

MOUND



**Environmental
Restoration
Program**



OhioEPA

MOUND PLANT

**Building 87 Status Report
Explosives Testing Building
Located Within Release Block C**

Mound Plant Recommendation Bldg. 87

BACKGROUND:

Building 87 was constructed in 1985. Its footprint and surrounding enclosure include landscaped areas, grass lawn, asphalt driveways, and concrete sidewalks and patios. Building 87 covers 38,882 square feet of space and was used for the destructive testing of explosives and the fabrication of electronic test systems in support of the U.S. weapons mission. The building contains office space, rest rooms, a cafeteria, three large explosive test cells, the electronic equipment to operate the test cells, and environmental chambers. Building 87 also contains three surge tanks which are identified as potential release sites (PRS #333, 334, and 335).

RECOMMENDATION:

After thorough review of the environmental data and the Phase I report, the Core Team agrees that all existing environmental issues associated with Building 87 have been resolved. Future use of Building 87 shall be restricted to industrial/commercial use. The Core Team hereby recommends that the U.S. Department of Energy submit a letter to the Administrator of the U.S. EPA for final approval of the lease or sale of this property, as required by Section 120(h) of CERCLA.

CONCURRENCE:

DOE/MEMP:

Sam Cheng
Sam Cheng, D&D Team Leader

3-19-97

(date)

USEPA:

Timothy J. Fischer
Timothy J. Fischer, Rem. Proj. Mgr.

3/19/97

(date)

OEPA:

Brian K. Nickel
Brian K. Nickel, Project Manager

3/19/97
(date)

LEASE OF BUILDING # 87 : ENVIRONMENTAL CONCERN EVALUATION

DESCRIPTION	POTENTIAL PROBLEM?	COMMENT	PROPOSED RESOLUTION	REF
<p>1. A small dust collection system was observed in room 128. The warning on the collection drum stated that it may contain explosives. Later another dust collection system was found in Test Cell L.</p>	no	<p>Test Cell L had not gone through Safe Shutdown at the time of this finding. Safe Shutdown was completed and addressed this issue for Test Cell L on 1/22/97.</p> <p>(photo 38)HOK/K</p>	<p>Both dust collection systems have been removed and disposed of by Mound Waste Mgt.</p>	<p>HOK/K 7.1 page35</p> <p>NOTE: Baygents memo dated 3/13/97</p>
<p>2. Two 55-gallon drums marked as antifreeze and coolant were observed on the concrete pad at the northeast corner of the grassy courtyard on the east side of building 87. The concrete pad is just outside an entrance door to building 3. One of the drums' "fill" holes was open. Both drums seemed to have some fluid in them. The potential exists for these drums to be knocked over and to spill their contents on the gravelly, grassy surface of the courtyard.</p>	no	<p>(photo 36&37)HOK/K</p>	<p>The drums have been removed and disposed of. They were not associated with building 87 operations.</p>	<p>HOK/K 7.1 page35</p>

LEASE OF BUILDING # 87 : ENVIRONMENTAL CONCERN EVALUATION

<p>3. A self contained photo development machine is located in room 150, the L Cell dark room. The photochemical tanks at the rear of the machine still contain a liquid.</p>	<p>no</p>	<p>One inch or so of water was left in the fixit tank after the chemicals were removed to prevent drying out of the system.</p> <p>(photo 27)HOK/K</p>	<p>No action</p> <p>Note: Bob Ward memo dated 3/20/97.</p>	<p>HOK/K 7.1 page35</p>
<p>4. A black oily stain was observed at the base of the middle transformer unit of the electrical substation at the northeast corner of the site building. The transformer label states that these units do not contain PCB's.</p>	<p>no</p>		<p>The transformer and concrete pad were cleaned to prevent rainwater from washing oil into the surrounding soils.</p>	<p>HOK/K 7.1 page35 HOK/K photo38</p>
<p>5. Two instruments labeled as containing asbestos were observed in the center of the single point testing room (room 126, photo 39)</p>	<p>no</p>	<p>Asbestos containing items have been removed and disposed of.</p>	<p>No action</p>	<p>HOK/K 5.2.5 page28</p>

LEASE OF BUILDING # 87 : ENVIRONMENTAL CONCERN EVALUATION

<p>6. Observed water being pumped out of one test cell valve pit sump. This is not a traditional sump in the sense that it was designed to collect water; it is designed to give access to the expansion chamber valves. It was assumed that infiltrating surface water seeps into the valve sump. The water is periodically pumped out onto the ground outside the facility.</p>	no	No process wastewater was generated in Building 87.	Water from the pit servicing Test Cell J was sampled on October 24. The water was analyzed for volatile and semi-volatile compounds by National Environmental Testing Laboratory. See Lab Results attached.	<p>Environmental Appraisal of the Mound Plant page 9.9 4-4</p> <p>NOTE: Paulick memo dated 10/31/96</p>
<p>7. Eight occurrences were identified in the Occurrence Reporting System for building 87.</p>	no	All eight occurrences were related to false alarms in the fire detection system.	No environmental concerns were connected with any of the occurrences for building 87.	Occurrence summary report
<p>8. Three 51,700-gallon underground explosive surge tanks are located 20 feet from the southern wall of building 87, in line with the exhaust fans and vent pipes. The surge tanks are each constructed of 10-foot diameter reinforced concrete pipe that measures 90 feet long. The tanks are part of the explosion blast exhaust system associated with the destructive testing cells. The tanks are identified as 263, 264, and 265 in the Active Underground Storage Plan.</p>	no	PRS' 333, 334, and 335 See Baseline Assumptions page 6 in the Building 87 Status Report.	Full disclosure in lease/deed	<p>HOK/K 5.5.2 page 29</p> <p>OU-9 Site Scoping Report Vol. 12 a.1-35</p>

LEASE OF BUILDING # 87 : ENVIRONMENTAL CONCERN EVALUATION

<p>9. According to the process manager, EG&G is no longer inspecting and maintaining the HEPA filters on the air and exhaust systems.</p>	<p>no</p>	<p>Air Emission sources in Building 87 are no longer active. See Other Information page 5 of the Building 87 Status Report.</p>	<p>Bob Ward Building Manager confirmed that the HEPA filters have been removed and that there are no filters currently installed.</p> <p>see memo dated 12/11/96 attached.</p>	<p>Environmental Appraisal of the Mound Plant 9.94.5 87-1 / 87-2</p>
<p>10. Rad Survey Results</p>	<p>no</p>	<p>Information included in Safe Shutdown Survey to be reviewed by K. Hall, DOE MEMP.</p>	<p>rad data summary complete with no outstanding environmental or health concerns.</p>	<p>Rad Summary data bldg. 87</p>
<p>11. Explosive Test Cell L has not gone through Safe Shutdown.</p>	<p>no</p>	<p>The last active Cell used in User Agreement number E10144.</p>	<p>Safe Shutdown of Test Cell L was completed on 1/22/97. (Note: no additional rad data was collected) Investigation of user indicated that no radiological activities took place during user agreement.</p>	<p>Bldg. 87 tour Baygents memo dated 3/13/97</p>

LEASE OF BUILDING # 87 : ENVIRONMENTAL CONCERN EVALUATION

12. Odor detected in Room 104 coming from floordrain.	no	See building 87 drawings for drain locations/destinations. Source of odor is suspected to be sewer gas back-up which is common in buildings where these systems are inactive and have dried out.	The traps were filled with water and were re-evaluated in late March and no odor was present.	Bldg. 87 tour Baygents memo dated 3/13/97
13. Duct in Room 126 marked "danger may contain explosives".	no	Boom box exhaust system duct work.	Full disclosure in lease/deed	Bldg. 87 tour Baygents memo dated 3/13/97
14. Could not locate the 3,000 gal. above ground nitrogen storage tank mentioned in the Environmental Appraisal of the Mound Plant (bldg. 87). pg 6 of 27	no	Was located at the south/west corner of building 87 on a concrete pad. Note: Baygents memo dated 3/13/97	Tank was removed in early 1996. (rental unit)	Env. Appraisal of the Mound Plant pg. 6 of 27

**Radiological Characterization
Summary
Building 87**

Type	RSDS	Location	Amount (dpm/100 cm ²)	5400.5 Guidelines for Groups 1,3,4 (fixed + loose) (dpm/100 cm ²)	NUREG 1500 Guidelines (loose) (dpm/100 cm ²)	Attachment 1 Limit (fixed + loose) (See Note 2) (dpm/100 cm ²)	Comments
Highest Alpha Smearable Activity	R-1144-96	Corridor 137	8.7	20	211	20	No Action Necessary
Highest Alpha Fixed Activity	96-GA-844	Room 102	253	100	Note 1	100	Determined to be radon based on field measurement that verified decay
Highest Beta Smearable Activity	R-1146-96	Corridor 137	13.3	1000	9940	1000	No Action Necessary
Highest Beta Fixed Activity	ALL	ALL	< 5000	5000	Note 1	5000	No Action Necessary
Highest Tritium Smearable Activity	96-GA-849	Room 107	855.3	1000	Note 1	1000	No Action Necessary

Note 1 NUREG-1500 gives guidelines for loose beta and alpha only.

Note 2 The limits referenced above is based on MD-80043, Radiological Work Requirements Procedure 400 "Transfer of Radioactive Material and Unrestricted Release of Property/Waste" Attachment 1.

Note 3 Data for Test Cell L is not included.

General The detail radiological characterization data is available upon request of the DOE-MEMP.

Equipment Greater Than Release Limits Building 87

Equipment	RSDS	Location	Amount (dpm/100 cm ²)	5400.5 Guidelines for Groups 1,3,4 (fixed + loose) (dpm/100 cm ²)	¹ NUREG 1500 Guidelines (loose) (dpm/100 cm ²)	² Attachment 1 Limit (fixed + loose) (See Note 2) (dpm/100 cm ²)	Comments
Ventilation Grill	R-1114-96	Room 109	140 alpha fixed	100	211 loose alpha only	100	<u>Sent to Gamma Spec. Laboratory. Identified as Radon. No Action Required.</u>
Ventilation Grill	96-GA-844	Room 102	153 alpha fixed	100	211 loose alpha only	100	Determined to be radon based on field measurements that verified decay
Ventilation Grill	96-GA-844	Room 102	253 alpha fixed	100	211 loose alpha only	100	Determined to be radon based on field measurements that verified decay

Note 1 NUREG-1500 gives guidelines for loose beta and alpha only.

Note 2 The limits referenced above is based on MD-80036 Radiological Operations Procedure 90014 "Transfer of Radioactive Material and Unrestricted Release of Property/Waste" Attachment 1.

Author: MNDCONT.MNDPO:WARDRA at MNDGW
Date: 3/20/97 11:34 AM
Priority: Normal
Subject: Photo-Lab Building #87

----- Message Contents -----

Date: 03/20/1997 11:34 am (Thursday)
From: Robert Ward
To: DOE_OH.MOUND.Lucas Paul, DOE_OH.MOUND.Merker Michael
CC: BAYGLW, KOEHKG,
Subject: Photo-Lab Building #87

Several months ago P. Lucas, and Mike Merker with the Building Manager toured building #87. During the tour of building #87 it was noted that a photo-lab in room 150 of "L" cell had two plastic containers of liquid. The one container was marked "fix" and the other marked "dev". The liquid was a small amount of water used during Safe Shutdown clean-up (as attested to by Tim Tayse, of Safe Shutdown) of this lab. During a recent tour of this area by the Building Manager, Robert Ward and Larry Baygents there appeared to be no liquid left in these containers.

3

Sincerely,
Robert A. Ward
Building Manager

Author: MNDCONT.MNDPO:BAYGLW at MNDGW
Date: 3/13/97 8:29 AM
Priority: Normal
Subject: Building 87 open items

----- Message Contents -----

Date: 03/13/1997 08:29 am (Thursday)
From: Lawrence Baygents
To: DOE_OH.MOUND.Lucas Paul
CC: MAULGF
Subject: Building 87 open items

Per our conversation I believe there are three remaining open items from the building 87 follow up memo:

1-Status of the Nitrogen above ground tank located outside of building 87-Removed in late1996-verified 2-25-97. #14

2-Status of room 126 duct marked may contain explosives. This duct was utilized as a smoke collection systems when the boom boxes were used. It contains the same residue as the 12" ducts leading to the surge tanks. I have assumed that the same efforts directed at the surge tanks systems would be appropriate. I am looking into the cost of removal of the duct as an option. These will be addressed with the surge tanks. #13

3-Room 104 source of order. Each of us involved believe that this is a problem with sewer gas. When a building is taken out of service it is necessary that the traps be filled quarterly with water. Otherwise the sewer gas backs up and the building will have this odor. The building manager and I filled the traps. I will visit the building again in late March and April to verify that the problem is gone. #12

4-Safe shutdown schedule for Test cell L. Per Dan Gorman, the system was shut down 1-22-97. #1 and #11

MOUND

#6

INTEROFFICE CORRESPONDENCE

Date: October 31, 1996

cc: Sue Cloud
File

From: Ronald Paulick

Subject: IEMP Finding 87-4

To: Robert Ward

During the IEMP audit, appraisers noticed that water was being pumped out of one test cell valve pit sump. The IEMP finding 87-4 recommended that the water be tested to assure discharge was not in violation of the Clean Water Act. Water was observed in all three sump pits upon inspection on October 23. You assumed that water was seeping into the pits along the pipe chase from outside the building, since there are no operations in the building that would generate the water.

Water from the pit servicing Test Cell J was sampled on October 24. The water was analyzed for volatile and semi-volatile compounds by National Environmental Testing Laboratory. No compounds were detected in the sample. Consequently, the water can be pumped to the storm sewer outside of the building.

If further information is required, please contact me at extension 4080.



