final inspection, component gaging, component fabrication (inert and HE), special materials handling, component surveillance, explosives component process development, fabrication of detonators, fabrication of transducers for ferroelectric fire sets and assembly of fire sets, non-destructive testing of explosives components, surveillance of detonators and cables, tooling acceptance lab, mechanization of manufacturing processes
1980s	component development, standards and calibration lab, final inspection, component gaging, component fabrication (inert and HE), special materials handling, component surveillance, explosives component process development, fabrication of detonators, fabrication of transducers for ferroelectric fire sets and assembly of fire sets, non-destructive testing of explosives components, mechanization of manufacturing processes, surveillance of detonators and cables, tooling acceptance lab, quality assurance HE, precision inspection, shipping and receiving, thermometry, inert storage, gage surveillance, final inspection, micro systems facility (clean room)
1990s	tape processing, slapper detonator development, process technology development, welding technology, off schedule production, energetic component development, low energy component development, X-ray inspection and film processing, final acceptance, IMPAC, material handling, standards and calibration lab, printed flexible circuit board manufacture, non-destructive testing labs, timer disassembly, detonator and pyrotechnic production, explosives development, energetic materials packaging, explosives shipping and receiving, welding development, physical vapor deposition (clean room), computer tomography, nuclear component gaging, production data control center, safe shut down, receiving inspection, User Center labs, private industry
2000s	respirator training, site training, laundry and clothing distribution, bioassay sample collections and container distribution, safe shut down, private industry

DS Building Solvent Storage Shed (PRS 128)

A solvent storage shed (also known as PRS 128), which supported operations in DS Building, was located on the east side (near the southeast corner) of DS Building. Built in the early 1970s (and modified in the 1980s), the 10-foot by 10-foot shed had walls and a roof that were constructed of corrugated metal sheeting. The metal shed was built on a four-inch thick concrete slab. A five-inch high concrete curb adjacent to the interior of the shed walls supported steel floor grating that provided the walking surface in the shed. Originally, solvents were stored in the shed in containers and delivered to the building by laborers. Later, process piping was used to pump solvents to DS Building and transfer waste solvents back to the solvent shed where they were containerized in drums. As shown in Table 2, the DS Building Solvent Storage Shed was binned No Further

Assessment (NFA) on April 16, 1998. The recommendation sheet is provided in Appendix C.

DS Building Vacuum Pump Shed

An 8-foot by 8-foot storage shed was located on the walkway pad on the north side of DS Building, adjacent to the T Building west tower. The west and north walls of the shed were formed by the walkway retaining wall and were constructed of poured concrete. The east wall was constructed of masonry block. The front wall and roof were constructed of corrugated steel sheeting. The shed housed vacuum pumps and was used for the storage of pumps and oils.

DS Building Equipment Shed

The equipment shed was located on the concrete dock on the west side of DS Building. The 34-foot by 21-foot shed had walls and a roof that were constructed of corrugated metal sheeting. The shed was used to store equipment and materials.

Building 25

Built in 1966, Building 25 was a one-story, poured concrete and concrete block, slab-on-grade structure. The roof was a metal deck with an asphaltic built-up membrane. Building 25 contained 430 square-feet of floor space.

Building 25 was constructed and initially used as a low-level counting facility. The low-level counting facility function was not well defined in historical documentation; however, an interview with a former employee indicated that the building was used for whole body monitoring and for the low-level radiological counting of gasses from HH Building, and that some work with Carbon-14 and Carbon-14 dating took place in the building. The work in the building was very low-level and there was a monitoring system in place to monitor people before they entered the building.

By late 1972, Building 25 was converted to a Meteorological Station. The building housed instrumentation that was used to collect meteorological information. Computers in the building received data from two onsite weather-monitoring towers. These computers were connected to computers at Lawrence Livermore Laboratory; there, the information was used to predict dispersion patterns in the event of any airborne releases. The building also housed telephone switching equipment and office space. The meteorological station function continued into the spring of 2003 when the meteorological tower that was connected to Building 25's computers was knocked down by straight-line winds.

2.2 Potential Release Sites (PRSs)

As a result of the investigations and documentation accomplished to comply with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) cleanup process via the Federal Facilities Agreement (FFA)/DOE Environmental Restoration (ER) Program, DOE and site contractor tabulated all the PRSs identified under the various regulatory programs in effect at the site. Of these PRSs, 38 are located at or

near Buildings DS and 25, as identified in Table 2. The PRS locations are shown on Figure 2, and recommendation sheets are provided in Appendix C. Only one of the PRSs (PRS 128) is associated with Buildings DS and 25, and it is binned No Further Assessment (NFA). All of the PRSs are binned either Removal Action (RA) or NFA.

Table 2 - PRSs in Proximity to Buildings DS and 25

PRS	CERCLA or Bldg. Related	Binning Status	Comments
103	CERCLA	NFA	E Building Soils
105	CERCLA	NFA	E Building Solvent Storage Shed
128	Building	NFA	DS Building Solvent Storage Shed
213	Building	Removal Action (RA)	T Building Solidification Unit
214	Building	RA	T Building Solid Radioactive Waste Compactor
215	Building	RA	Room T-1 Cooling Water Sump (Tank 124)
216	Building	RA	T Building, Corridor 2 Sanitary Wastewater Sump (Tank 125)
217	Building	RA	Room T-11F Sanitary Wastewater Sump (Tank 126)
218	Building	RA	Room T-15 Sanitary Wastewater Sump (Tank 127)
219	Building	RA	T Building, Stair 3 Cooling Water Sump (Tank 128)
220	Building	RA	Room T-78 Steam Condensate Sump (Tank 129)
221	Building	RA	T Building, Corridor 8 Sanitary Wastewater Sump (Tank 130)
222	Building	RA	Room T-78A Sanitary Wastewater Sump (Tank 131)
223	Building	RA	Room T-90 Cooling System Condensate Sump (Tank 132)
224	Building	RA	Room T-99 Sanitary Wastewater Sump (Tank 133)
225	Building	RA	Room T-23 Beta Wastewater Sump (Tank 227)
226	Building	RA	Room T-3 Floor Drain Sump (Tank 228)
227	Building	RA	Room T-40 Alpha Wastewater Sump (Tank 229)
228	Building	RA	Room T-41 Alpha Wastewater Sump (Tank 230)
229	Building	RA	Room T-50 Alpha Wastewater Sump (Tank 231)
230	Building	RA	Room T-50 Alpha Wastewater Sump (Tank 232)
231	Building	RA	T Building, Corridor 8 Alpha Wastewater Sump (Tank 233)
232	Building	RA	T Building, Corridor 7 Alpha Wastewater Sump (Tank 234)
233	Building	RA	Room T-63 Alpha Wastewater Sump (Tank 235)
243	CERCLA	NFA	VOC Potential Hot Spot Location 1064
339	Building	RA	T-44 Wastewater Sump (Tank 250)
340	Building	RA	T-16b Wastewater Sump (Tank 251)
341	Building	RA	T-90 Condensate Sump (Tank 269)

PRS	CERCLA or Bldg. Related	Binning Status	Comments
342	Building	RA	T-1 Hot Side Fire Water Tank (Tank 271)
343	Building	RA	T-20 Fire Water Sump (Tank 272)
344	Building	RA	T-37 Fire Water Sump (Tank 273)
430	CERCLA	RA	Hot Waste Line – Segment 9a
431	CERCLA	RA	Hot Waste Line – Segment 10
432	CERCLA	RA	Hot Waste Line – Segment 11
433	CERCLA	RA	Hot Waste Line – Segment 12
434	CERCLA	RA	Hot Waste Line – Segment 13a
435	CERCLA	RA	Hot Waste Line – Segment 13b
436	CERCLA	RA	Hot Waste Line – Segment 14

Note: PRSs 213 through 233 and 339 through 344 are authorized in the T Building Action Memorandum. PRSs 430 through 436 are authorized in the UGL Action Memorandum.

3.0 ACTIONS TAKEN

The Buildings DS and 25 BDP was submitted for simultaneous Core Team and public review on 5 April 2004, and the 30-day public review period concluded on 5 May 2004.

This Closeout Report documents the completion of the demolition and removal of Buildings DS and 25. All preparation and demolition activities, except for final site restoration, were performed in accordance with the detailed Work Plan to perform demolition and debris removal. At the time this closeout report was written, the site was to be used for access to Group 9 work areas. The site restoration will take place prior to parcel transfer and will be documented in an addendum to this closeout report.

A Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) study of Buildings DS and 25 was performed prior to demolition. The study reports (provided in the Final BDP) provide details of the survey design and results and indicate that Buildings DS and 25 met applicable surface release criteria. Post-demolition surveys showed no elevated readings (copies are provided in Appendix B).

Building debris was loaded into haulers and taken to a local sanitary landfill.

The demolition of Buildings DS and 25 was performed in two stages due to the proximity and timing of Group 9 work activities. The demolition of Buildings DS and 25 prior to Group 9 activities commenced on 15 June 2004 and was terminated on 27 September 2004. The demolition of Buildings DS and 25 after Group 9 activities commenced on 28 March 2005 and was completed on 15 April 2005. Photographs taken before, during, and after demolition are provided in Appendix A.

After building demolition and site grading, the site will be used for access to the Group 9 work areas. As a result of this follow-on use, final site restoration was postponed. Site

restoration will take place prior to parcel transfer and will be documented in an addendum to this closeout report.

Table 3 - Materials Disposition

DS Building Material	Quantity	Disposal Method	Destination
Asbestos Abatement (Debris)	130 cubic yards	Landfill	Stoney Hollow
Construction Debris (concrete, brick, and rebar)	7,340 cubic yards	Landfill	Stoney Hollow
Construction Metal	7,380 cubic yards	Recycle	Metal Shredders Inc.
Construction Debris Slab	885 cubic yards	Concrete Crusher	Reuse onsite
Light Ballast	3.99 cubic yards	Treatment	Clean Harbors
Glycol	26,510.87 liters	Treatment	Clean Harbors

Building 25 Material	Quantity	Disposal Method	Destination
Asbestos Abatement (Debris)	1 cubic foot	Landfill	Stoney Hollow
Construction Debris (concrete, brick, and rebar)	90 cubic yards	Landfill	Stoney Hollow
Construction Debris Slab	7.96 cubic yards	Concrete Crusher	Onsite Reuse

4.0 PROBLEMS ENCOUNTERED

Buildings DS and 25 were successfully demolished per the Work Package. As stated in Section 3.0, after building demolition, the site will be used for access to the Group 9 work areas. As a result of this follow-on use, final site restoration was postponed. Final site restoration 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 4 lists the personnel organization for the demolition.

Table 4 - 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.
DOE/ MCP 1075 Mound Road Miamisburg, OH 45342 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 937-608-8007	Chris Watson	Provided the DOE/ MCP Project Manager with technical assistance, administrative support, sampling, decontamination, photo and site documentation, site safety, and report preparation. Provided the equipment necessary for the demolition and performed the building demolition and site restoration.

5.2 Demolition Cost

Under the new site contract, CH2M Hill Mound, Inc. has elected to cluster financial data for multiple buildings together. Buildings DS and 25 are part of Cluster DS, which also includes Emergency Generator-4 (EG-4). The total cluster costs are presented in Table 5.

Table 5 – Cluster DS Total Costs

Activity	Cost
Work Planning	$37K
Facility Prep	$350K
Demolition	$163K
Total	$550K

APPENDIX A

Figures

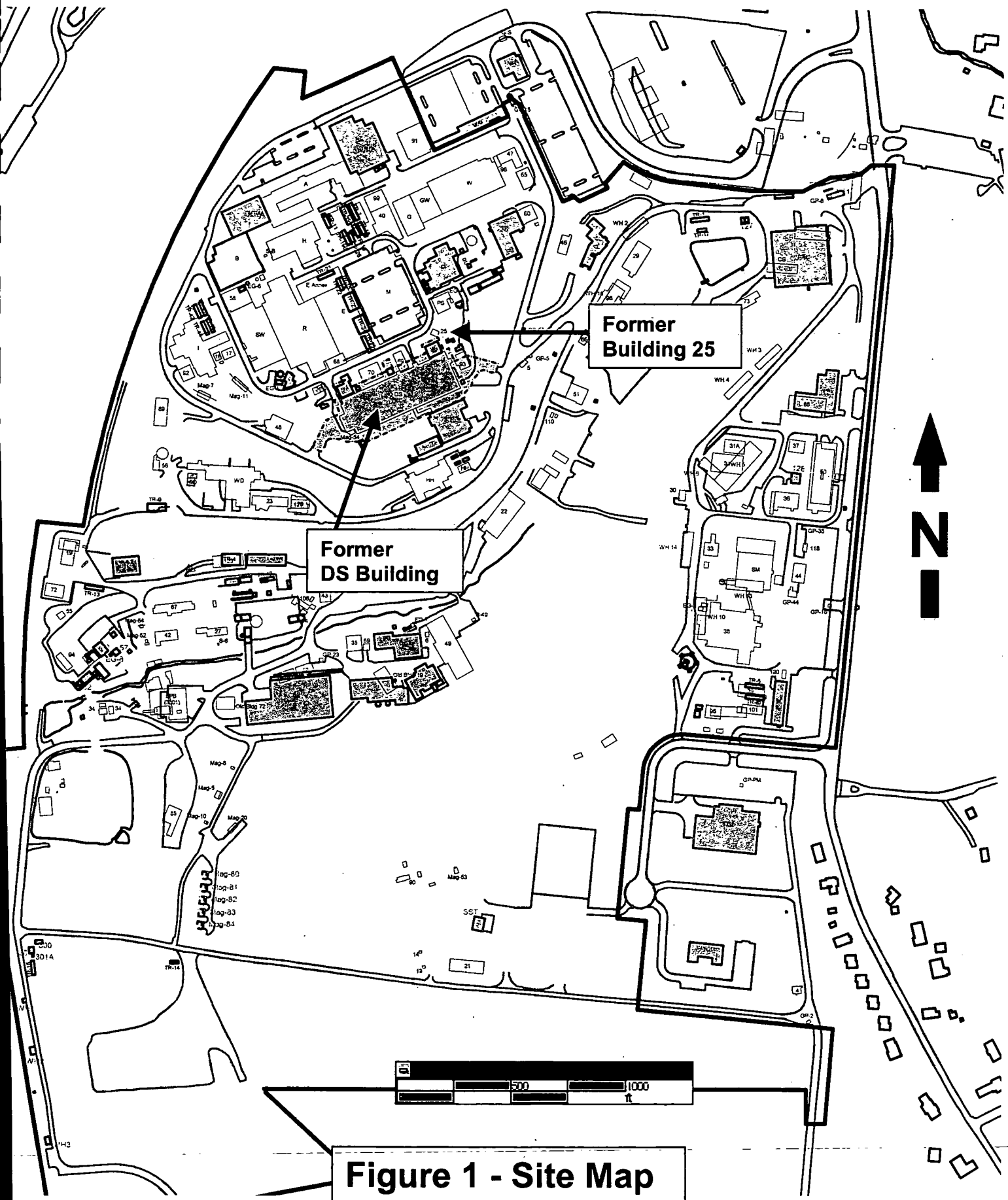
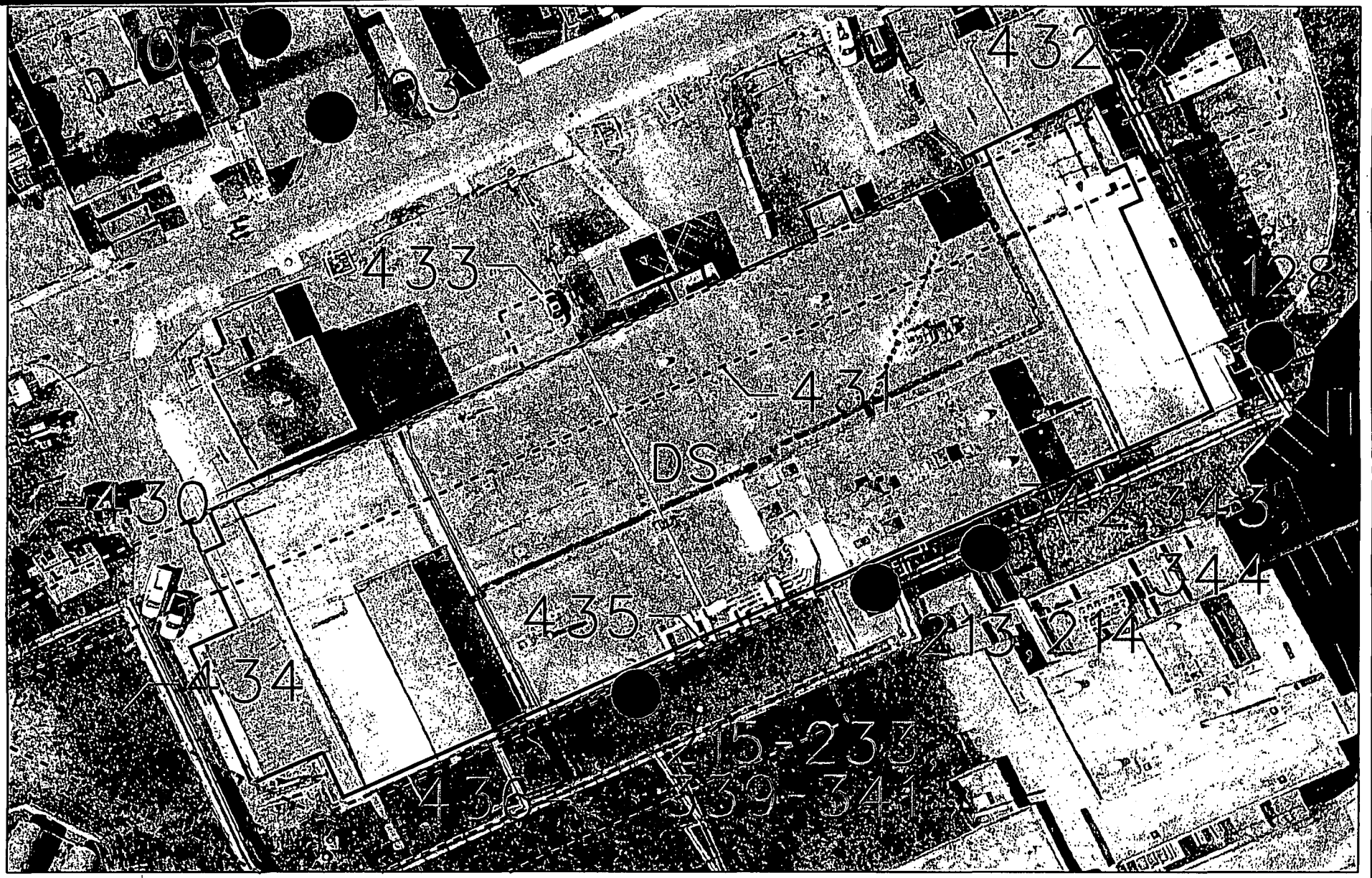