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ENVIRONMENTAL
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Dayton, OH 45439
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PAGE 2

ANALYTICAL REPORT

Ron Paulick
EG&G MOUND APPLIED
TECHNOLOGIES, INC.
P.O. Box 3000
Miamisburg, OH 45343-3000

*PAUL /
BLDG /
BT /
WARD*

10/29/1996
JOB NUMBER: 96.16522
SAMPLE NO.: 374527

Sample Description: BD-87 J.Cell-Grab
Client Project ID:

Date Taken: 10/24/1996

Date Received: 10/24/1996

VOLATILE COMPOUNDS - 624

Parameter	Result	Unit	Date Anal.	Analyst
Acetone	<20.0	ug/L	10/24/1996	dls
Acrolein	<50.0	ug/L	10/24/1996	dls
Acrylonitrile	<50.0	ug/L	10/24/1996	dls
Benzene	<1.0	ug/L	10/24/1996	dls
Bromodichloromethane	<1.0	ug/L	10/24/1996	dls
Bromoform	<1.0	ug/L	10/24/1996	dls
Bromomethane	<5.0	ug/L	10/24/1996	dls
Carbon tetrachloride	<1.0	ug/L	10/24/1996	dls
Chlorobenzene	<1.0	ug/L	10/24/1996	dls
Chloroethane	<10.0	ug/L	10/24/1996	dls
2-Chloroethyl vinyl ether	<5.0	ug/L	10/24/1996	dls
Chloroform	<1.0	ug/L	10/24/1996	dls
Chloromethane	<10.0	ug/L	10/24/1996	dls
Dibromochloromethane	<1.0	ug/L	10/24/1996	dls
1,1-Dichloroethane	<1.0	ug/L	10/24/1996	dls
1,2-Dichloroethane	<1.0	ug/L	10/24/1996	dls
1,1-Dichloroethene	<1.0	ug/L	10/24/1996	dls
trans-1,2-Dichloroethene	<1.0	ug/L	10/24/1996	dls
cis-1,2-Dichloroethene	<1.0	ug/L	10/24/1996	dls
1,2-Dichloropropane	<1.0	ug/L	10/24/1996	dls
cis-1,3-Dichloropropene	<1.0	ug/L	10/24/1996	dls
trans-1,3-Dichloropropene	<1.0	ug/L	10/24/1996	dls
Ethylbenzene	<1.0	ug/L	10/24/1996	dls
Methylene chloride	<10.0	ug/L	10/24/1996	dls
2-Butanone (MEK)	<10.0	ug/L	10/24/1996	dls
1,1,2,2-Tetrachloroethane	<1.0	ug/L	10/24/1996	dls
Tetrachloroethene	<1.0	ug/L	10/24/1996	dls
Toluene	<1.0	ug/L	10/24/1996	dls
1,1,1-Trichloroethane	<1.0	ug/L	10/24/1996	dls
1,1,2-Trichloroethane	<1.0	ug/L	10/24/1996	dls
1,2,4-Trimethylbenzene	<2.0	ug/L	10/24/1996	dls
Trichloroethene	<1.0	ug/L	10/24/1996	dls
Trichlorofluoromethane	<1.0	ug/L	10/24/1996	dls



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PAGE 3

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Date Received: 10/24/1996

VOLATILE COMPOUNDS - 624

Parameter	Result	Unit	Date Anal.	Analyst
Xylenes (Total)	<1.0	ug/L	10/24/1996	dlS
Vinyl chloride	<2.0	ug/L	10/24/1996	dlS
Surrogate: d4-1,2-DCE	105	%	10/24/1996	dlS
Surrogate: d8-Toluene	96	%	10/24/1996	dlS
Surrogate: BFB	91	%	10/24/1996	dlS



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Sample Description: BD-87 J.Cell-Grab
Client Project ID:

Date Taken: 10/24/1996

Date Received: 10/24/1996

BASE NEUTRAL COMPOUNDS - 625

Parameter	Result	Unit	Date Anal.	Analyst
Acenaphthene	<5	ug/L	10/28/1996	dmg
Acenaphthylene	<5	ug/L	10/28/1996	dmg
Anthracene	<5	ug/L	10/28/1996	dmg
Benzo(a)anthracene	<5	ug/L	10/28/1996	dmg
Benzo(b)fluoranthene	<10	ug/L	10/28/1996	dmg
Benzo(k)fluoranthene	<10	ug/L	10/28/1996	dmg
Benzo(a)pyrene	<5	ug/L	10/28/1996	dmg
Benzo(ghi)perylene	<5	ug/L	10/28/1996	dmg
Benzyl butyl phthalate	<5	ug/L	10/28/1996	dmg
bis(2-Chloroethyl) ether	<5	ug/L	10/28/1996	dmg
bis(2-Chloroethoxy)methane	<5	ug/L	10/28/1996	dmg
bis(2-Ethylhexyl)phthalate	<5	ug/L	10/28/1996	dmg
bis(2-Chloroisopropyl) ether	<5	ug/L	10/28/1996	dmg
4-Bromophenyl phenyl ether	<5	ug/L	10/28/1996	dmg
2-Chloronaphthalene	<5	ug/L	10/28/1996	dmg
4-Chlorophenylphenyl ether	<5	ug/L	10/28/1996	dmg
Chrysene	<5	ug/L	10/28/1996	dmg
Dibenzo(a,h)anthracene	<5	ug/L	10/28/1996	dmg
Di-n-butylphthalate	<5	ug/L	10/28/1996	dmg
1,3-Dichlorobenzene	<5	ug/L	10/28/1996	dmg
1,2-Dichlorobenzene	<5	ug/L	10/28/1996	dmg
1,4-Dichlorobenzene	<5	ug/L	10/28/1996	dmg
3,3'-Dichlorobenzidine	<50	ug/L	10/28/1996	dmg
Diethyl phthalate	<5	ug/L	10/28/1996	dmg
1,2-Diphenylhydrazine	<5	ug/L	10/28/1996	dmg
Dimethyl phthalate	<5	ug/L	10/28/1996	dmg
2,4-Dinitrotoluene	<5	ug/L	10/28/1996	dmg
2,6-Dinitrotoluene	<5	ug/L	10/28/1996	dmg
Di-n-octylphthalate	<5	ug/L	10/28/1996	dmg
Fluoranthene	<5	ug/L	10/28/1996	dmg
Fluorene	<5	ug/L	10/28/1996	dmg
Hexachlorobenzene	<5	ug/L	10/28/1996	dmg



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Client Project ID:

Date Taken: 10/24/1996

Date Received: 10/24/1996

BASE NEUTRAL COMPOUNDS - 625

Parameter	Result	Unit	Date Anal.	Analyst
Hexachloro-1,3-butadiene	<5	ug/L	10/28/1996	dmg
Hexachlorocyclopentadiene	<5	ug/L	10/28/1996	dmg
Hexachloroethane	<5	ug/L	10/28/1996	dmg
Benzo(1,2,3-cd)pyrene	<5	ug/L	10/28/1996	dmg
Isophorone	<5	ug/L	10/28/1996	dmg
Naphthalene	<5	ug/L	10/28/1996	dmg
Nitrobenzene	<5	ug/L	10/28/1996	dmg
N-Nitrosodimethylamine	<5	ug/L	10/28/1996	dmg
N-Nitrosodiphenylamine	<5	ug/L	10/28/1996	dmg
N-Nitrosodi-n-propylamine	<5	ug/L	10/28/1996	dmg
Phenanthrene	<5	ug/L	10/28/1996	dmg
Pyrene	<5	ug/L	10/28/1996	dmg
1,2,4-Trichlorobenzene	<5	ug/L	10/28/1996	dmg
Surrogate: d5-Nitrobenzene	72	%	10/28/1996	dmg
Surrogate: 2-Fluorobiphenyl	72	%	10/28/1996	dmg
Surrogate: d14-Terphenyl	77	%	10/28/1996	dmg



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PAGE 6

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10/29/1996

JOB NUMBER: 96.16522

SAMPLE NO.: 374527

Sample Description: BD-87 J.Cell-Grab
Client Project ID:

Date Taken: 10/24/1996

Date Received: 10/24/1996

ACID COMPOUNDS - 625

Parameter	Result	Unit	Date Anal.	Analyst
4-Chloro-3-methylphenol	<10	ug/L	10/28/1996	dmg
2-Chlorophenol	<10	ug/L	10/28/1996	dmg
4-Dichlorophenol	<10	ug/L	10/28/1996	dmg
2,4-Dimethylphenol	<10	ug/L	10/28/1996	dmg
2,4-Dinitrophenol	<10	ug/L	10/28/1996	dmg
2-Methyl-4,6-dinitrophenol	<10	ug/L	10/28/1996	dmg
2-Nitrophenol	<10	ug/L	10/28/1996	dmg
4-Nitrophenol	<10	ug/L	10/28/1996	dmg
Pentachlorophenol	<10	ug/L	10/28/1996	dmg
Phenol	<10	ug/L	10/28/1996	dmg
2,4,6-Trichlorophenol	<10	ug/L	10/28/1996	dmg
Surrogate: d6-Phenol	68	%	10/28/1996	dmg
Surrogate: 2-Fluorophenol	63	%	10/28/1996	dmg
Surrogate: Tribromophenol	79	%	10/28/1996	dmg



NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

COMPANY EG&G Mound Applied Technologies
 ADDRESS _____
 PHONE 865-4080 FAX 865-3725
 PROJECT NAME/LOCATION SDWA
 PROJECT NUMBER _____
 PROJECT MANAGER _____

REPORT TO: Ronald Plick
 INVOICE TO: Cora Rogers
 P.O. NO. 34680
 NET QUOTE NO. _____

SAMPLED BY Ronald Paulick SIGNATURE Ronald Paulick
 (PRINT NAME) (SIGNATURE)
 (PRINT NAME) (SIGNATURE)

ANALYSES

DATE	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	# and Type of Containers					VOC's - 5042	Radology reads	Tritium	Acid/Base Neut	VOC's	Cyanide-free	Total Coliforms
						HCl	NaOH	HNO ₃	H ₂ SO ₄	OTHER							
10/23	1705	DO1	W	X		3		1			3	1	1				
10/23	1650	DO2	W	X		3		1			3	1	1				
10/23	1635	PW1	W	X		3		1			3	1	1				
10/23	1620	PW2	W	X		3		1			3	1	1				
10/23	1420	PW3	W	X		3		1			3	1	1				
10/23	1610	0271	W	X		3					3						
10/24	1110	BD-87 JCell	W	X		3			1				1	3			
10/24	10:00	APG 1	W	X			1								1		
10/24	1030	APG 2	W	X			1								1		
10/23	1535	05E-139-S	W	X					1						1		
10/23	1600	102-129-S	W	X					1						1		

To assist us in selecting the proper method

Is this work being conducted for regulatory compliance monitoring? Yes No

Is this work being conducted for regulatory enforcement action? Yes No

Which regulations apply: RCRA NPDES Wastewater
 UST Drinking Water
 Other None

COMMENTS

Tritium done by DTH

"

"

"

"

Please forward results by 10/30/96 L+C

separate job

All else due 10/14

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO _____
 FIELD FILTERED? YES / NO _____

COC SEALS PRESENT AND INTACT? YES / NO _____
 VOLATILES FREE OF HEADSPACE? YES / NO _____

TEMPERATURE UPON RECEIPT: ch
 Bottles supplied by NET? YES / NO _____

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA _____
 I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS _____ DATE _____

RELINQUISHED BY: <u>R Paulick</u>	DATE: <u>10/24/96</u>	TIME: <u>1240</u>	RECEIVED BY:	RELINQUISHED BY:	DATE: <u>10/24/96</u>	TIME: <u>1240</u>	RECEIVED FOR NET BY: <u>Delbie Ganning</u>
METHOD OF SHIPMENT: <u>WT</u>			REMARKS:				

Author: MNDCONT.MNDPO:WARDRA at MNDGW
Date: 12/11/96 9:48 AM
Priority: Normal
TO: Paul Lucas at MOUND
TO: Michael Merker at MOUND
Subject: Building #87 Hepa Filter Removal

#9

----- Message Contents -----

Date: 12/11/1996 09:48 am (Wednesday)
From: Robert Ward
To: lucas paul, merker michael
Subject: Building #87 Hepa Filter Removal

The hepa filters were removed from the surge tank exhaust system sometime during the month of November, 1996. These filters were in the exhaust system located outside in the rear of Building #87. The filters were put into plastic bags and transferred to Building #72 Waste Management for disposal.

Robert A. Ward
Building/Property Manager

CHEMICAL WASTE DISPOSAL REQUEST

(For disposal inquiries please call X3515)

- Send a copy of this form to the Hazardous Waste Management Group. Provide the original copy at waste pickup. It is advisable to keep a copy for your records. Allow five (5) days for processing.
- The Hazardous Waste Management Group will contact you if there are any concerns with respect to this form.
- For radioactive materials, or chemicals contaminated with radioactivity, complete the blocks that address radioactivity.

All the waste listed on this form ^{MAY} does does not contain Energetic/Explosive Material.

All the waste listed on this form does does not contain Radioactive Material.

All the waste listed on this form is is not from a Radiological Buffer Area. The Radiological Buffer Area does does not contain a Contaminated Area.

CHEMICAL OR TRADE NAME (INCLUDE ESTIMATED PURITY OR CONCENTRATION, e.g., TRICHLOROETHYLENE, 100%)	BAR CODE NO.	(WM USE ONLY) WASTE MGMT. ID	PHYSICAL STATE (SOLID, LIQUID, OR GAS)	CONTAINER TYPE (e.g., PLASTIC)	QTY. PER CONTAINER	CONTAINER VOLUME	RETURN CONTAINER?	
							YES	NO
FILTER, HEPA - LOCATED IN VACUUM DRUM (HAZARDOUS WASTE SATELLITE ACCUMULATION CONTAINER)	001281		SOLID	METAL	4 FILTER			

COMMENTS: REMOVE FILTER FROM DRUM VACUUM (MAY CONTAIN EXPLOSIVE WASTE)

I hereby certify that the information on this form is complete and accurate to the best of my knowledge and ability. I understand that I may be liable for civil and/or criminal penalties for providing false information.

NAME (PLEASE PRINT OR TYPE) ROBERT A. WARD		HP NO. [REDACTED]	TELEPHONE 3821	SIGNATURE <i>Robert A. Ward</i>	DATE 11/13/96
LOCATION OF WASTE:	BLDG. # 87	ROOM 128	FURTHER LOCATION DIRECTIONS: HAZARDOUS WASTE		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes*	Results	Ref
321	Dayton Unit II	Dayton	Historical	Explosives (including ammonium picrate and ammonium nitrate) Rocket propellant	1, 4	None Suspected			No Data		
322	Dayton Unit III	Dayton	Historical	Polonium-210, Tellurium, Bismuth, Cobalt, Nickel, Beryllium, Thorium	1, 4	Suspected Cobalt-60	S	4	No Data		
323	Dayton Unit IV	Dayton	Historical	Contaminants listed under Dayton Unit III	1, 4	Suspected Cobalt-60	S	4	No Data		
324	Dayton Warehouse	Dayton	Historical	Polonium-210	4	None Suspected			No Data		
325	Scioto Facility (Marion)	Scioto	Historical	Facility never used	4	None Suspected			No Data		
326	Building 38 Sanitary Sump (Tank 254)	G-9	In Service	Sanitary wastewater	25	None Suspected			No Data		
327	R-111 Calorimetry Bath (Tank 255)	E-6	Inactive	Deionized water with potential alpha contamination	25	None Suspected			No Data		
328	R-111 Calorimetry Bath (Tank 266)										
329	Building 62 Hot Waste Sump (Tank 258)	E-6	In Service	Sanitary wastewater with potential alpha contamination	25	None Suspected Tank removed			No Data		
330	Building 2 Fuel Oil Tank (Tank 260)	H-7	Historical	Fuel oil	25	Unknown			No Data		
331	Building 2 Tank (Tank 261)	H-7	Historical	Sanitary Wastes	25	Unknown Closed in place			No Data		
332	Building G Waste Oil Tank (Tank 262)	E-7	Inactive	Waste oils	25	Unknown			No Data		
333	Building 87 Explosive Surge Tank (Tank 263)	H-7	In Service	Exhaust air from explosives testing	25	None Suspected			No Data		
334	Building 87 Explosive Surge Tank (Tank 264)										
335	Building 87 Explosive Surge Tank (Tank 265)										

USER AGREEMENT

No. E10144

USER CENTER MANAGER APPROVAL:

Douglas E. Remmer
EG&G MAT User Center Manager (Technical)

9/20/95
Date

T.M. Bugen
EG&G MAT User Center Manager (Administrative)

9/19/95
Date

PROGRAM TEAM APPROVALS:

T.M. Bugen
EG&G MAT Representative

9/19/95
Date

[Signature]
MMCIC Representative

9/20/95
Date

[Signature]
DOE/MB Representative

9/19/95
Date

USER AGREEMENT

No. E10144

THIS AGREEMENT, entered into this the 20th day of September, 1995 by and between EG&G Mound Applied Technologies, (hereinafter called "EG&G"), managing the Mound Facility under Contract No. DE-AC04-88-DP43495 with the UNITED STATES OF AMERICA (hereinafter called the "Government"), as represented by the UNITED STATES DEPARTMENT OF ENERGY (hereinafter called "DOE"), and Mound Laser & Photonics Center (hereinafter called the "User"):

ARTICLE I SCOPE OF SERVICES

Subject to the terms and conditions set forth below, EG&G shall make available to designated employees or representatives (hereinafter referred to as "Participants", individually or collectively, as the context suggests) of User certain facilities, equipment, services, information and/or material (hereinafter referred to as the "Activity") as described in Appendix A, which is attached hereto and hereby made apart of this Agreement.

ARTICLE II COSTS

EG&G will retain its employees assigned to this work on its payroll, and costs resulting from the Activity will be reimbursed by the User for the account of DOE in accordance with DOE's pricing policy as set forth in Appendix A.

ARTICLE III PAYMENT

User must prepay the total estimated costs per this Agreement before work can begin at the User Center on this project. Acceptable methods of payment are cashier's check, certified check, money order or cash.

User Address:

Mound Laser & Photonics Center

P.O. Box 223

Miamisburg, OH 45343

Telephone: (513) 865-4046 FAX: (513) 865-3680

ARTICLE IV ADMISSION; PERSONNEL RELATIONSHIPS

A. Each admission or readmission of a Participant to the Activity under this Agreement shall be subject to and implemented under the applicable admission regulations and procedures of EG&G and DOE. Each Participant shall execute Appendix "B," which is attached hereto and made a part of this Agreement, and deliver it to EG&G on or before admission to the Activity.

B. Participants shall be considered employees or representatives of User during all activities under this Agreement and shall not be considered employees of EG&G or DOE for any purpose. However, Participants shall be subject to the administrative and technical supervision and control of EG&G during and in connection with such participation in the Activity, and shall therefore abide by and comply with all applicable rules, regulations and requirements of EG&G and DOE with regard to such Activity including, but not limited to, those pertaining to security, safety, operating and health-physics procedures, environmental protection, access to information, hours of work, and conduct. User shall obtain such agreements from each Participant as necessary to implement the provisions of this Agreement.

ARTICLE V SCHEDULING

The User understands and agrees (a) that the Activity is subject to the priority of EG&G's work for the Government and on a nonpriority basis in regard to other users, and (b) that EG&G, through its cognizant User Facility administrator, shall have sole responsibility and discretion for allocating and scheduling usage of the facilities, equipment, services, materials and/or information needed for or involved in the Activity.

ARTICLE VI MATERIALS

It is recognized that any material to be supplied by the User may be damaged, consumed, or lost. Materials (including residues and/or other contaminated material) remaining after performance of the work or analysis will be removed in the current condition by the User at the User's expense.

ARTICLE VII INTELLECTUAL PROPERTY PROVISIONS

Except as otherwise required by 35 U.S. Code Section 212, rights of the parties in patents, technical data, copyrights and other intellectual property shall be as set forth in Appendix C, which is attached hereto and made a part of this Agreement.

ARTICLE VIII LIABILITY

A. Neither the Government, DOE, EG&G, nor persons acting on their behalf will be responsible for any injury to or death of persons or other living things or damage to or destruction of property or for any other loss, damage or injury of any kind whatsoever resulting from the furnishing of facilities, equipment, material, information or personnel under this Agreement.

B. Neither the Government, DOE, EG&G, nor persons acting on their behalf will be responsible, irrespective of cause, for failure to furnish the facilities, equipment, material, information or personnel under this Agreement at any particular time or in any particular manner.

C. Neither the Government, DOE, EG&G, nor persons acting on their behalf will be responsible, irrespective of cause, for User Facility start-up costs and/or for returning a User Facility to safe shutdown status once it has been activated for User Facility operation. User hereby agrees to return the User Facility to its original condition after completion/termination of User Agreement, including, but not limited to chemical cleanup, etc. EG&G will assess facility condition, identify necessary actions and costs to return facility to shutdown condition, and User or MMCIC will pay for recovery of costs as necessary.

D. 1. To the extent permitted by law applicable to the User, the User indemnifies the Government and EG&G for all damages, costs and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the User, its assignees or licensees, which was derived from the work performed under this Agreement. In respect to this Article, neither the Government nor EG&G shall be considered assignees or licensees, of the User, as a result of reserved Government and EG&G rights. The User shall have been informed as soon and as completely as practical by EG&G and/or the Government of the action alleging such claim and shall have been given an opportunity, to the extent afforded by applicable laws,

rules, or regulations, to participate in and control its defense, and EG&G and/or the Government shall have provided reasonably available information and reasonable assistance requested by the User. No settlement for which the User would be responsible shall be made without the User's consent unless required by a final decree of a court of competent jurisdiction.

2. To the extent permitted by law applicable to the User, the User agrees to indemnify and save harmless the Government, DOE, EG&G, and persons acting on their behalf from any costs and expenses resulting from loss, damage, destruction, misuse, or alteration to of property of the U.S. Government to the extent that such loss, damage, destruction or alteration is caused or contributed to by the intentional or negligent act of User or its employees or representatives.

E. The foregoing provisions of the Article VIII shall have no application to public liability for nuclear incident as defined and provided for in the Atomic Energy Act of 1954, as amended, compensation for which shall be in accordance with such law.

ARTICLE IX EXPORT CONTROLS

User hereby acknowledges notice that the export of goods and/or Technical Data from the United States may require some form of export control license from the U.S. Government and that failure to obtain such export control license may result in criminal liability under the laws of the United States.

ARTICLE X ENTIRE AGREEMENT

It is expressly agreed by the parties hereto that this agreement constitutes the entire and only contract between the parties with respect to the subject matter herein; and that this Agreement cannot be amended nor any provision thereof waived except by an instrument in writing and duly executed on behalf of each of the parties hereto by the duly authorized representative of each party.

ARTICLE XI TITLE AND ADMINISTRATION

It is understood and agreed that this Agreement is entered into by EG&G for and on behalf of the Government; that EG&G is authorized to and will administer this Contract in other respects for DOE, unless otherwise specifically provided for herein; that administration of the Agreement may be transferred from EG&G to DOE or its designee, and in case of such transfer and notice thereof to the User, EG&G shall have no further responsibilities hereunder.

ARTICLE XII TERMINATION

Either party hereto may terminate this Agreement for any reason at any time by giving not less than thirty (30) days prior written notice to the other party. EG&G reserves the right to immediately cancel this Agreement without regard to the aforesaid written notice when cancellation of this Agreement is determined to be necessary to the national defense and security of the United States. Such termination shall only affect the term of this Agreement, and shall otherwise be without prejudice to the rights of the parties hereunder which may have previously accrued.

In witness whereof, the parties hereto have executed this Agreement effective the day, month, and year first above written.

(For User)
Signed: Larry R. Dosser
Dr. Larry R. Dosser

(For EG&G MAT)
Thomas M. Bruggeman
Thomas M. Bruggeman

Date: 9/20/95

APPENDIX A

To USER AGREEMENT No. E10144

between

EG&G MOUND APPLIED TECHNOLOGIES

and

Mound Laser & Photonics Center (User)

STATEMENT OF WORK

Pursuant to the above identified User Agreement and subject to the terms and conditions stated therein, EG&G shall provide, furnish, or otherwise make available to duly authorized employees or representatives of User the following facilities, equipment, services, material and/or information for the following purpose:

Mound Laser & Photonics Center will utilize L-Cell in Building 87 (ECTF) to function test air bag ignitors and full up air bag modules.

All necessary materials will be supplied by Mound Laser & Photonics Center.

Work will be performed by operators who are fully trained in the use of this equipment and facility, therefore, no User Center personnel will be required to be present during these operations. Justification was provided by the User Center Manager per letter dated September 18, 1995, for the following individuals to be granted unsupervised access to the facility:

Dr. Larry R. Dosser

Douglas E. Benner

NOTE: Work performed in support of this User Agreement by EG&G MAT employees acting as participants on behalf of Mound Laser & Photonics Center (User) must be accomplished outside the employee's regular EG&G MAT working hours.

TERM: September 20, 1995 through November 30, 1995 ^{Dec. 30}

ESTIMATED TIME OF USE: 40 hours (over three months)

COST:	User Center Fee	\$ 1,572.00
	Administration Fee	\$ 350.00
	Total Costs	\$ 1,922.00

Payment is to be made incrementally, prior to commencement of work per the following schedule:

Administration Fee (due at initiation)		\$ 350.00
September	10 hours	\$ 393.00
October	20 hours	\$ 786.00
November	10 hours	\$ 393.00
	40 hours	\$ 1,922.00 ✓

APPENDIX C

To USER AGREEMENT No. E10144

between

EG&G MOUND APPLIED TECHNOLOGIES

and

Mound Laser & Photonics Center (User)

INTELLECTUAL PROPERTY PROVISIONS

I. PATENT RIGHTS - USER FACILITIES (CLASS WAIVER)

A. Definitions

1. "User" means the person or entity with which this Agreement is made.
2. "Subject Invention" means any invention or discovery of the User conceived in the course of or under this Agreement or first actually reduced to practice in the course of or under this Agreement. "Subject Invention" includes any art, method, process, machine, manufacture, design, or composition of matter, or any new and useful improvement thereof, or any variety of plants, whether patented or unpatented under the patent laws of the United States of America or any foreign country and User's rights under paragraph I.B.2 hereof.
3. "States and domestic municipal governments" means the States of the United States, and District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam, the Trust Territory of the Pacific Islands, and any political subdivision and agencies thereof.
4. "Government agency" includes an executive department, independent commission, board, office, agency, administration, authority, Government corporation, or other Government establishment of the Executive Branch of the Government of the United States of America.
5. "EG&G" means the operating contractor which manages and operates the Government-owned, contractor-operated facility where the work under this Agreement is to be performed.
6. "Patent Counsel" means the DOE Patent Counsel assisting the procuring activity.

B. Rights of the User

1. Election to retain rights - Subject to the provisions of paragraph C.(2) of this clause, with respect to any Subject Invention reported and elected in accordance with paragraph D. of this clause the User may elect to obtain the entire right, title, and interest in any patent application filed in any country on a Subject Invention and in any resulting patent or copyright secured by the User. Where appropriate, the filing of patent applications by the User is subject to DOE security regulations and requirements. User agrees that, in the event technical services are requested from EG&G, then any intellectual property developed by EG&G personnel will remain the property of EG&G or the Government, as their rights may appear and same will not be considered a Subject Invention.

- e. The User agrees to grant to responsible applicants, upon request of the Government, a license to waived Subject Inventions on terms that are reasonable under the circumstances:
- (1) Unless the User, its licensee, or its assignee demonstrates to the Government that effective steps have been taken within three years after a patent issued on such invention to bring the invention to the point of practical application, or that the invention has been available for licensing royalty-free or on terms that are reasonable in the circumstances or can show cause why the principal or exclusive rights should be retained for a fixed period of time; or
 - (2) To the extent that the invention is required for public use by governmental regulation as may be necessary to fulfill purposes stipulated in this Agreement.
- f. The User shall submit written reports at reasonable intervals upon request of the Government during the term of the patent on the Subject Invention regarding:
- (1) The commercial use that is being made or is intended to be made of the invention;
 - (2) The steps taken by the User or its transferee to bring the invention to the point of practical application or to make the invention available for licensing.
- g. The User agrees to refund any amounts received as royalty charges on any Subject Invention in procurements for or on behalf of the Government and to provide for that refund in an instrument transferring rights to any party in the invention.

D. Invention Identification, Disclosures, and Reports

1. The User shall furnish the Patent Counsel a written report containing full and complete technical information, concerning each Subject Invention of the User within six months after conception or first actual reduction to practice, whichever occurs first, in the course of or under this Agreement but in any event prior to any sale, public use or public disclosure of such invention known to the User. The report shall identify the contract and inventor/author and shall be sufficiently complete in technical detail and appropriately illustrated by sketch or diagram to convey to one skilled in the art to which the invention pertains a clear understanding of the nature, purpose, operation, to the extent known, the physical, chemical, biological, or electrical characteristics of the invention. The report should also include any election of patent rights under this clause. When an invention is reported under this paragraph D., it shall be presumed to have been made in the manner specified in Section (a) (1) and (2) of 42 U.S.C. 5908.

E. Limitation of Rights

Nothing contained in this clause shall be deemed to give the Government any rights with respect to any invention other than a Subject invention, except as set forth in the Facilities License in paragraph F.

F. Facilities License

In addition to the rights of the parties with respect to inventions or discoveries conceived or actually reduced to practice in the course of or under this Agreement, the User agrees to and hereby grants to the Government an irrevocable, non-exclusive, paid-up license in and to all inventions or discoveries, regardless of when conceived or actually reduced to practice or acquired by the User, which at any time through completion of this Agreement are owned or controlled by the User and are incorporated in the facility as a result of this Agreement to such an extent that the facility is not restored to the condition existing prior to the Agreement (1) to practice or to be practiced by or for the Government at the facility, and (2) to transfer such license with the transfer of that facility. The acceptance or exercise by the Government of the aforesaid rights and license shall not prevent the Government at any time from contesting the enforceability, validity or scope or title to, any rights or patents herein licensed.

EG&G MOUND APPLIED TECHNOLOGIES

PROGRAM TEAM
RECOMMENDATION

COMPANY NAME	Mound Laser & Photonics Center		
ADDRESS	P.O. Box 223		
	Miamisburg, OH 45343-0746		
COMPANY CONTACT	Douglas E. Benner		
TELEPHONE	(513) 865-3310	FAX	(513) 865-3115

PROJECT TITLE Air Bag Function Testing MOUND # E10144

Upon initial review of the prospective project, the Program Team makes the following recommendation:

RECOMMENDATION TO PROCEED

USER FACILITY WORK FOR OTHERS

TRANSITION WORK RIGHT TO USE

RECOMMENDATION TO REJECT

Explanation: _____

Kurt Benner
MMCIC Representative

9/18/95
Date

[Signature]
DOE/MB Representative

9/15/95
Date

Thomas M. Ryan
EG&G Mound Applied Technologies Representative

9/14/95
Date

E10144

WBS 0104130802

**EG&G MOUND APPLIED TECHNOLOGIES
PROJECT PROFILE**

COMPANY NAME Mound Laser & Photonics Center
ADDRESS P.O. Box 223
Miamisburg, Oh 45353
COMPANY CONTACT Douglas E. Benner
TELEPHONE 865-3310 **FAX** 865-3115

SCOPE OF WORK

A specifically defined scope of work is necessary for Mound to evaluate the project. Please address the following questions and include any other relative information such as drawings, prints, specs., etc.

1. Briefly describe the work to be performed. In addition, list the facilities, personnel, equipment, materials, etc./ which will be utilized.

The Mound Laser & Photonics Center will function test air bag ignitors and full up air bag modules using L-Cell in Building 87 (ECTF). Approximately 20 air bag ignitors will be tested into a closed pressure vessel inside L-Cell, and approximately 20 full up assemblies will be photographed and instrumented in L-Cell.

2. Define the Period of Performance of this work.

This work will be performed within a two month period and require approximately 40 hours of user center time. The customer would like to begin testing in mid September.

3. What level of participation of your personnel do you foresee during this project?

All work will be performed by Mound Laser & Photonics Center personnel. Because of the level of experience and expertise with this facility and equipment, Mound Laser & Photonics Center expects to qualify for unmanned use of the Desturctive Testing user Center and the corresponding unmanned rate.

4. Does Mound's participation in this project represent a unique capability that your company has been unable to obtain elsewhere? (If yes, explain.)

Mound's participation in this project is considered unique in that the remote testing capabilities (test Cell L) as well as diagnostic capabilities (photographic as well as electronic) are not readily available in the commercial sector.