Figure 1 - Site Map

A1/9



PRS Point
PRS Area
PRS Line

20 10 0 20 40FT
GRAPHIC SCALE

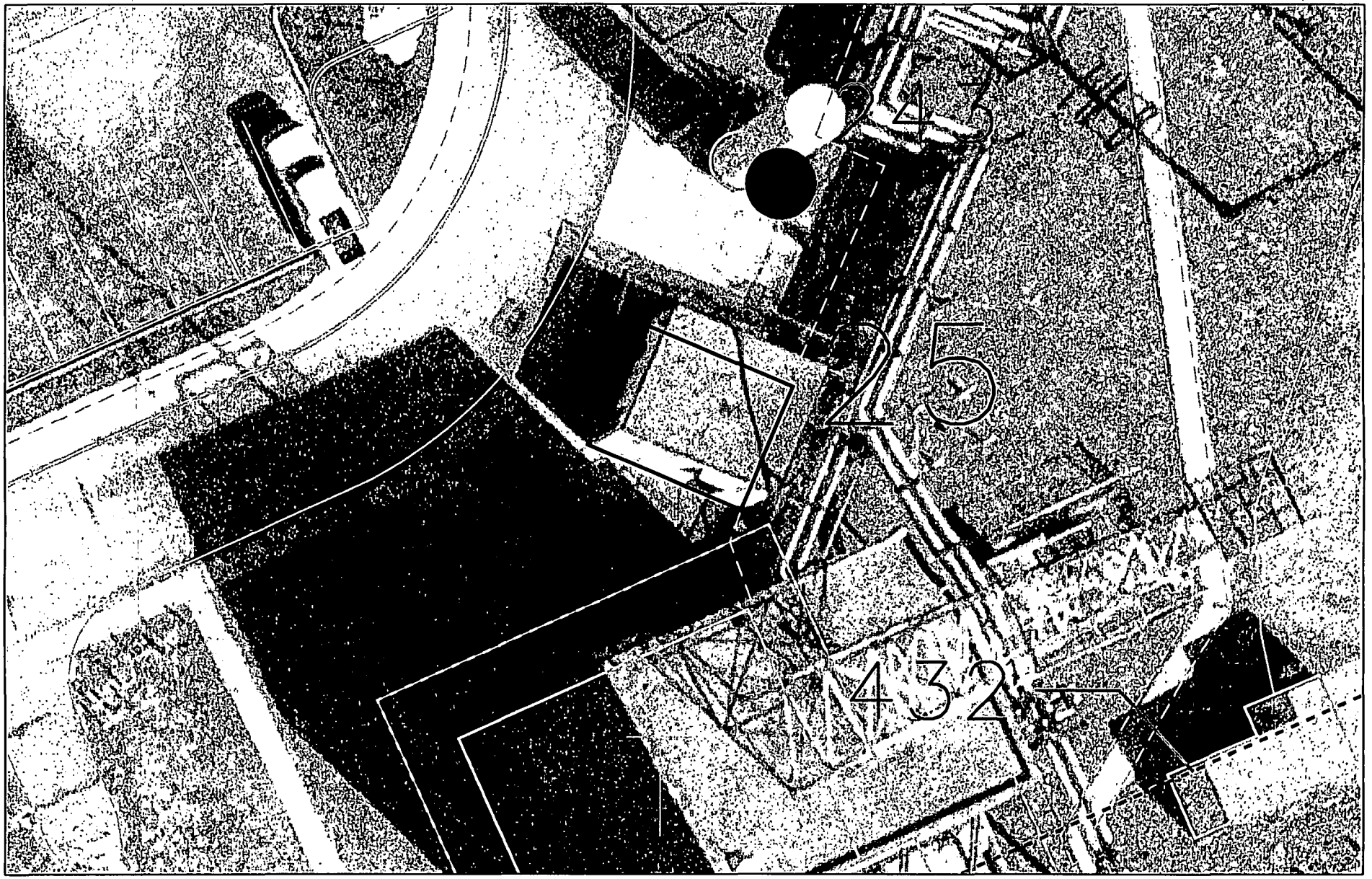
MOUND
Environmental Restoration Geographic Information System

Figure 2:
DS Building and Vicinity

ISS	DATE	REVISION	BY	CHKR	ENG	LDSEC	APVD	B
	12/29/03		SSF					

SHEET 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
ISSUE
SHEET 1 2 3 4 5 6
ISSUE
PART CLASSIFICATION
DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE | DRAWING NUMBER | JOB NUMBER
DIG TYPE STE | PROG ER-GIS | CADD | SCALE 1" | SHEET 1 OF 1
STATUS MD-REL-12/29/03 | ORIGIN MSTATION / .I