10 Sept
20 Oct
10 Nov

3131.00
= 34.2

**EG&G MOUND APPLIED TECHNOLOGIES
PROJECT PROFILE**

PAGE 2

5. **Will the project require the use of any hazardous materials or operations? (If yes, explain.)**

The experiments will require the handling of energetic materials. The procedures for test firing of energetic materials are well established and will only be conducted using trained personnel.

6. **Does the project involve any classified or proprietary information?**

This project does not involve any classified or proprietary information.

7. **Describe the specific goal this project achieves in relation to a new business venture. (Examples: proving a process, evaluating equipment, producing a prototype, etc.)**

Mound Laser & Photonics Center is attempting to develop a customer base which will utilize the destructive testing capabilities of Building 87. Approving this user center agreement is key to informing the automotive manufacturing community of our capabilities in high speed photography (Photonics) as well as high speed data capture.

Signature

Douglas E. Renner

Date

9/7/95

MOUND



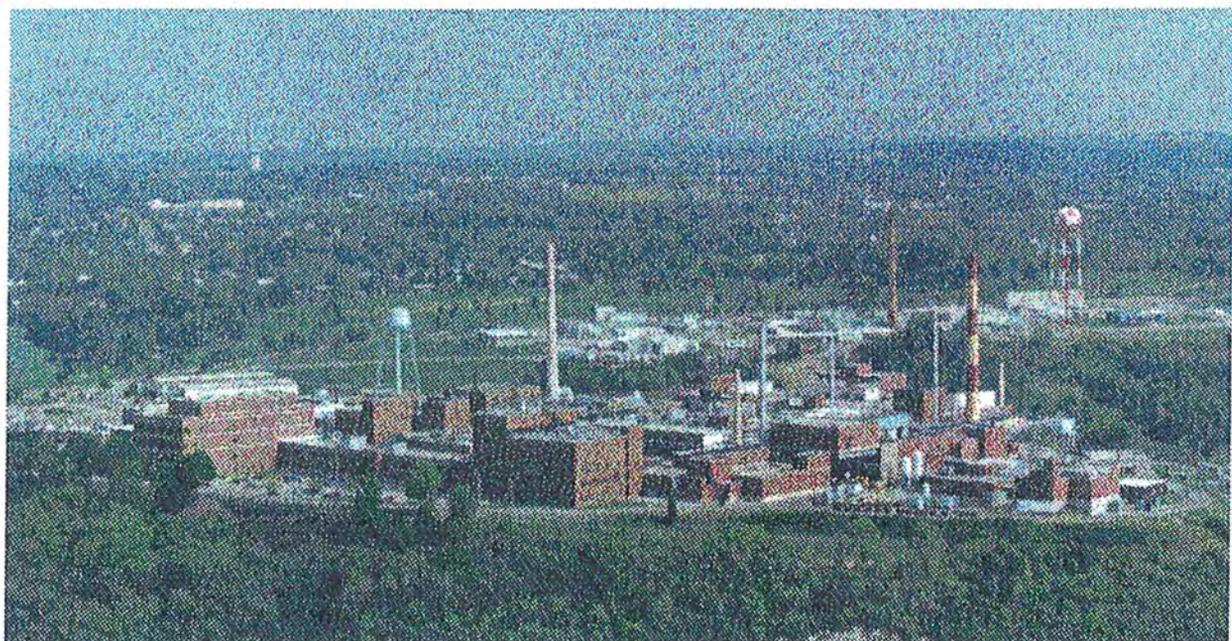
Environmental
Restoration
Program



MOUND PLANT

Building 87 Status Report

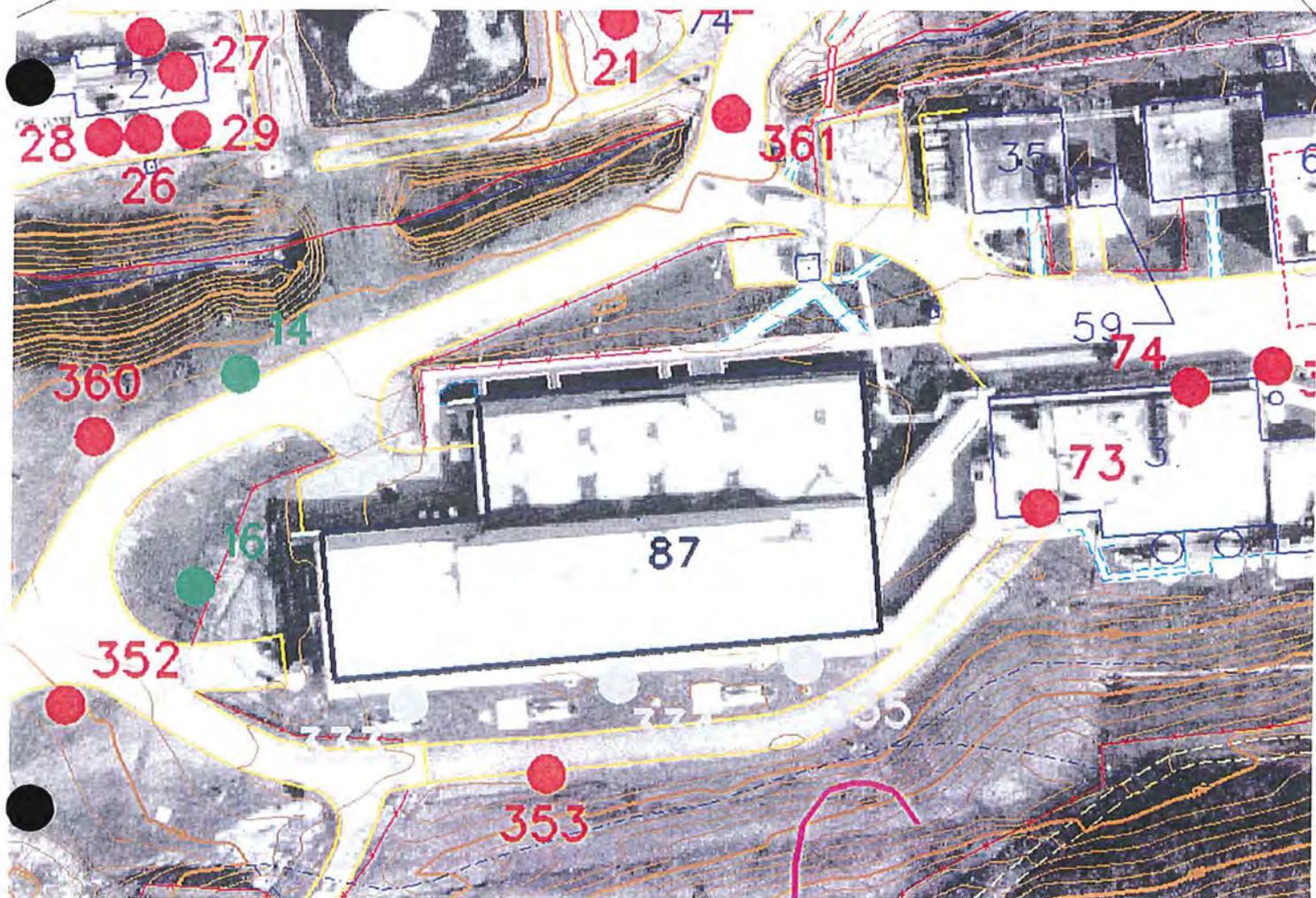
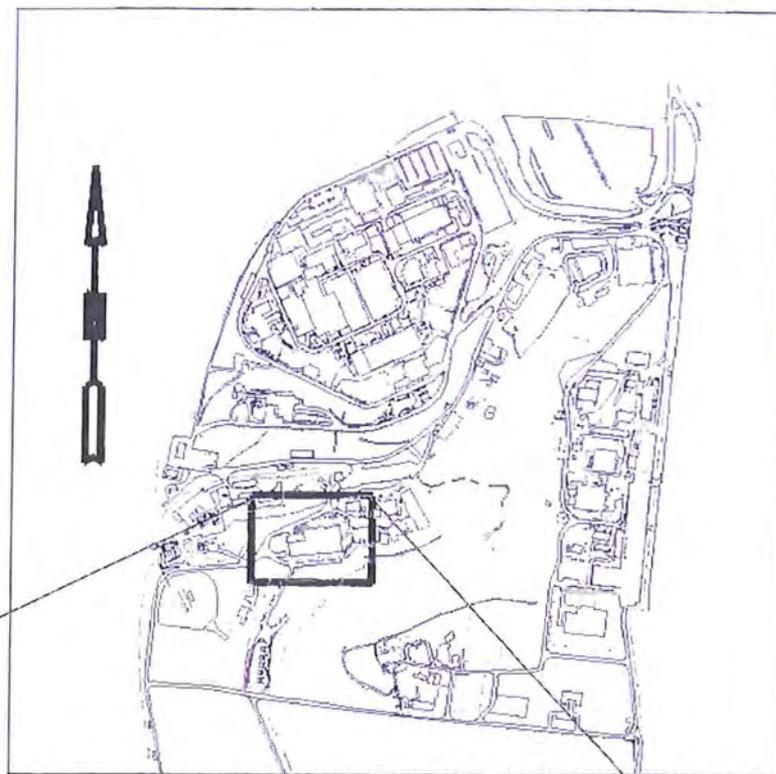
Explosives Testing Building
Located Within Release Block C

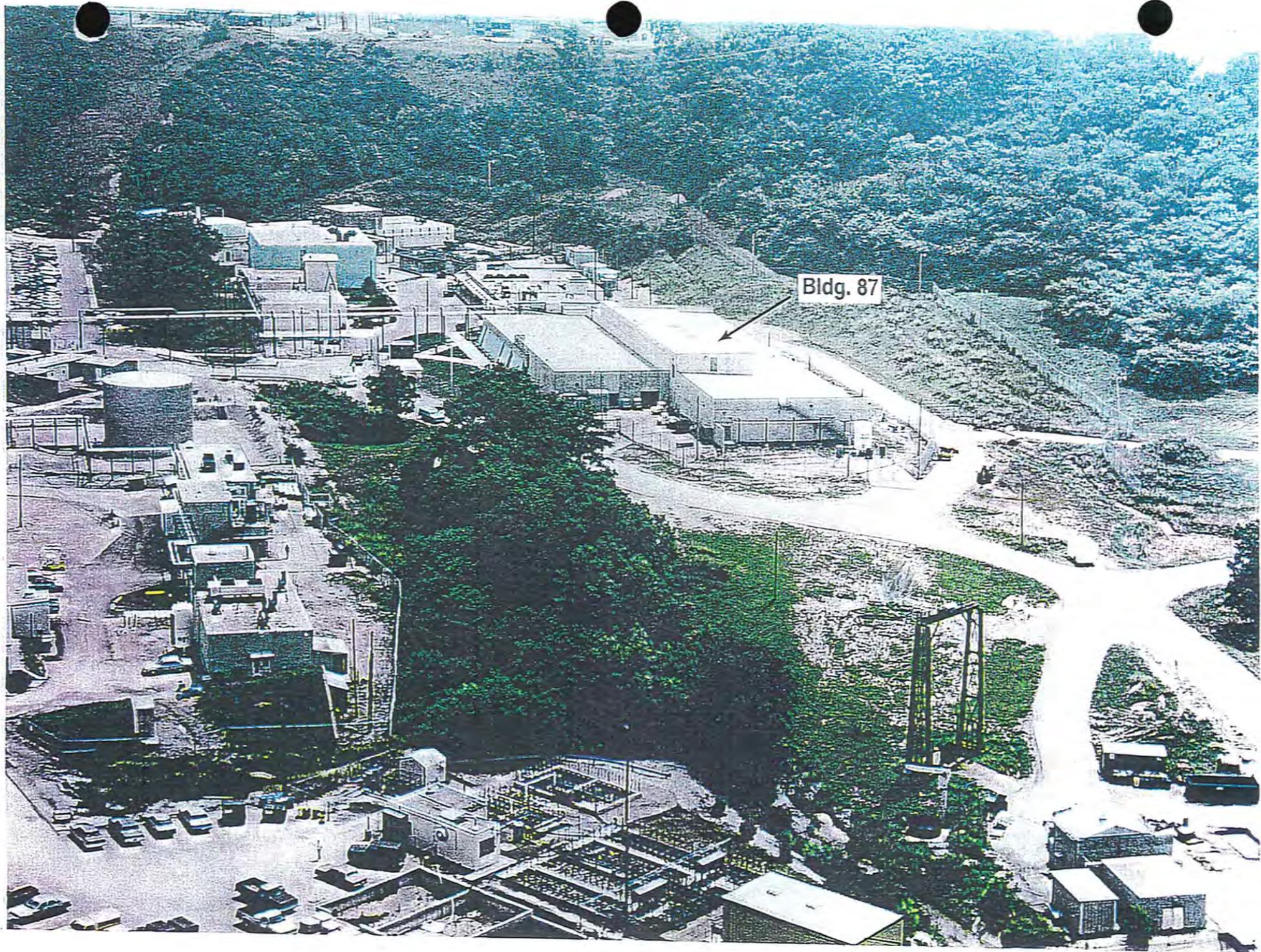


Mound Plant

Release Block C

Building 87
Explosives Testing
Building





MOUND



Environmental
Restoration
Program

**MOUND PLANT
BUILDING DATA PACKAGE**
Notice of Public Review Period



The following Building Data Packages will be available for public review in the CERCLA Public Reading Room, 305 E. Central Ave., Miamisburg, Ohio beginning July 24, 1997. Public comment will be accepted on these packages from July 24, 1997, through August 26, 1997.

Building 87: Explosives Testing Building
Building 89: Detonator Storage Building

Questions can be referred to Mound's Community Relations at (937) 865-4140.

Information found within this building status report is taken in large part from the document Environmental Appraisal Report of the Mound Plant, MLM-ML-96-43-0001, March 1996 and does not represent an all inclusive record search for this facility. Although not reflective of any facility changes since the date of this publication, the information is representative of the facility's current status and is deemed acceptable for the purpose of a general building overview. Any questions or comments regarding this document should be submitted to DOE/MEMP to the attention of Alan S. Spesard, Sam C. Cheng, or Kevin Donovan.

Environmental Appraisal of the Mound Plant

9.94 BUILDING 87

9.94.1 Scope of Building 87 Report

In late 1995 and the early months of 1996, EG&G MAT performed a review of environmental conditions at the Mound Plant. The purpose was to develop a performance baseline, and to identify areas for improvement on a building and a sitewide basis. EG&G MAT did not perform a "due diligence" or Phase I Environmental Site Assessment as specified by ASTM 1527 or ASTM 1528. The scope of the appraisal effort and a discussion of the appraisal methodology are detailed in Sections 2.0 and 5.0, found in Volume 1 of this report.

The appraisal team performed a walk-through of Building 87 on the morning of February 5, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is included as Attachment 1 (Section 9.94.6.1) The appraisal team was accompanied by the building manager. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.94.6.2).

9.94.2 Description of Building 87

Building 87 is a two-story, 38,882-square-foot, concrete structure, built slab-on-grade. It has a built-up membrane coaltar and steel roof. Its location is shown in Attachment 3 (Section 9.94.6.3). The building is bordered by a sidewalk on the north. Adjacent buildings are Building 3 to the east, Building 35 on the northeast and Magazines 8, 5, and 10 to the southwest. All offices, support facilities, and other operational control/testing facilities in support of the testing cells are on the first floor. The mechanical penthouse, on the second floor, contains HVAC heating and air conditioning, air handling units for the test cell areas, and a heat exchanger for hot water. The mechanical area occupies approximately 600 square feet. Floor plans are presented as Attachment 4 (Section 9.94.6.4). The building is serviced by central steam, chilled water (including a fire sprinkler system), potable and service water. Building 87 has electrical service of 480V (*Mound Facility Physical Characterization*, 12-1-93).

Building 87 was constructed in 1985 with the fire sprinkler system added in 1987. The building has been used for the same purpose since construction. The facility is currently being shut down. All operations have been suspended, with the exception of the test cell in Room 153. It is being used by others under a "user agreement."

9.94.3 Summary of Findings

The facility is being shut down with all weapons support operations suspended. Two of the three test cells are inoperable and their associated photo processing rooms and preparation rooms have had all chemicals removed. Room 126 currently serves as a staging area for test equipment. Test Cell L is being used under a user agreement with a private company (i.e., explosive component testing is being conducted). The Test Cell L underground expansion chamber is the only active air source in Building 87. The building is in excellent condition. However, several issues of environmental concern were identified during the walk-through.

Environmental Appraisal of the Mound Plant

9.94.4 Observations

9.94.4.1 Air Emissions

During the facility walk-through, a total a five fumehoods were located (Rooms 104, 127, 129, 139 and 152). These fumehoods were labeled by Mound Industrial Hygiene as inactive. These fumehoods, with the exception of the hood in Room 127, were not listed in the Mound Air Emissions Database of 11-30-95. Room 126 was formerly used to conduct testing utilizing a small test cell with the test cell venting out through the facility roof. This source is listed in the Mound Air Emissions Database of 11-30-95 but is currently inactive. Additionally, exhaust from the test cells is allowed to expand into individual underground chambers (each of the three cells has a dedicated expansion chamber) with exhaust subsequently filtered prior to release to the atmosphere. As noted, two of the three test cells are currently inactive and the associated air sources listed in Rooms 130 and 143 of the 11-30-95 Mound Air Emissions Database are also inactive. The only active air source of the facility is the underground expansion chamber associated with the test cell currently being utilized under the user agreement (listed in Room 153 of the 11-30-95 Mound Air Emissions Database). Permit applications were submitted to RAPCA on 3-5-92 for sources in Rooms 153, 126, 127, 130 and 143. No permits were issued. There is a high efficiency particulate air (HEPA) filter for exhaust for Test Cell L. The filter is not maintained by EG&G MAT, (T. Tayse, 3-96).

There are no fuel-burning units in the building. There was no evidence of fugitive dust at or around Building 87.

9.94.4.2 Wastewater Emissions

9.94.4.2.1 Sanitary Wastewater

According to facility drawings as listed in Attachment 5 (Section 9.94.6.5), Building 87 is serviced by a sanitary line. Confirmation of drainage of sanitary waste into the sanitary line was not within the scope of the project and was therefore not verified with dye or smoke tests. The three large test fire cells all have drain lines that are shown on facility drawings to drain to the sanitary line. These drains are capped.

Sanitary effluent is conveyed to the onsite tertiary wastewater treatment facility, and subsequently discharged to the Great Miami River. There is no monitoring of building effluent. Based on operations data, supplied by the process owner, effluent from Building 87 does not deviate from that expected by the sanitary treatment plant manager.

9.94.4.2.2 Storm Wastewater

The facility exterior drains discharge to the storm sewer system according to information shown on drawings in Attachment 5 (Section 9.94.6.5).

Environmental Appraisal of the Mound Plant

9.94.4.2.3 Chemicals

All chemicals with the exception of limited janitorial supplies have been removed from the facility under the Safe Shutdown program. There was no evidence that any of the chemicals (e.g., photo processing chemicals) were allowed to enter into the facility sanitary drain lines.

9.94.4.3 Potable and Service Water

Potable water is supplied to the building. Backflow prevention devices are installed at all visible points of potential cross connection. The fountains which supply drinking water have not been tested for lead. According to Environmental Protection Agency (EPA) protocol, annual sampling criteria do not require testing of each fountain. There is service water supplied to the building; it is not distributed within the building except to the fire sprinkler system.

9.94.4.4 Chemical Storage and Hazardous Materials

All chemicals and hazardous materials associated with Department of Energy (DOE) support work, with the exception of a liquid nitrogen supply and distribution system have been removed from the facility. Test Cell L is being utilized for explosive testing under a user agreement by a private contractor. EG&G MAT does not control the work going on in this cell. No research, development, or production activities using radioactive materials have occurred in the building; however, the use of energetic materials has occurred (R. Ward, 1996).

There are two HEPA filters associated with inactive Test Cells K and J. They may contain hazardous materials. These filters will ultimately be removed and disposed of by Waste Management.

9.94.4.5 Solid, Hazardous, and Radioactive Waste

At Mound there is an active program to minimize waste streams in accordance with state and federal requirements and Executive Order 12856. Solid wastes generated are primarily paper. There is paper and aluminum can cycling to minimize solid waste. Solid wastes are removed by janitorial personnel to a local site collection point, then shipped to a landfill by a contractor. The disposal permit is maintained by Waste Management.

Hazardous waste may include the HEPA filter that filters effluent from the Test Cell L expansion chamber (the chamber under a current user agreement). This filter is not managed by EG&G MAT. Additionally, the two HEPA filters associated with inactive Test Cells K and J will ultimately require disposal.

The facility never contained radioactive materials.

Environmental Appraisal of the Mound Plant

9.94.4.6 Waste Minimization and Pollution Prevention

The building has been shut down with pollution prevention limited to paper recycling and aluminum can recycling.

9.94.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.94.6.6). The environmental appraisal of Building 87 indicates that the following action items, in order of priority order, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

- 87-1. A third party user produces air emissions and generates wastes in the operation of Test Cell L. In addition, according to the process manager, EG&G MAT is no longer inspecting and maintaining the HEPA filters on the air and exhaust systems. Management should investigate this operation to assure that it is not in violation of its air permit application and the CAA.
- 87-2. Air emission sources in Building 87 are no longer active except for Test Cell L. An air permit application for sources within the building was filed with RAPCA. RAPCA should be notified of the change in status.
- 87-3. If any fumehoods remain within Building 87 at the conclusion of Safe Shutdown, they should be listed in the Mound Air Emissions Database.
- 87-4. The appraisers noticed during the facility walk-through that water was being pumped out of one test cell valve pit sump. This is not a traditional sump in the sense that it was designed to collect water; it is designed to give access to the expansion chamber valves.) It was assumed that infiltrating surface water seeps into the valve sump. The water is periodically pumped out onto the ground outside the facility. It is recommended that the water be tested to assure discharge is not in violation of the Clean Water Act requirements.

Other Information

On September 30, 1996, the User Agreement expired under which a tenant had access to Test Cell L and its adjacent control Room 153. Thereupon the whole of the building reverted to the EG&G MAT Safe Shutdown Program.

The Building 87 operations were classified as Standard Industrial Hazard.

Because the building was constructed after 1980, when both asbestos construction materials and lead paints were banned, neither asbestos nor lead paint is present in Building 87.

There are no PCBs in the building.

Associated PRS(s)

PRSs 333, 334, and 335 are the three underground surge tanks that are a part of the surge systems for test cells J, K, and L. The tanks are numbered 263, 264, and 265 in the Mound Active Underground Storage Tank Plan. They are described as noise suppressing expansion chambers in the explosive exhaust systems. Each system is equipped with a HEPA filter, and the exhaust systems are assumed to contain unburnt explosive material and/or combustion products.

PRSs 14 and 16 are near Building 87, and do not require further assessment. PRSs 72, 73, and 74 are near the building and do require further assessment. PRSs 21, 22, 26, 27, and 28 require resolution and are across the plant drainage ditch, hence are rather removed from the immediate vicinity. PRSs 352, 353, 360, and 361 are soil gas PRS locations which require dispensation and are in the Building 87 area.

Baseline Assumptions

In the EG&G Mound Environmental Restoration Mound 2000 Rebaseline Submittal, March 1996, the preliminary disposition decision for Building 87 was "cleanup for unrestricted use". This preliminary decision was premised upon the lack of any known radiological or energetic materials contamination within the facility as determined through its process history, a physical walk-through, and available radiological data. Facility Decontamination and Decommissioning (D&D) efforts were assumed to be limited to the test cells and surge tank systems. It was also assumed that these efforts would include the assessment sampling, decontamination via High Energy Particulate Air (HEPA) vacuuming, wiping down of the interior surfaces with a decontamination solution, and the necessary final verification sampling. The debris from the wiping and HEPA vacuuming was assumed to be hazardous, thus requiring disposal in a landfill approved for hazardous waste.

References

- 1) MLM-ML-96-43-0001, Environmental Appraisal Report of the Mound Plant, Volume 9, March 1996.
- 2) MLM-3791, Mound Facility Physical Characterization, December 1993.
- 3) Environmental Restoration Baseline Cost Estimate, March 1996, Block C.
- 4) Mound Applied Technologies, Active Underground Storage Tank Plan, 1994.

Point of Contact

DOE/MB, Paul C. Lucas, (513) 865-4578
EG&G/MAT, Gerald F. Maul, (513) 865-4285

November 20, 1996

Environmental Appraisal of the Mound Plant

0921681 Environmental Appraisal Checklist

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ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 87

Appraisers:

MARCIA JANNET CHEMIST
Name Discipline

MARK GILLIAT ENGINEER
Name Discipline

MYRON SMITH ENGINEER
Name Discipline

Name Discipline

Building Manager: Bob Ward

Process Manager: Tim Taysse

Date: 2/5/96

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

Table of Contents

Checklist	Page
Clean Water Act	1
Clean Air Act	2
Hazardous Materials	4
Safe Drinking Water Act	7
RCRA Hazardous Waste	8
TSCA and NESHAP Requirements for Asbestos	13
TSCA—PCB	14
Low-level and Transuranic Waste	17
Waste Minimization/Pollution Prevention Activities	22

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

Clean Water Act (CWA) Screening Checklist

Question	Response	Comments
Does the outside drain spouting of the building discharge directly to a storm sewer/sanitary system? <i>STORM</i>	Y/N	If the answer to any of these questions is yes, proceed with the following checklist.
Are there sinks, toilets and floor drains in the building?	Y/N	
Are chemicals being used in the building? *	Y/N	
Is there a process which discharges to the storm or sanitary system?	Y/N	

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	N/A Y/N Y/N	chemicals have been removed
	Is the building in operation? What are the processes and where do they discharge to?	* Y/N _____ _____	
	Do the floor drains, sinks & toilets appear to be draining properly?	Y/N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary Storm	
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	Y/N _____ _____ Y/N Y/N	Water seeps into valve sump
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	Y/N _____ * Y/N Y/N	chemicals have been removed

6-76.6

* Test Cell K is being used under a User Agreement.

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Clean Air Act (CAA) Screening Checklist

Regulatory Guideline	Question	Response	Comments
	Are there any rooms that have air emissions sources that vent to the outside of the building, e.g., fumehoods, equipment? If so, note the rooms.	Y/N	
OAC 3745-35	Using the air emissions inventory reference for this building, are there any sources in the building that are not documented?	Y/N	All fumehoods parted inactive
	Is there evidence of fugitive dust emissions inside or outside of the building	Y/N	

CAA Checklist

Regulatory Guideline	Question	Response	Comments
	Are there existing air permits or applications applicable to the building?	Y/N	
OAC 3745-31,35	If yes, are the terms and conditions of the permit or the information included on the application (see air emissions database) being followed? Note any differences and update the air emissions database.	N/A Y/N	
OAC 3745-31	Are there any sources that are not included in the air emissions database? If so, note the room, hood number, active or not, POC, and applicable air emission database information on Table B.	Y/N	Three fumehoods not noted on 11/30/95 Database (All labeled inactive)
OAC 3745-31-03	Are there sources which are lab equipment of lab fumeheads used exclusively for chemical or physical analyses and bench scale lab equipment? These sources do not require a permit. However, the air emissions database should be updated.	Y/N	
	Has there been any release of air contaminants from this building?	Y/N	

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

CAA Checklist

Comments: Note the number of sources/hoods per room, the number that are active, and the POC on the reference document.

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
	104	0871040001	Y/(N)	Y/(N)	N/A	_____	_____	_____	_____
	129	0871290001	Y/(N)	Y/(N)	N/A	_____	_____	_____	_____
	127	0	(Y)/N	Y/(N)	N/A	_____	_____	_____	_____
	139	0871390001	Y/(N)	Y/(N)	N/A	_____	_____	_____	_____
	152	0871520001	Y/(N)	Y/(N)	N/A	_____	_____	_____	_____

Source: _____

9.94-11

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Hazardous Materials (HM) Screening Checklist

Question	Response	Comments
Are any chemicals used or stored in this building, now or in the past?	Y/N	If the answer is yes, proceed with the following checklist.

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.1200(b,f)	All containers of hazardous chemicals shall be labeled as to the identity of the chemical and the appropriate hazard warnings.	Y/N	<i>All chemicals have been removed as part of safe shutdown (liquid N2 remains)</i>
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	Y/N	
29 CFR 1910.22, 1910.106, 1910.176	All places of employment, passageways, storerooms and service areas shall be kept clean and orderly and in a sanitary manner. Aisles shall be unobstructed. Drums and containers are not leaking and are tightly sealed.	Y/N	
29 CFR 1910.106	Storage cabinets for flammable materials are constantly kept closed, are fire resistant and are labeled "FLAMMABLE - Keep Fire Away". Containers inside should be labeled and closed. No spills inside cabinet.	Y/N	
29 CFR 1910.106(d)(7)	Incompatible chemicals are not stored together.	Y/N	
29 CFR 1910.106(d)(4)	Inside Flammable/combustible storage rooms must meet the following: 4 in. raised sill or trench that drains to a safe area, liquid tight wall/floor joints, self-closing doors, gravity or mechanical exhaust providing 6 room changes/hr., exhaust switch located outside room, at least one 3 ft. aisle; no cracks in secondary containment.	Y/N	

9.94-12

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	Y/N	BLANK
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	Y/N	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	Y/N	
CGA P-1 3.5.3	Full and empty containers should be stored separately with the storage layout planned so that containers comprising of old stock can be removed first with a minimum handling of other containers.	Y/N	
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	Y/N	
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y/N	
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y/N	
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y/N	
	Is there a sign posted in each work area regarding emergency egress and emergency response action?	Y/N	
	Is there an emergency response plan available?	Y/N	

9.94-13

Environmental Appraisal Checklist

Building Name: _____

Appraisers: _____

Date: _____

HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	Y/N	
	Does it have proper containment?	Y/N	
	Is there a liquid bulk transfer area?	Y/N	
	Is there proper containment?	Y/N	
	Is there an above ground storage tank? If so, complete Table B.	(Y)N	

Above Ground Storage Tanks Inventory

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/Contamination	If Empty, Flushed
		2000 gal		Y/N	Y/N	Y/N	Y/N
* 87	3000 gal	NITROGEN (LN ₂)	UNKNOWN	(Y)N	Y/(N)	Y/(N)	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

* LN₂ Storage Tank Outside Facility.