A2/9



PRS Point
PRS Area
PRS Line

20 10 0 20 40FT
GRAPHIC SCALE

MOUND
Environmental Restoration Geographic Information System

ISS	DATE	REVISION	BY	CHKR	ENG	LPREC	APVD	#
	12/29/03		SSF					

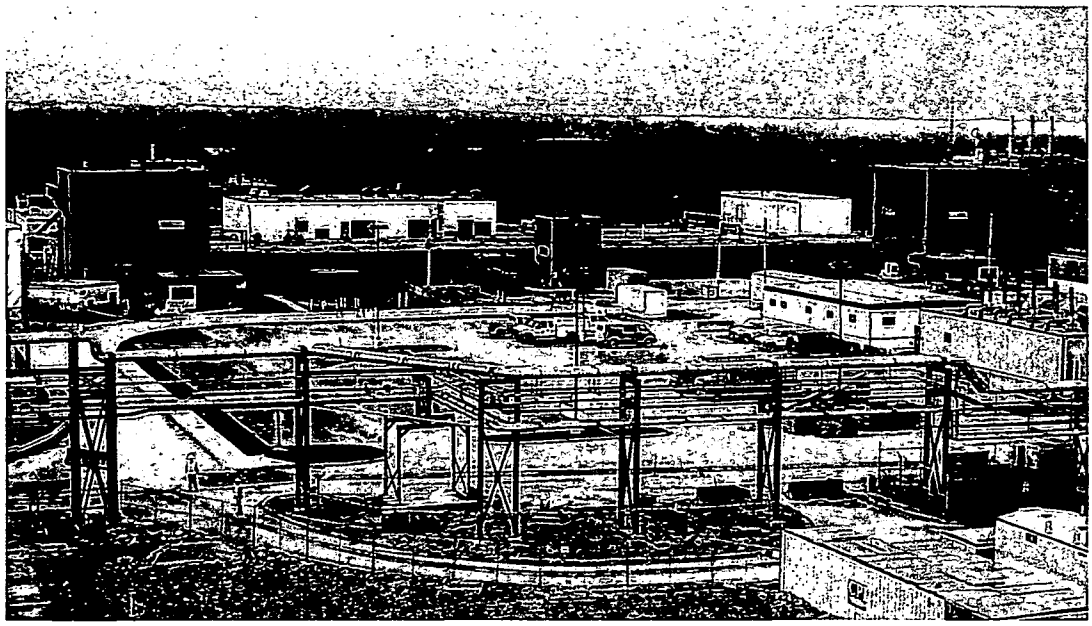
SHEET 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
ISSUE
SHEET 1 2 3 4 5 6
ISSUE
PART CLASSIFICATION
DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE | DRAWING NUMBER | JOB NUMBER
DGN TYPE STE | PROJ ER-GIS | CADD | SCALE 1" | SHEET 1 OF 1
STATUS MD-REL-12/29/03 | ORIGIN MSTATION / J