Source: _____

9.94-14

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

Safe Drinking Water Act (SDWA) Screening Checklist

Does this facility have potable water?	<input checked="" type="radio"/> Y <input type="radio"/> N	If yes, conduct the following survey.
--	--	---------------------------------------

SDWA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 95-02 (A)	Do actual or potential cross-connections exist between potable (light green) and service water (dark green)?	<input checked="" type="radio"/> Y <input type="radio"/> N	
OAC 3745 95-04 (B)(C)	Are backflow prevention devices installed where cross connections (hoses connected to faucets, hot water tank vented directly to a drain) exist?	<input checked="" type="radio"/> Y <input type="radio"/> N	
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	<input checked="" type="radio"/> Y <input type="radio"/> N	
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	<input checked="" type="radio"/> Y <input type="radio"/> N	

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
87		OASIS	(No Model #)

Source: _____

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

9T-16'6

RCRA Screening Checklist

Does this facility generate waste or use chemicals?	Y (N)	If yes, conduct the following survey.
---	-------	---------------------------------------

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	Has any material generated been characterized RCRA hazardous? Was characterization by analysis or by process knowledge? Are lab results or documentation of process knowledge readily available? Note any uncharacterized material in comment section. Is it waste? If yes, proceed with next section, <i>BLANK</i>	Y / N analysis / process Y / N Y / N	
OAC 3745 52-11	Are any of the materials noted RCRA hazardous waste? If no, note and stop here. If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.	Y / N	

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	Y/N Y/N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y/N	
	<i>BLANK</i>		
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y/N	
	Are the containers in good condition?	Y/N	
	Are the waste compatible with the containers?	Y/N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the plant site boundary?	Y/N	
	Are containers kept closed and locked except during filling?	Y/N	
	Are containers moved within 3 days of being filled?	Y/N	

9.94-17

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

RCRA Checklist

9.94-18

Regulatory Guideline	Question	Response	Comments
OAC 3745-52-11 (A)	If a Satellite accumulation area has been abandoned and/or if waste left in place, and the containers may be subject to the 90-day-storage exclusion.		BLANK
	If this exclusion does not apply, go to the next section. If the containers have been in storage under this exclusion, answer the following:		
	Are the containers in good condition?	Y/N	
	Are the waste compatible with the containers?	Y/N	
	Are the containers kept closed except during filling?	Y/N	
	Are the containers managed in such a way, that they are not ruptured, or leaks caused?	Y/N	
	Is the area inspected at least once weekly?	Y/N	
	Is the inspection recorded? Where is the log? Is it properly completed, dated, and signed?	Y/N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the facility boundary?	Y/N	
	Are incompatible wastes managed in such a way that they will not react with another incompatible waste?	Y/N	
OAC 3745-52-34(B)	Has any of the waste (except in Building 23, Building 72 and the Burn Area) been managed in excess of 90-days?	Y/N	
	If no go to next section.		
	If yes, note.		
	For Building 23, Building 72 & Burn Area use special checklist.		

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y/N	<i>BLANK</i>
	If the answer was no, then proceed with the following:		
	Has the tank or piece of equipment had an integrity assessment?	Y/N	
	Is there a sump?	Y/N	
	Is it dry?	Y/N	
	Does the tank or equipment have secondary containment?	Y/N	
	Does the tank or equipment have leak detection device(s)?	Y/N	
	Has spill control prevention been enacted?	Y/N	
	Has any hazardous waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y/N	
	If the answer was no, then proceed with the following:		
	Has the tank or piece of equipment had an integrity assessment?	Y/N	
	Does the tank or equipment have secondary containment?	Y/N	
	Does the tank or equipment have leak detection device(s)?	Y/N	
	Has spill control prevention been enacted?	Y/N	
	Is there a closure plan?	Y/N	
If yes, then note.			
OAC 3745-67	Has any of the waste been managed in a surface impoundment? If yes, then note. Go to the next section.	Y/N	

9.94-19

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745-68	Has any of the waste been managed in a Landfill? If yes, then note. Go to the next section.	Y/N	<i>BLANK</i>
OAC 3745-68	Has any of the waste been managed in an Incinerator (other than Burn area units)? If yes, then note. Go to the next section.	Y/N	
OAC 3745-68	Has any of the waste been managed in a Thermal treatment Unit (other than Burn area units)? If yes, then note. Go to the next section.	Y/N	
OAC 3745-69	Has any of the waste been managed in a Miscellaneous Treatment Unit (other than Burn area units)? If yes, then note. Go to the next section.	Y/N	
OAC 3745-56	Has any of the waste been managed in a Waste Pile? If yes, then note. Go to the next section.	Y/N	

General Comments:

9.94-20

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

Asbestos Screening Checklist

Does this facility contain ACM? <input type="checkbox"/>	Y/N	If yes, conduct the following survey.
--	-----	---------------------------------------

Asbestos Checklist

Note: Routinely, the asbestos standard for ACM in schools has been applied to facilities for purpose of cleanup. In addition to AEHERA, there are additional standards in the NESHAPS that may be of importance.

Regulatory Guideline	Question	Response	Comments
ADAPTED FROM TSCA ACM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos? If no for this building or area note this conclusion in the comment section.	Y/N	<i>BLANK</i>
	Is there any evidence of friable asbestos?	Y/N	
	Is the asbestos removal properly managed? (See questions listed below)	Y/N	
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACM during the removal.	Y/N	
40 CFR 61.152(b) (1)	ACM is treated with water in accordance with 40 CFR 152(b)?	Y/N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y/N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y/N	

9.94-21

Environmental Appraisal Checklist

Building Name: .

Appraisers:

Date:

Toxic Substances and Control Act (TSCA) PCB's Screening Checklist

Does this facility potentially contain any PCB's or PCB contaminated equipment?	Y <input checked="" type="radio"/> N	If yes, are transformers labeled (Blue or Yellow stickers)? If yes, conduct the following survey.
---	--------------------------------------	--

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ? If the answer is no, note . If the answer is yes, proceed with next section.	Y / N	BLANK
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated? If no, note and stop here. If yes, note the location of the management unit, and the method of management, and proceed.	Y / N	
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days? If yes, are auditable records maintained.	Y / N	
	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater? Are they visually inspected quarterly? If yes, are auditable records maintained?	Y / N	

9.94-22

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.30 (a) 1,viii	Are all combustible materials (i.e., paints, solvents, plastics, paper, sawn wood, etc.) cleared from areas containing PCB transformers to a distance of five meters?	Y / N	BLANK
40 CFR 761.65 (b) (8)	Are all PCB articles and containers labeled with the date they were placed in storage?	Y / N	
	Are labeled PCB articles and containers stored so that the labels can be referenced?	Y / N	
40 CFR 761.65 (a)	Are all PCB's and PCB contaminated items at concentrations above 50 PPM, that are stored for disposal, stored no longer than one year from the date they were placed in storage?	Y / N	
40 CFR 761.62 (b) (1) (i)	Do all PCB storage areas have an adequate roof and walls to prevent rainwater from reaching the stored items?	Y / N	
40 CFR 761.62 (b) (1) (iv)	Are storage area floors curbed and constructed of continuous smooth and impervious materials?	Y / N	
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y / N	
40 CFR 761.62 (b) (1) (iii)	No drains are allowed in storage areas. Are there drains in the storage areas?	Y / N	

9.94-23

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

TSCA Checklist

9.94-24

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitors and PCB-containing electrical equipment are allowed to be stored outside of PCB storage areas, on pallets if stored outside, with containment for 10 percent of the volume of the equipment. Do all PCB's stored in this configuration conform with this requirement?	Y / N	
40 CFR 761.45 and .65	Are all PCB storage areas marked with a large PCB mark as described in 40 CFR 761.45 (a)?	Y / N	
40 CFR 761.65 (c) (5)	Have all leaking PCB articles and containers been transferred to non-leaking containers?	Y / N	
40 CFR 761.65 (c) (6)	Do all PCB storage containers for the storage of liquid and non-liquid PCB's comply with DOT shipping container specifications?	Y / N	

BLANK

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	Y/N	If yes, conduct the following survey.
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Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW? If the answer is no, note. If the answer is yes, proceed with next section.	Y/N <i>BLANK</i>	
DOE Order 5820.2A Chapter III.	Are any of the materials noted by inspection LLW? If no, The audit would stop here, because there are no LLW. If yes, note the location of the management unit, and the method of management, and proceed with the section below.	Y/N	
DOE Order 5820.2A Chapter III, 3.a.	Have the storage configurations in use in this area been taken into account for keeping external exposures to the general public below 25 mrem/yr?	Y/N	
	Is the waste stored in a configuration that protects ground-water resources?	Y/N	
DOE Order 5820.2A Chapter III, 3.b.	Has monitoring been conducted in this area in accordance with DOE Order 5820.2A in order to evaluate the area against the performance standard?	Y/N	
	Based on field data, does the monitoring conducted in this area conform to the performance standard?	Y/N	

9.94-25

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Low-Level Waste and Transuranic Waste Checklist

9.94-26

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A Chapter III, 3.d.	Based on field data, is the characterization of the materials in this area sufficient to assure proper segregation to assure proper segregation, treatment, storage, and disposal?	Y/N	BLANK
	Based on field data does the characterization as documented at the time of generation of the waste ensure that the actual physical and chemical characteristics, and major radionuclide content of this material are recorded and known at all stages of the waste management process?	Y/N	
	Do characterization data include the following:		
	Physical and chemical characteristics of the waste?	Y/N	
	Volume of the waste (including solidification and absorbent material)?	Y/N	
	Weight of the waste (including solidification and absorbent material)?	Y/N	
	Major radionuclides and their concentrations?	Y/N	
	Packaging date, package weight, external volume?	Y/N	
	How were the concentration of radionuclides determined? Direct methods?	_____ _____	
	How were the concentrations of radionuclides determined? Indirect methods?	_____ _____	
DOE Order 5820.2A Chapter III, 3.h	Is the storage configuration in long term storage sufficient to meet the performance standard?	Y/N	
	Are records maintained at the facility enabling this waste to be traced from its origin?	Y/N	

Environmental Appraisal Checklist

Building Name: 37

Appraisers: TEAM 4

Date: 2/5/96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	<p>Can any waste generated in, or from this building be characterized either through process knowledge or by analyses to determine if it is TRU waste?</p> <p>If no, note and stop.</p> <p>If yes, proceed with the next section.</p>	Y / N	BLANK
	<p>Are any of the materials noted as being TRU waste during an inspection?</p> <p>If no, note and stop.</p> <p>If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.</p>	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	<p>Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste?</p> <p>(Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)</p>	Y / N	
	<p>Did the determination of TRU radionuclide concentration include the mass of the container, including shielding? These should be included in calculating the specific activity of the waste.</p>	Y / N	

9.94-27

Environmental Appraisal Checklist

Building Name: _____

Appraisers: _____

Date: _____

Low-Level Waste and Transuranic Waste Checklist

9.94-28

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A, Chapter II, 3.b	Has the TRU waste been assayed or otherwise evaluated to determine its radioactive content prior to storage?	Y/N	<i>BLANK</i>
	Has the TRU waste been characterized or otherwise evaluated to determine if hazardous waste is present?	Y/N	
	Has classified TRU waste been treated to destroy the classified characteristics?	Y/N	
DOE Order 5820.2A, Chapter II 3.d	Has all newly generated TRU waste been packaged in non-combustible packaging that meets DOT requirements?	Y/N	
	Have all Type A TRU waste packages been equipped with a method to prevent pressure buildup?	Y/N	
	Have all TRU packages been marked, labeled and sealed in accordance with 40 CFR 261 Subpart C and 49 CFR 172 Subparts D, E and 49 CFR 173 Subpart I?	Y/N	



Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A, Chapter II 3.e	Has the TRU waste been segregated in manner that will not permit commingling of TRU waste with LLW or high-level waste?	Y/N	BLANK
	Has the TRU waste been protected from unauthorized access?	Y/N	
	Has the TRU waste been monitored periodically to ensure that it is not releasing its radioactive and/or hazardous constituents?	Y/N	
	Has this TRU waste storage area been designed, constructed, maintained, and operated to minimize the possibility of fire, explosion, or accidental release of its radioactive and/or hazardous constituents?	Y/N	
	Does the facility have a contingency plan designed to minimize the adverse impacts of fire, explosion, or accidental release of its radioactive and/or hazardous constituents?	Y/N	

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Waste Minimization/Pollution Prevention Activities Screening Checklist *

Does this facility generate waste or use chemicals?

Y (N)

If yes, conduct the following survey.

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y / N	
	Are there solvent wastes?	Y / N	
	Is vehicle maintenance performed?	Y / N	
	Are oils used ?	Y / N	
	Are these corrosive wastes?	Y / N	
	Are there sludges?	Y / N	
	Are there halogenated organic (nonsolvent) wastes?	Y / N	
	Are metals recovered from wastewater?	Y / N	
	Is waste sludge generated?	Y / N	
	Are any waste minimization practices used that reduce the generation of sludge?	Y / N	
	Ion exchange process?	Y / N	
	Lead in gasoline lowered to reduce tank sludge toxicity?	Y / N	
	Storage tank agitators installed?	Y / N	
	Corrosive resistant materials used?	Y / N	
	Prevention of crude oil oxidation ?	Y / N	
	Drying?	Y / N	

* All chemicals w/ exception of limited janitorial supplies have been purchased from reputable sources

9.94-30

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
<u>HALOGENATED ORGANIC (NONSOLVENT) WASTES</u>			
	Are halogenated organic wastes used as fuel in cement kilns?	Y/N	<i>BLANK</i>
	Are baghouse filters used to collect pesticides and pesticide intermediates?	Y/N	
	Are solid wastes generated from the collection of baghouse dust?	Y/N	
	Wet instead of dry grinding used?	Y/N	
	The output spray dried?	Y/N	
	Has baghouse emptying and recycling of baghouse fines been scheduled?	Y/N	
	Have operations been evaluated to improve procedures such as handling, storage and spill prevention for increased efficiency?	Y/N	
<u>METAL WASTES</u>			
	Are any technologies for the recovering of metals from waste rinsewater used?	Y/N	
	Evaporation of waste rinsewater?	Y/N	
	Reverse osmosis?	Y/N	
	Ion exchange?	Y/N	
	Electrolysis?	Y/N	
	Agglomeration?	Y/N	
<u>CORROSIVE WASTES</u>			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y/N	

9.94-31

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are ion exchange resins used to remove heavy metals and cyanides from acid and base solutions?	Y / N	<i>BLANK</i>
	Is crystallization used to remove corrosives from solution by cooling?	Y / N	
	Is the process of evaporation of liquid wastes by heating used to leave behind a more concentrated solution?	Y / N	
<u>CYANIDE AND REACTIVE WASTES</u>			
	Has non-cyanide or low concentration of cyanide process replaced zinc cyanide bath ?	Y / N	
	Are any of these processes used to recycle cyanide wastes?	Y / N	
	Refrigeration/crystallization?	Y / N	
	Evaporation?	Y / N	
	Ion exchange?	Y / N	
	Membrane separation which includes reverse osmosis or electrodialysis?	Y / N	
<u>VEHICLE MAINTENANCE</u>			
	How are auto parts cleaned?	Y / N	
	Solvent sink?	Y / N	
	Solvent dunk bucket?	Y / N	
	Solvent dip tank?	Y / N	
	Are parts cleaning solvents used for anything else besides cleaning parts?	Y / N	
	Are spills reduced by locating sinks or dunk buckets near auto service bays?	Y / N	

9.94-32

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are cleaned parts drained on the sink to minimize solvent spills?	Y / N	
	Are drip tanks used to capture losses?	Y / N	
	Is a solvent sink used for mineral solvents rather than a dunk bucket or dip tank?	Y / N	
	Does a waste hauler collect solvent waste for recycling or treatment?	Y / N	
<u>OILS</u>			
	What kind of oils are used?		
	Hydraulic oil?	Y / N	
	Transformer oil?	Y / N	
	Metal working fluids?	Y / N	
	Spent lubricating oils?	Y / N	
	Can the process be modified or changed to use water-based fluids?	Y / N	
	Are these good housekeeping and operation practices used to minimize oil waste production?		
	Use oils not contaminated with other liquids?	Y / N	
	Oil spills prevented?	Y / N	
	Drip pans installed?	Y / N	
	Oil soaked rags laundered?	Y / N	
	Rags and absorbants used to their limit?	Y / N	

BLANK

9.94-33

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are these treatment techniques used to promote separation of oil/water wastes?		
	Reclaiming process to remove water and solvents by heat?	Y/N	<i>BLANK</i>
	Gravity setting?	Y/N	
	Screening?	Y/N	
	Centrifugation?	Y/N	
	Filtration?	Y/N	
<u>SOLVENT WASTES</u>			
	Has there been an attempt to reduce volume or toxicity by:		
	Eliminating solvents?	Y/N	
	Reducing the use of solvents?	Y/N	
	Reducing the loss of solvents?	Y/N	
	Increasing recyclability?	Y/N	
	Are solvents segregated?	Y/N	
	Are waste solvents free from water and garbage?	Y/N	
	Are recycled solvent containers labeled as such?	Y/N	
	Are containers kept closed?	Y/N	
	Free and sheltered from the elements?	Y/N	
	Are solvent tanks kept as free from contaminations as possible so that the waste can be recycled?	Y/N	
	Is a method used to minimize the use of new materials such as a countercurrent process?	Y/N	

Environmental Appraisal Checklist

Building Name: 87

Appraisers: TEAM 4

Date: 2/5/96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	If there is a recycling program, what technique is used?	Y/N	<i>BLANK</i>
	Distillation?	Y/N	
	Solids removal?	Y/N	
	Dispersion breaking?	Y/N	
	Dissolved and emulsified organics recovery?	Y/N	
	Are any of these housekeeping procedures used to minimize the production of solvent wastes?		
	Separators cleaned and checked?	Y/N	
	Parts not allowed to enter the degreaser while wet?	Y/N	
	Sludge from the bottom of the tank not allowed to accumulate?	Y/N	
	Lids kept on tanks?	Y/N	
	Freeboard space on tanks increased?	Y/N	
	Are better operating practices used to reduce waste?	Y/N	
	How long is solvent waste stored and where?	_____ _____	

9.94-35

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Environmental Appraisal of the Mound Plant

99462 Building Manager's Questionnaire

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Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: 3821 Date: 12-07-95
Alternate: K. ... Phone: 3851

1. What are the access requirements (training, clearance, etc.)?

South of window 137: Previously, training on building LCO's and other aspects of building operations was required.

2. What protective equipment is required to enter the building?

Each room is posted with requirements. Operating areas require safety glasses and safety shoes.

3. Are there any restricted areas? Yes No
Where are they?

4. Provide a physical description of the building.

This one-story, reinforced concrete structure with BUM roof (metal and coal tar) contains 38,882 ft². HVAC systems are central steam and chilled water. The building contains three test cells, environmental chambers, and office and other support space. Building is not contaminated with any radioactive or energetic materials. Bldg has
A FIRE DELUGE SYSTEM. BUILT in 1987 ?

Source: Mound Facility Physical Characterization, 12-1-93

5. Provide a drawing of the building.

Attached

6. What is the current building use?

The building ^{was} is used for destructive testing of explosives and the fabrication of electronic test systems.

Source: Mound Buildings, 5-9-95

7. What is the history of building use other than that described in #6?

Source: Mound Buildings, 5-9-95

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

8. What are ongoing operations or processes? What are the raw materials and waste streams from each process? Who is the best contact for each process?

Process(es) Housed: Testing of explosive components *

How Wastes Are Generated:

No explosive powders are permitted in this building. Only explosive components are tested. Exhaust from the test chambers is allowed to expand into an underground compartment and is filtered before being released to the atmosphere. The filters in which combustion products are trapped are sent to the onsite burn area for disposal. Components that do not detonate are put in explosive waste containers (different from the containers used for filters) and sent to the burn area.

High-speed cameras are used to photograph some of the tests of explosive components. ~~The film is processed in Building 87. Developer and fixer used in the film processor are collected in plastic drums which are picked up by Waste Management.~~

Test equipment fabrication
~~In the electrical testing area, copper is etched in baths of xylene and ferric chloride. The xylene is reused and not discarded as waste. The ferric chloride bath is changed infrequently. When a change is necessary, the ferric chloride is put in a waste can for pickup by Waste Management.~~

~~The only other solvent commonly used in Building 87 is ethyl alcohol which is used to wipe parts clean. The alcohol evaporates, and there is no waste.~~

All photo processing has been terminated

Contact:
Phone #:

Source: Characterization of Mound's Hazardous, Radioactive, and Mixed Waste, (8-15-90).

* The only active portion of the building is Test Cell k being used under a ~~other~~ user agreement

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

9. In the last six months, have any modifications been made to the building or to processes in the building? Yes No

10. Does the building have air emission sources? ~~No~~ YES *

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
Component Testing	127		Y N	See Spreadsheets				
Component Testing	126		Y N	See Spreadsheets				
Component Testing	130 130 129		Y N	See Spreadsheets				
Component Testing	143 143 139		Y N	See Spreadsheets				
Component Testing	153 153 152		Y	See Spreadsheets				

Source: Mound Air Emissions Database 11/30/95

ROOMS

129, 139, 152 HAVE FUME HOODS ALL LABELED INACTIVE

(152 is part of the user facility)

* 153 is part of the user facility

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

11. Describe air pollution control equipment used to reduce emissions for each source. None Listed

Process Source	Emissions	Control Equipment	Functioning
<i>Test Cells</i>	<i>Evaporators of</i>	<i>Filter banks</i>	<i>(Y) / N</i>
	<i>solvent</i>		<i>Y / N</i>
			<i>Y / N</i>
			<i>Y / N</i>
			<i>Y / N</i>

Source: Air Permits 2/4/95

12. For existing permits are emissions monitored? At what frequency? Where are the records maintained? None Listed

Process Source	Permit	Log	Permit Conditions & Frequency of Monitoring
		<i>Y / N</i>	

Source: Air Permits 2/4/95

13. Does the building have domestic water service? Yes No
 Is there bottled water? Yes No

14. Does the building discharge to the storm sewer? Yes No
 Where? *see building drawings*

15. Does the building discharge to the sanitary sewer? Yes No
 Where? *see building drawings*

16. Has an asbestos survey been conducted? Yes
 What are the results? NO

Source: Technical Manual MD-10391, Issue 3 Asbestos Program Manual 9/6/95

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? No

Source: PCB ANNUAL DOCUMENT LOG

18. Has the building been identified as containing PCBs? No

Source: PCB ANNUAL DOCUMENT LOG

19. What chemicals are used or stored inside or outside of the building? Include compressed gasses not in large tanks.

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

Building Manager's Questionnaire

Building Name: 87 : Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

20. Has there been a reported spill, leak, or other release of any chemical? Yes No
 What, how much, and what clean-up measures were followed?

Chemical	Amount	Clean-up Measures
"buna" (ethylene glycol)	see G. Allison's report	

Source: _____

21. Where do waste chemicals go?

~~All waste chemicals are picked up by Waste Management.~~ No waste chemical generated

22. What janitorial supplies are stored inside or outside of the building?

JANITORIAL CLOSET

23. Where do excess janitorial supplies go?

JANITORIAL CLOSET

Source: _____

24. Are pesticides or herbicides stored or used in or around the building? Yes No

Chemical	Amount	Chemical	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

25. Does the building contain active or inactive above ground storage tanks? Yes No
 For each tank, list the content, quantity, last inspection, registration number.

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
	nitrogen	3000 gal		Y/N	
7782-37-9	nitrogen	03C		Y/N	outside
				Y/N	

Source: Emergency and Hazardous Chemical Inventory Form - Chemical Storage Tanks on EGG Mound Site Owned and Maintained by Outside Contractors 8/8/94

26. Is there a sump or pit or underground tank in or around the building?
 Yes No Unknown
 Is it double-walled? What does it contain? How many days per year is it filled?
 Is there an emergency overflow tank? Have there been previous overflows?

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
<u>Y(N)</u>	<u>byproducts</u>		Y/N	Y/N

Source: detonation

27. Does the building generate, store, or dispose of hazardous waste? Yes No

Materials	Amount
ALUMINUM FLUOROSILICATE	0.9
DOW CORNING FOUR COMPOUND	0.1
FERRIC CHLORIDE	48.7
KESTER SOLDERING FLUX 1544	0.9
KODAK DEVELOPER PART A	0.3
KODAK DEVELOPER PART B	1.0
KODAK DEVELOPER STARTER	7.6
KODAK PHOTO FLO 200	1.3
MERCURY RELAY CONTACTS	1.3
NH5 HARDNER SOLUTION	1.4
NITRIC ACID	0.9
PHOTO WASTE	130.1
PHOTO WASTE	308.8
PHOTO WASTE	311.3
PHOTO WASTE	316.0
PHOTO WASTE	291.6
PHOTO WASTE	173.7

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

*

Materials	Amount
PHOTO WASTE, SAMPLE 93-486	1.3
PHOTO WASTE SAMPLE, 93-486	1.7
SILVER PAINT	2.5
THERMOMETERS, BROKEN	0.2
THROAT SEAL	.07
TRICHLORO ETHYLENE	5.4

Source: Characterization of Mounds Hazardous, Radioactive, and
Mixed Wastes 08/15/90

All hazardous waste has been removed and all operations in the facility have been terminated with the exception of Test cell K (user facility)

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.? Yes No

29. Is waste material stored in or around the building for more than 90 days? Yes No

30. Has the building been identified as a 90-day waste accumulation area? Yes No

31. Has any area in the building been identified as a satellite accumulation area? Yes No

32. Is mixed waste generated, stored, or disposed of from the building? Yes No
 Where are logs found?

Process	Waste	Stored	Disposed	Logs
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N

Source: _____

Building Manager's Questionnaire

Building Name: 87. Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

33. Is TRU radioactive waste generated, stored, or disposed of from the building?
 Yes No
 Where are logs found?

Process	Waste	Stored	Disposed	Logs
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N

Source: _____

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

34. Is low-level radioactive waste generated, stored, or disposed of from the building? Yes **No**
 Where are logs found?

Process	Waste	Stored	Disposed	Logs
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N

Source: _____

35. Identify all administrative orders, temporary or permanent injunctions, civil administrative penalties, or criminal activities issued against the building.

None.

Building Manager's Questionnaire

Building Name: 87 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

36. Is there a waste minimization program in the building?
Discuss your ideas about how to minimize waste.

Yes

No

37. Has a pollution prevention program been developed for the building? Yes

No

Environmental Appraisal of the Mound Plant

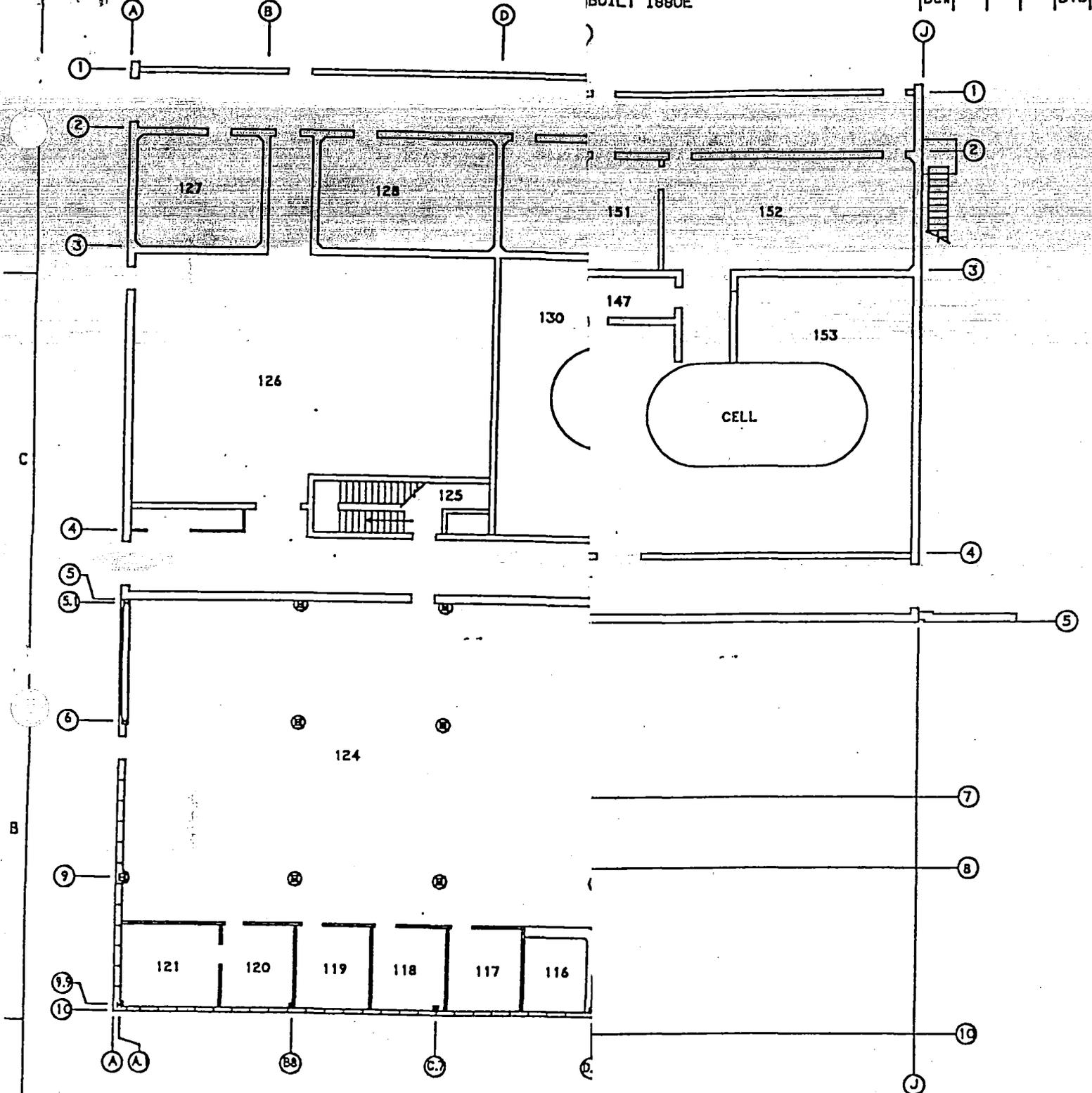
942616 Location of Building 7

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Environmental Appraisal of the Mound Plant