Figure 2:
Building 25
and Vicinity

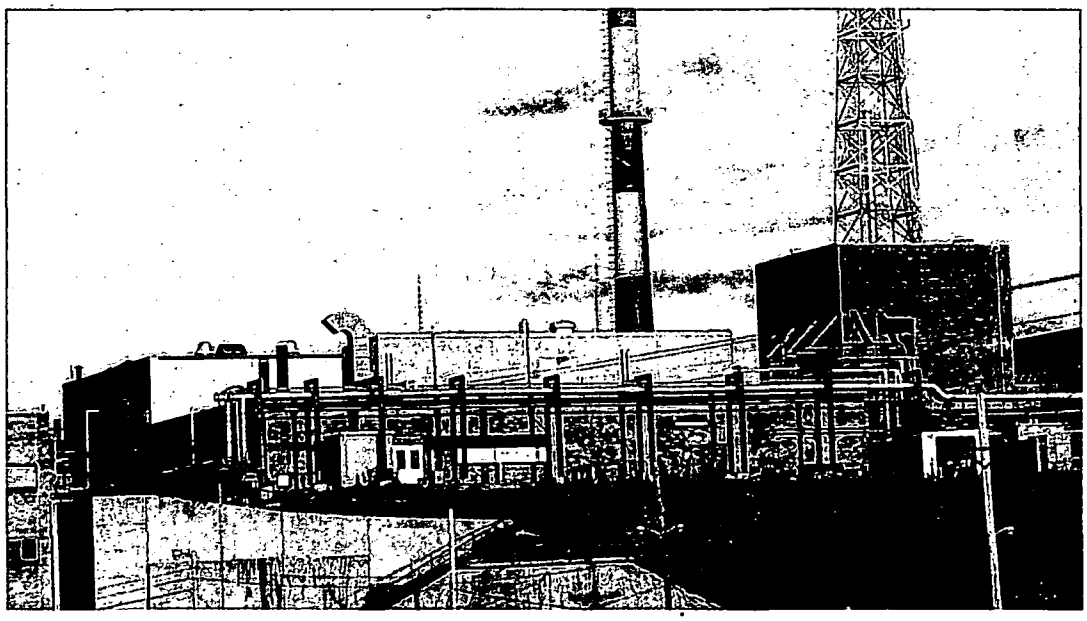
A 3/4

1 2 3 4

Figure 3 - Building Photos

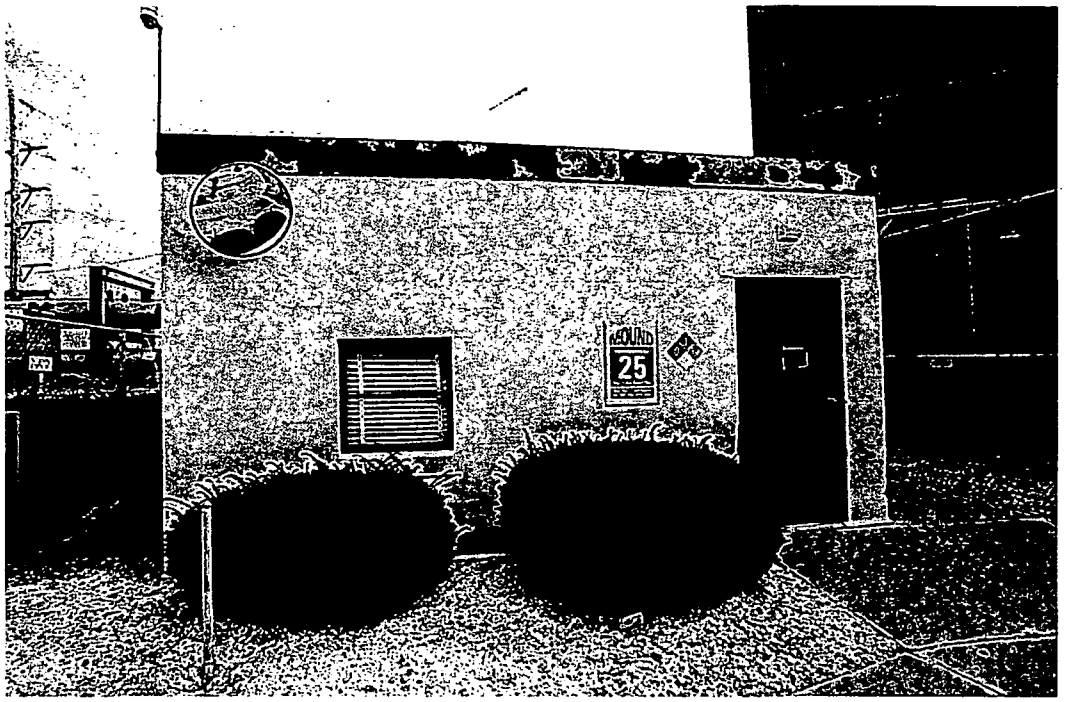


View from the north



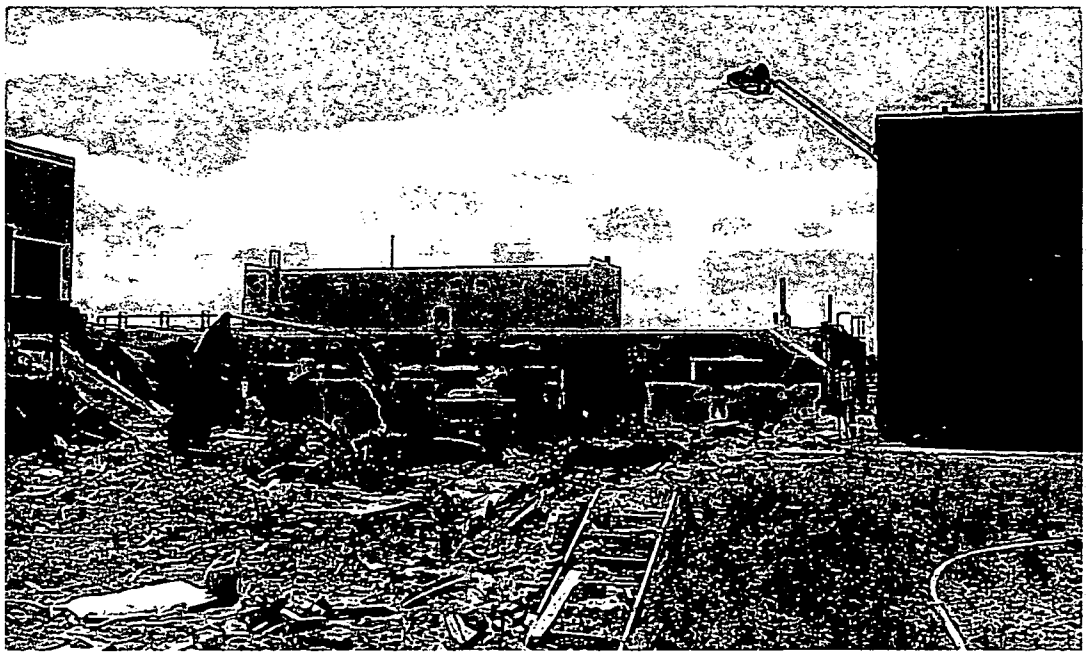
View from the east

DS Building – Prior to Demolition



View from the northwest

Building 25 – Prior to Demolition



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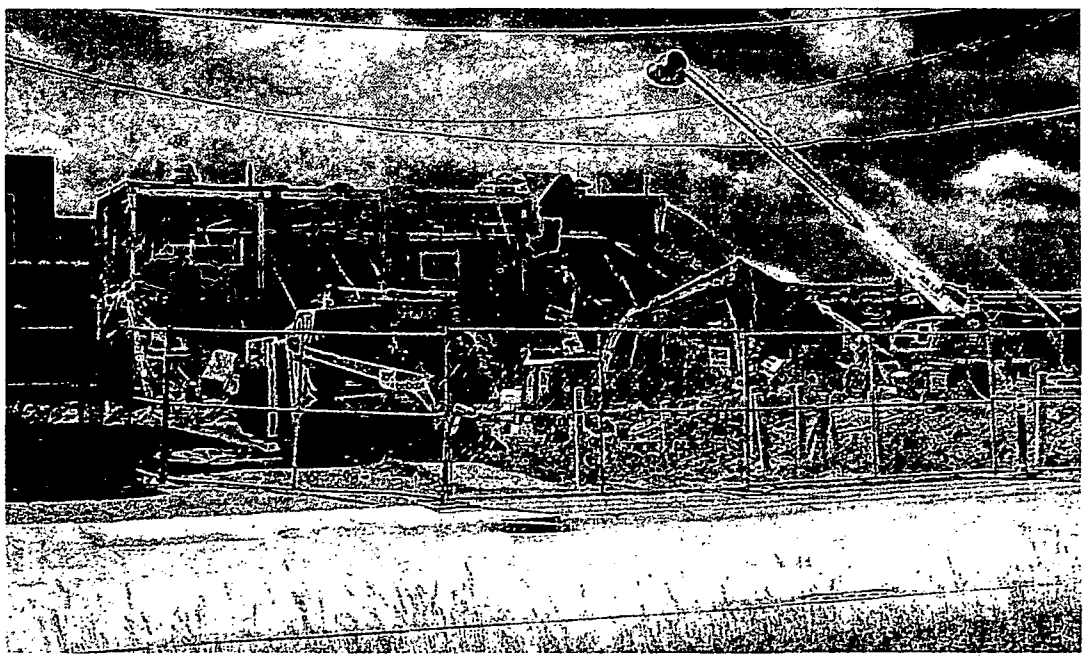
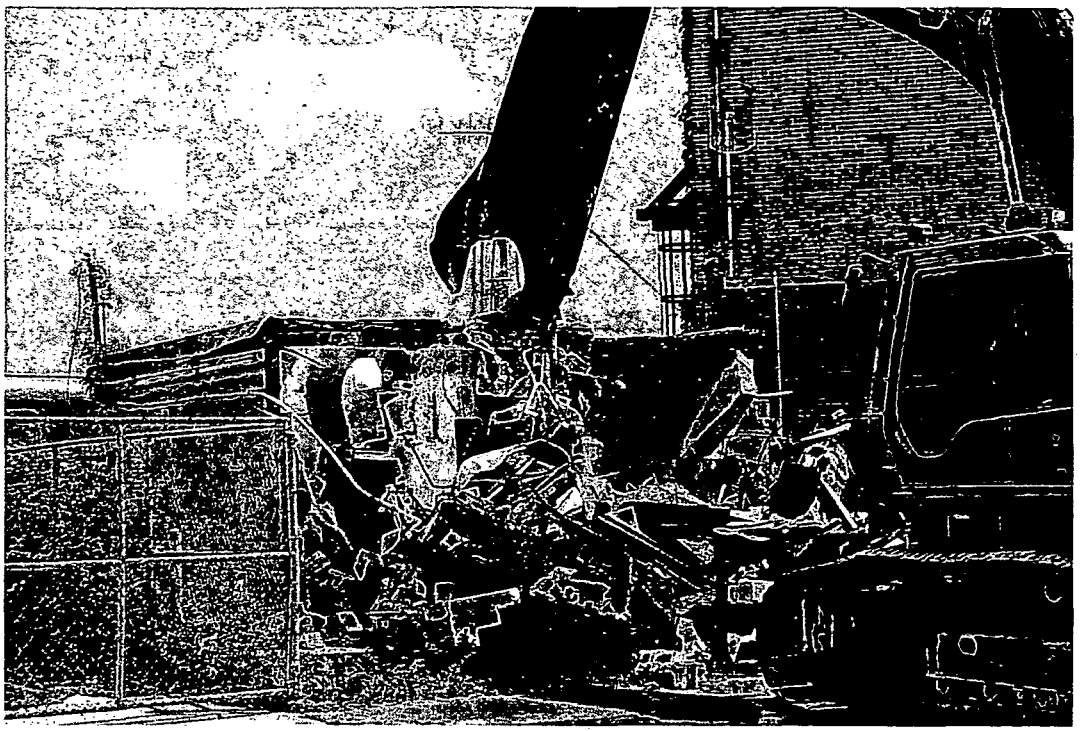


View from the north

DS Building – During Demolition

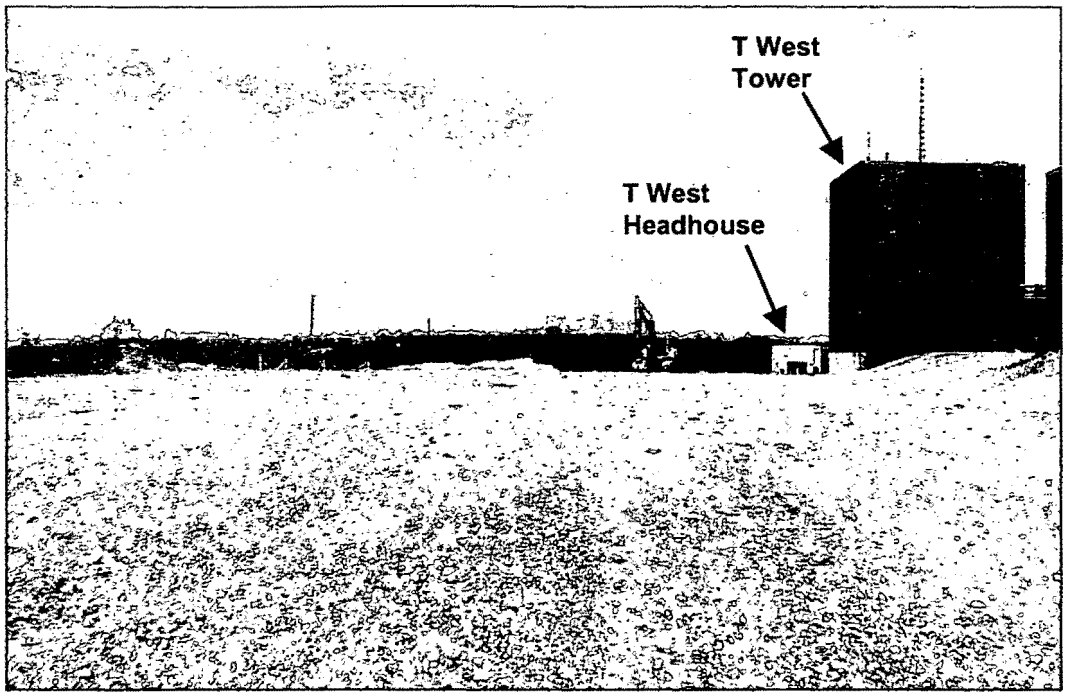
A6/9



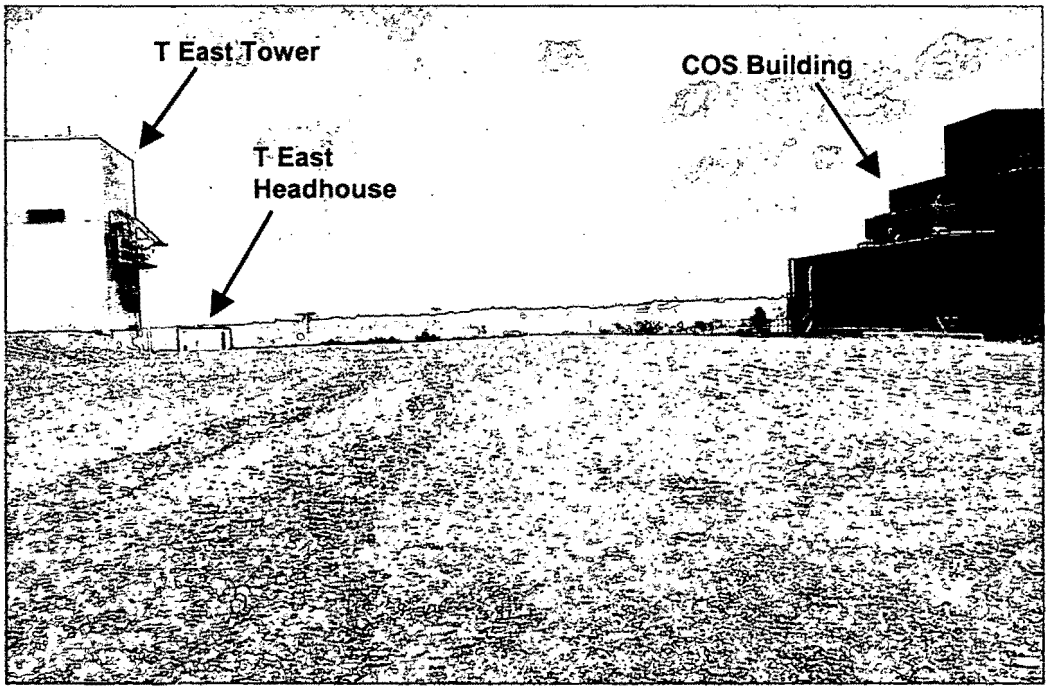
View from the north

View from the north

Building 25 – During Demolition

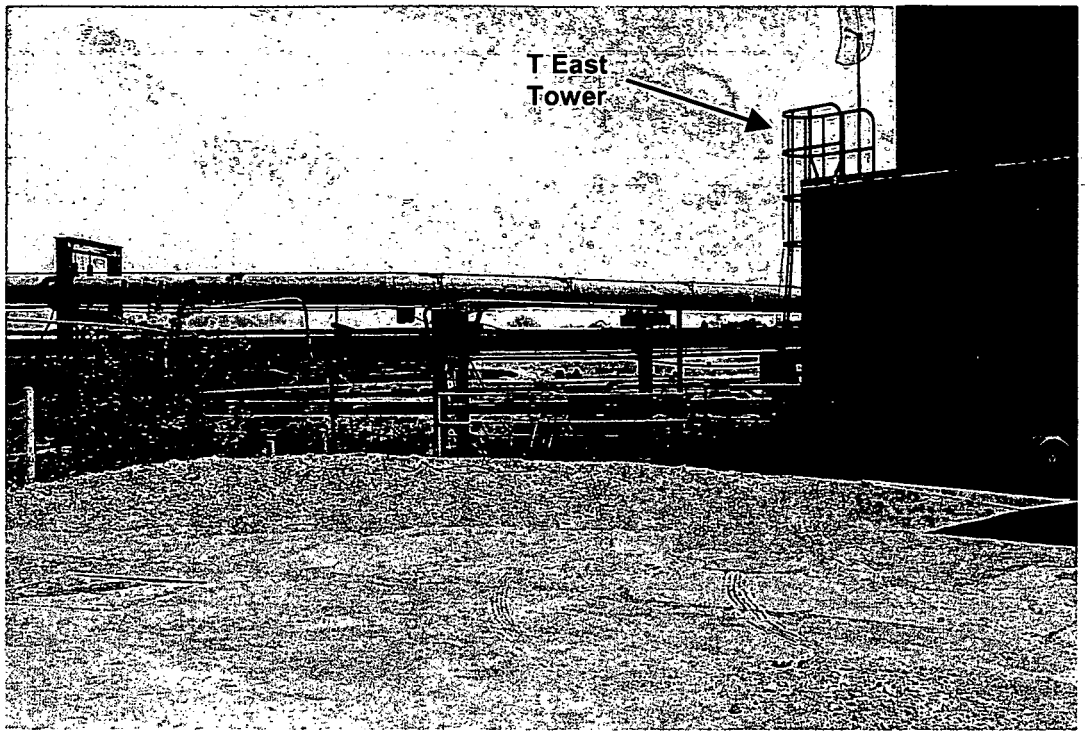


View from the east



View from the west

DS Building – Post-Demolition, Site Graded



View from the northwest

Building 25 – Post-Demolition, Site Graded

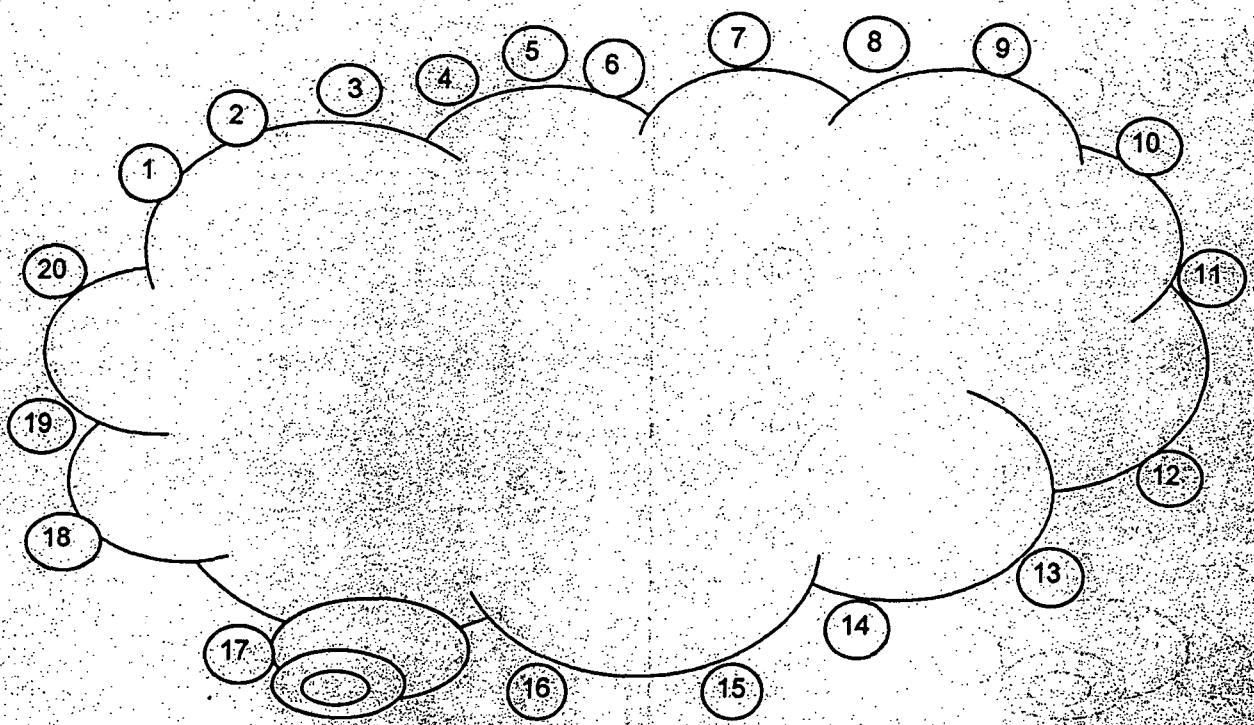
APPENDIX B

Post-Final Status Survey Report
Radiological Surveys

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM)	SURVEY NO.
Powerhouse *	05-TF-0165
PURPOSE:	RWP NO.
Characterize debris pile from DS bldg. And bldg.25 concrete rubble	N/A
	DATE: 4/11/05
	TIME: 8:30

MAP / DRAWING



2360bkg 2 alpha
140 beta
DL 2.2 alpha
20 beta

pause and scan with 2360. No audible clicks. intergrated counts not required.

*Note: Debris was moved from DS & 25 to the Powerhouse area for survey - Rmc

LEGEND:

- # = mrem/hr (γ) whole body
- #E = mrem/hr (β+η+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
Lud 2360/4389	5691/5811	8/4/05
	NA	

[redacted]

HP#	Date
7176	4/12/05
[redacted]	
HP#	Date
HP#	Date
7207	4-13-05
[redacted]	

R1/4

R1/4

RADIOLOGICAL SURVEY DATA SHEET (cont.)

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

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

Smears field check with 2360/4389 prior to sending counting lab

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.

ML-9620A (4-98)

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Green
Data file name: SMEAR004
Batch Ended: 4/11/05 9:51
Cal. Due Date: 11/17/05
Serial Number: 26966-3

Batch ID: 05-TF-0165 WORLEY [20] GWD

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A1	1	1.74	2.23		2.12	2.62	
A2	2	1.57	2.02		0.26	1.65	
A3	3	0.00	2.28		0.72	1.78	
A4	4	0.00	2.10		0.00	1.22	
B1	5	0.00	1.92		1.73	2.07	
B2	6	0.00	1.85		0.00	1.13	
B3	7	0.00	2.24		2.95	2.66	
B4	8	0.00	1.97		0.00	1.21	
C1	9	0.00	2.05		0.00	1.23	
C2	10	0.00	1.91		0.00	1.12	
C3	11	0.00	2.07		0.27	1.72	
C4	12	0.00	1.96		0.62	1.59	
D1	13	0.00	2.08		2.79	2.50	
D2	14	1.74	2.18		1.43	2.06	
D3	15	0.00	2.11		1.42	2.15	
D4	16	0.00	2.04		0.00	1.17	
A1	17	1.74	2.22		0.81	2.27	
A2	18	0.00	2.02		0.42	1.65	
A3	19	0.00	2.28		0.72	1.78	
A4	20	1.71	2.12		0.16	1.71	

GW 4-12-05

GW 4-12-05

B3/4

GW 4-12-05

GWD

11 Apr 2005 10:14 ALPHA/BETA - 1.09 QW 4-12-05
Protocol #: 4 Pw-H3 #403728 User : 5801

Time: 2.00
Data Mode: DPM Nuclide: SMGL02 Quench Set: SMGL02
Background Subtract: 1st Vial

	LL	UL	LCR	2S%	BKG
Region A:	0.5 -	18.6	0	0.0	8.92
Region B:	2.0 -	18.6	0	0.0	8.73
Region C:	40.0 -	2000	0	0.0	12.10

Quench Indicator: tSIE/AEC
Ext Std Terminator: Count
05-TF-0165 WORLEY [20] GWD
Luminescence Correction On
Coincidence Time(ns): 18
Delay Before Burst(ns): Normal
Protocol Data Filename: c:\data\prot1.dat
Count Data Filename: c:\data\SDATA4.DAT
Spectrum Data Drive & Path: c:\data

S#	TIME	CPMA	CPMB	CPMC	LUM	tSIE	DPM1	2Sigma	FLAG
-1	10.00	8.92	8.73	12.10	6	626.49		0.00	B
0	2.00	672.54	641.27	0.00	0	628.26	1218.28	99.20	
1	2.00	0.00	0.00	0.00	10	657.65	0.00	0.00	
2	2.00	0.00	0.61	0.00	15	599.73	0.00	0.00	
3	2.00	0.00	0.00	0.00	0	681.40	0.00	0.00	
4	2.00	0.00	0.00	0.00	9	661.84	0.00	0.00	
5	2.00	0.00	0.00	0.00	8	664.79	0.00	0.00	
6	2.00	23.16	20.25	29.40	4	613.48	42.46	15.75	
7	2.00	0.03	0.00	0.00	6	665.27	0.06	8.18	
8	2.00	0.00	0.00	2.66	0	634.73	0.00	0.00	
9	2.00	0.00	0.00	0.00	6	633.97	0.00	0.00	
10	2.00	0.00	0.00	0.00	6	645.70	0.00	0.00	
11	2.00	0.00	0.00	0.90	8	599.52	0.00	0.00	
12	2.00	1.58	1.77	0.00	0	644.99	2.83	8.89	
13	2.00	0.00	0.00	0.00	87	521.02	0.00	0.00	
14	2.00	2.01	2.19	0.00	9	621.56	3.66	9.21	
15	2.00	0.00	0.00	3.40	0	512.66	0.00	0.00	
16	2.00	0.08	0.00	1.40	6	628.11	0.15	8.44	
17	2.00	0.58	0.22	0.00	5	600.12	1.08	8.84	
18	2.00	0.00	0.00	0.00	6	648.94	0.00	0.00	
19	2.00	1.82	1.59	0.00	9	563.88	3.49	9.60	
20	2.00	0.00	0.00	0.00	19	610.81	0.00	0.00	

QW
4-12-05

B4/4

APPENDIX C

PRS Recommendation Sheets

MOUND PLANT
PRS 103
SOIL CONTAMINATION - E BUILDING

RECOMMENDATION:

This soils location was identified as a Potential Release Site (PRS) because of the detection of Volatile Organic Compounds (VOCs) during the Mound Reconnaissance Sampling soil gas survey. The compounds identified were trichloroethane (111-TCA), trichloroethene (TCE), and toluene.

Calculations were performed converting the 10^{-6} Risk Based Guideline Values (given in mg contaminant per kg soil) to corresponding 10^{-6} Risk Based Guideline Values for soil gas concentrations (parts contaminant per parts soil gas). The results of the calculation showed that the 111-TCA detection was approximately 25,000 times less than guideline criteria, TCE approximately 10 times less than guideline criteria and toluene 1,800 times less than guideline criteria. Additionally, Pu-238 and Th-232 were at concentrations below their respective guideline criteria of 25 pCi/g and 5 pCi/g.

Therefore, since the VOC soil gas detections establishing this soils location as a PRS have been shown not to be evidence of contamination above guideline criteria and since there is no additional evidence of contamination, PRS 103 requires NO FURTHER ASSESSMENT.

CONCURRENCE:

DOE/MB: Arthur W. Kleinrath, Remedial Project Manager — 8/20/96 (date)

USEPA: Timothy J. Fischer, Remedial Project Manager — 8/20/96 (date)

OEPA: Brian K. Nickel, Project Manager — 8/24/96 (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from 9/15/96 9/16/96 to 10/15/96

☒ No comments were received during the comment period.

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

MOUND PLANT
PRS 105
FORMER SOLVENT STORAGE SITE
E BUILDING SHED

RECOMMENDATION:

Potential Release Site (PRS) 105 is a remediated soils location that was the former location of the E Building Solvent Storage Shed. This area was identified as a PRS due to the shed's use as a short term storage area for both fresh and spent solvents. The compounds of concern were identified as trichloroethene (TCE), ethanol, and methanol.

In 1988, the shed's structure, concrete floor and underlying soil was removed (soil was excavated to approximately a 4 foot depth). Subsequent verification sampling found no evidence of any organics in the soil in excess of the 10^{-6} Risk Based Guideline Values. A 1994 quantitative soil gas study and a 1984 radiological study, near PRS 105, also found no evidence of contamination in excess of guideline criteria.

Therefore, since the removal verification results found no remaining evidence of contamination from operations at the E Building Storage Shed and since no additional history or lab evidence of contamination exists at this PRS, PRS 105 requires NO FURTHER ASSESSMENT.

CONCURRENCE:

DOE/MB: Arthur W. Kleinrath, Remedial Project Manager — 8/20/96 (date)

USEPA: Timothy J. Fischer, Remedial Project Manager — 8/20/96 (date)

OEPA: Brian K. Nickel, Project Manager — 8/24/96 (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from 9/15/96 to 10/15/96

☒ No comments were received during the comment period.

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

REV-B

MOUND PLANT RECOMMENDATION

DS BUILDING

Background:

DS Building is a 47,810 square foot single story concrete building with a built up membrane roof and three penthouses. It was constructed in 1965 and served as the Metrology Lab and Explosive Testing Facility. PRS 128, the DS Building Solvent Storage Shed, is also considered as part of this facility.

Recommendation:

After thorough review of the environmental data and the Building Data Package, the Core Team agrees that no environmental concerns are associated with DS Building. Because of the presence of PRS 122 (radioactive waste lines) located underneath DS Building, the Core Team has determined that it is not appropriate to transfer DS Building at this time. After PRS 122 is evaluated as NFA or clean up has been completed, title transfer for DS Building can occur. However, the Core Team feels that DS Building is protective of human health and the environment for the purpose of leasing for commercial/industrial use.

Concurrence:

DOE/MEMP: _____ 4/16/98
Sam Cheng, D&D Team Leader (date)

USEPA: _____ 4/23/98
Timothy J. Fischer, Remediation Project Manager (date)

OEPA: _____ 4/16/98
Brian K. Nickel, Project Manager (date)

4/16/98
4:18 pm

R

of americium are associated with the count lab. Certain areas of the building have been and are still used for the storage of Transuranic (TRU) materials. The T Building footprint is 173,000 square feet. Usable floor area, including the tunnel, is 150,000 square feet

As part of the ongoing decontamination and decommissioning (D&D) process at the MCP Site, limited volumes of CERCLA hazardous/mixed waste will be stored in T Building in accordance with ARARs presented in Appendix B. Waste Management will package and ship the CERCLA hazardous/mixed waste from T Building to an appropriate disposal site.

Associated PRSs

Twenty-seven Potential Release Sites (PRSs) are associated with T Building as listed in Table 1 and include a solidification unit, a waste compactor, and twenty-five sumps/tanks. All of these PRSs will be sufficiently decontaminated or removed to a No Further Assessment (NFA) status prior to building transfer.

Table 1 - PRSs Associated with T Building

PRS	Description
213	Solidification unit
214	Solid radioactive waste compactor
215	Cooling water sump (Tank 124) Room T-1
216	Sanitary waste sump (Tank 125) Corridor 2
217	Sanitary waste sump (Tank 126) Corridor 2
218	Sanitary waste sump (Tank 127) Corridor 2
219	Cooling water sump (Tank 128) Stair 3
220	Steam condensate sump (Tank 129) T-78
221	Sanitary waste sump (Tank 130)
222	Sanitary waste sump (Tank 131)
223	Cooling system condensate sump (Tank 132)
224	Sanitary waste sump (Tank 133)
225	Beta waste water sump (Tank 227) T-23
226	Floor drain sump (Tank 228) T-3
227	Alpha waste water sump (Tank 229)
228	Alpha waste water sump (Tank 230)
229	Alpha waste water sump (Tank 231)
230	Alpha waste water sump (Tank 232)

PRS	Description
231	Alpha waste water sump (Tank 233)
232	Alpha waste water sump (Tank 234)
233	Alpha waste water sump (Tank 235)
339	Waste water sump (Tank 250)
340	Waste water sump (Tank 251)
341	Condensate sump (Tank 269) T-90
342	Hot side fire water tank (Tank 271) T-1
343	Fire water sump (Tank 272)
344	Fire water sump (Tank 273)

9.0 RECOMMENDATION

This decision document represents the selected Removal Action for the decontamination and decommissioning of T Building, developed in accordance with CERCLA as amended by SARA, and not inconsistent with the NCP. This decision is based on the administrative record for the site.

Conditions at the site meet the NCP Section 300.415 (b)(2) criteria for a removal and we recommend initiation of the response action.

Approved:

DOE/MCP: _____ 2/27/03
Robert S. Rothman, Remedial Project Manager Date

USEPA: _____ 2/19/03
Timothy J. Fischer, Remedial Project Manager Date

OEPA: _____ 2/27/03
Brian K. Nickel, Project Manager Date

MOUND PLANT
PRS 243
SOIL CONTAMINATION - PAINT SHOP BUILDING

RECOMMENDATION:

This soils location was identified as a Potential Release Site (PRS) because of the detection of toluene during the Mound Reconnaissance Sampling soil gas survey.

Calculations were performed converting the toluene 10^{-6} Risk Based Guideline Value (given in mg contaminant per kg soil) to a corresponding 10^{-6} Risk Based Guideline Values for soil gas concentrations (parts contaminant per parts soil gas). The results of the calculation showed that the toluene detection was approximately 20,000 times less than the toluene guideline criteria. Additionally, one surface sample taken in the vicinity of PRS 243 showed that plutonium-238 and thorium-232 concentrations were below their respective guideline criteria of 25 pCi/g and 5 pCi/g.

Therefore, since the Volatile Organic Compound (VOC) soil gas detections establishing this soils location as a PRS have been shown not to be evidence of contamination above guideline criteria and since there is no additional lab data or history of evidence of contamination, PRS 243 requires NO FURTHER ASSESSMENT.

CONCURRENCE:

DOE/MB: Arthur K Kleinrath 8/20/96
Arthur W. Kleinrath, Remedial Project Manager (date)

USEPA: Timothy J Fisch 8/20/96
Timothy J. Fischer, Remedial Project Manager (date)

OEPA: Brian K. Nickel 9/24/96
Brian K. Nickel, Project Manager (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from 9/15/96 9/16/96 to 10/15/96

☒ No comments were received during the comment period.

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

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MOUND PLANT
PRS #429, 430, 431, 432, 433

RECOMMENDATION:

PRSs 429, 430, 431, 432, & 433 were identified because the underground line segments carried radioactively contaminated effluent from T Building operations to the Waste Disposal building (WD). Several radionuclides (including Cobalt-60) are present in the waste lines at a greater than 1 in 10,000 (10^{-4}) risk level.

Therefore, a RESPONSE ACTION is recommended for PRSs 429, 430, 431, 432, & 433.

CONCURRENCE:

DOE/MEMP: _____ 9/18/00
Robert S. Rothman, Remedial Project Manager (date)

USEPA: _____ 9/18/00
Timothy J. Fischer, Remedial Project Manager (date)

OEPA: _____ 9/18/00
Brian K. Nickel, Project Manager (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from _____ to _____

☐ No comments were received during the comment period.

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

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C7/8

MOUND PLANT
PRS #434, 435, 436

RECOMMENDATION:

PRSs 434, 435 and 436 were identified because the underground line segments carried radioactively contaminated effluent from T Building operations to the Waste Disposal building (WD). Several radionuclides (including Cobalt-60) are present in the waste lines at a greater than 1 in 10,000 (10^{-4}) risk level.

Therefore, a RESPONSE ACTION is recommended for PRSs 434, 435, & 436.

CONCURRENCE:

DOE/MEMP: _____ 9/18/00
Robert S. Rothman, Remedial Project Manager (date)

USEPA: _____ 9/18/00
Timothy J. Fischer, Remedial Project Manager (date)

OEPA: _____ 9/18/00
Brian K. Nickel, Project Manager (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from _____ to _____

☐ No comments were received during the comment period.

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

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C8/8