99464 Floor Plans for Building 87

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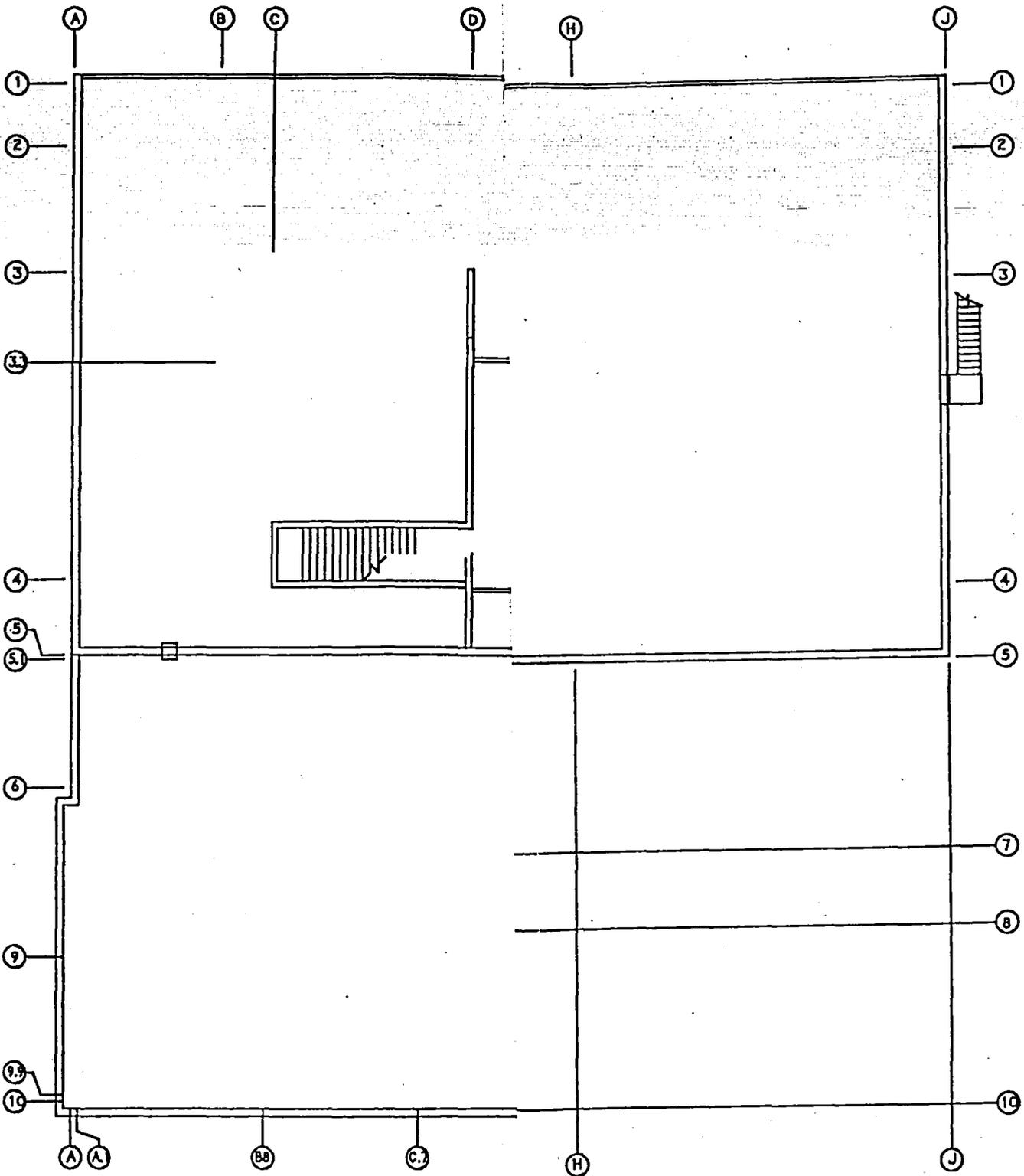


BLDG #87
FIRST FLOOR
BLDG CODE:3087

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
<input type="checkbox"/> TRUEBOC <input type="checkbox"/> TEROC <input type="checkbox"/> EBOC EBP: _____ FOR: _____	
TRUEBOC _____	
TEROC _____	
EBOC _____	

ET	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION
UE	0	0					BLDG #87	
CLASSIFICATION							FLOOR PLANS	
CLASSIFICATION							1122 DRAWING NUMBER	JOB NUMBER
UCN							D FSD911279	12335
TYPE SFP			FROM BLDG #87		CAGE 14865	SCALE AS NOTED	SHEET 1 OF 2	
TUB MD-REL-12/12/91					ORIGIN MD-BR3-V3.0			

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**BLDG #87
SECOND FLOOR
BLDG CODE:308**



NO PUBLIC DISSEMINATION

UNCLASSIFIED CONTROLLED NUCLEAR
SUBJECT TO SECTION 148 OF THE
ATOMIC ENERGY ACT OF 1954, AS AMENDED
FEDERAL APPROVAL BY THE DEPARTMENT
OF ENERGY AND ENVIRONMENTAL PROTECTION
FOR RELEASE IS REQUIRED.

DRAWING NUMBER		JOB NO
FSD911279		123
DRAWING CLASSIFICATION		
UCNI		
SIZE	CASEC 14865	SCALE AS NO
D	ISSUE B	SHEET 2
STATUS MD-REL-12/12/91		

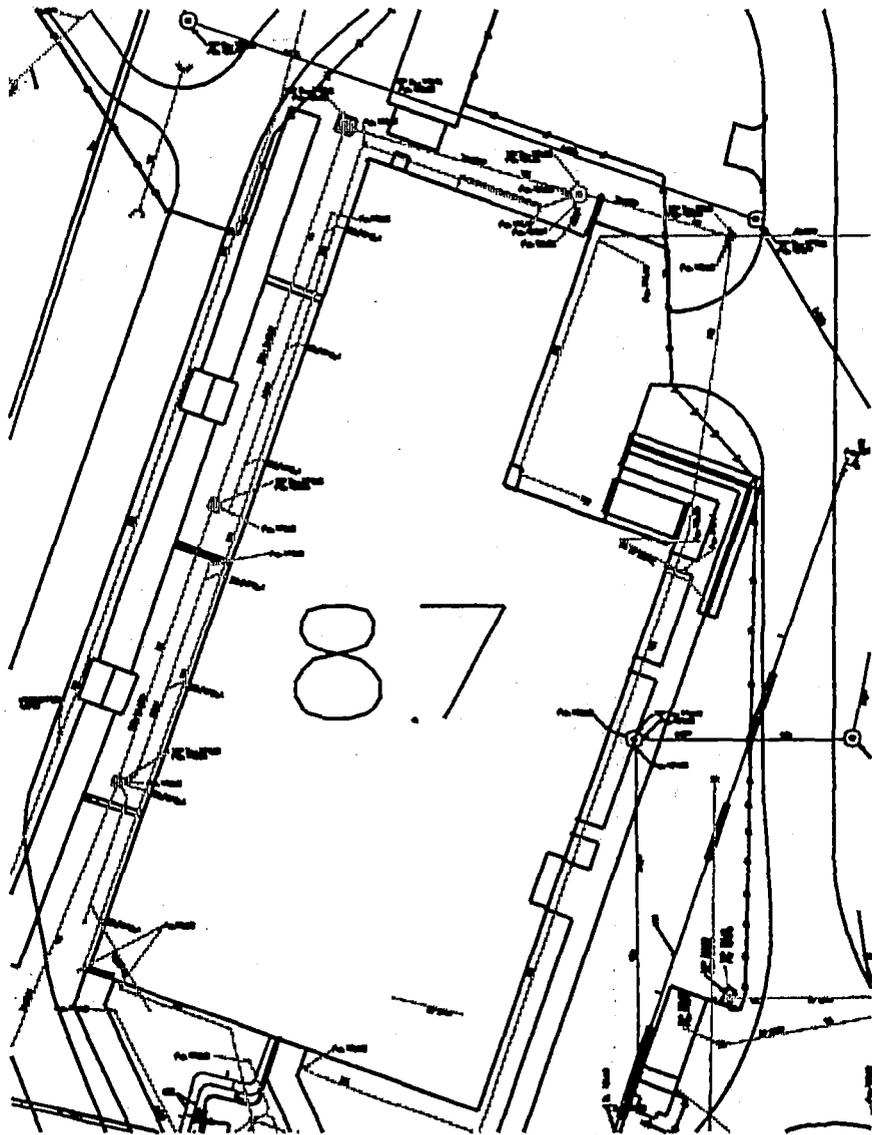
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Environmental Appraisal of the Mound Plant

99465 Underground Utility Lines

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9.94-63



- FIRE
- POTABLE
- RAIN
- SANITARY
- STORM
- RADIOLOGICAL

UNCLASSIFIED

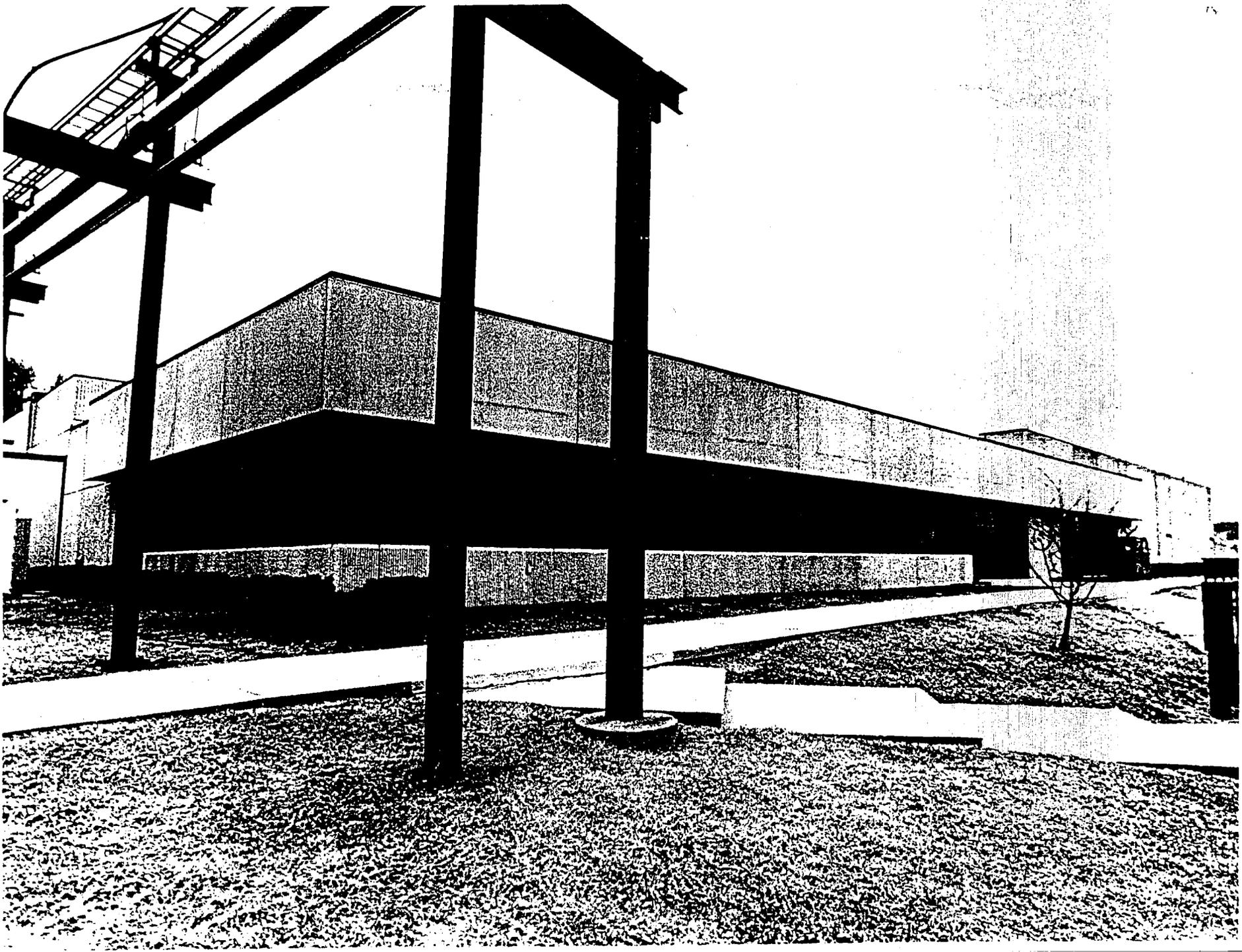
E.G. & G. - MOUND
UNDERGROUND WATER & WASTE LINES
BLDG. 87
DATE: 2/23/96

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Environmental Appraisal of the Mound Plant

99466 Photographs

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Mound Plant Building 87

9.94-67

HOK/K

PHASE I

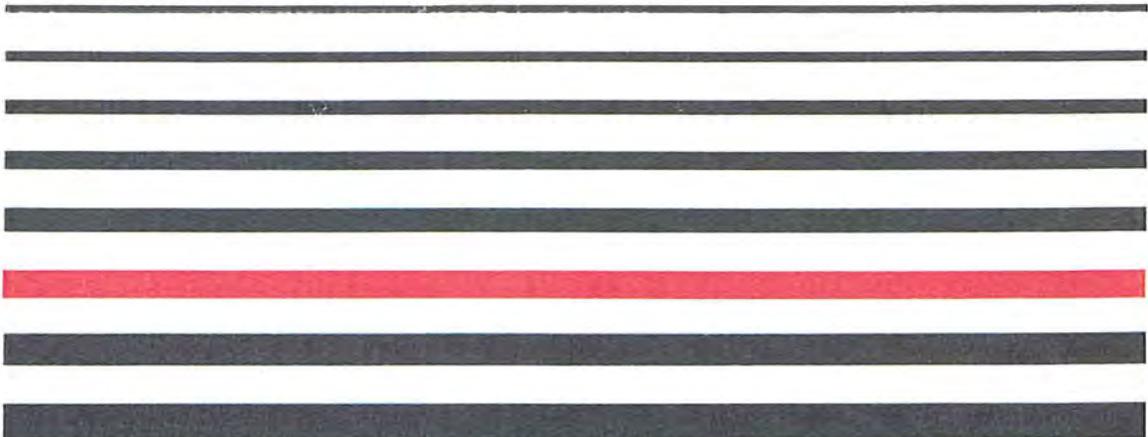
ENVIRONMENTAL SITE ASSESSMENT

OF

DOE MOUND BUILDING 87

DOE MOUND

MIAMISBURG, OHIO 45343-3020



7.0 FINDINGS AND CONCLUSIONS

7.1 HOK/K Industrial, Inc. has performed a Phase I Environmental Site Assessment of the DOE Mound Building 87 located at DOE Mound in Miamisburg, Ohio. Any exceptions to, or deletions from, our standard procedures are described in Section 2.3 of this report.

This assessment has revealed the following evidence of Recognized Environmental Conditions:

- ◆ Two 55-gallon drums marked as antifreeze and coolant were observed on the concrete pad at the northeast corner of the grassy courtyard on the east side of Building 87. The concrete pad is just outside an entrance door to Building 3. One of the drums' fill holes was open. Both drums seemed to have some fluid in them. The potential exists for these drums to be knocked over and to spill their contents on the gravelly, grassy surface of the courtyard. The drums should be removed and disposed by Mound Waste Management or by the occupants of Building 3 (Star City).
- ◆ A small dust collection system was observed in Room 128. The warning on the collection drum stated that it may contain explosives. The drum should be removed and disposed appropriately by Mound Waste Management.
- ◆ A self-contained photo development machine is located in Room 150, the L Cell dark room. The photochemical tanks at the rear of the machine may still contain chemicals. The L Cell suite is still in use, but Mound Waste Management staff should verify that the photo development machine is still being used, and if not, remove and dispose the photochemicals.
- ◆ A black oily stain was observed at the base of the middle transformer unit of the electrical substation at the northeast corner of the site building. Although the transformer label states that these units do not contain PCBs, the potential exists for rainwater to wash the oil to the surrounding soil. The transformer and concrete pad should be cleaned.

Various potential release sites (PRSs) were recognized in the Building 87 vicinity by DOE/EG&G through the FAA/ER combined program (refer to Section 4.1.2). However, DOE/EG&G have determined that none of these PRSs require further remedial action, due either to historical cleanup or subsequent analytical confirmation that contamination above regulatory criteria does not exist. Therefore, we have not included any of these PRSs as RECs in our findings.

7.2 HOK/K Industrial, Inc. also has the following recommendations for the site:

- ◆ The asbestos-containing items present in Room 126 of Building 87 should be removed in compliance with applicable federal and state regulations.

HOK/K
Industrial

October 25, 1996

Mr. Sam Cheng
United States Department of Energy
Miamisburg Area Office
P.O. Box 3020
Miamisburg, Ohio 45343-3020

Re: Phase I Environmental Site Assessment
DOE Mound, Building 87
Mound Road
Miamisburg, Ohio 45343-3020
Job #: H95234R

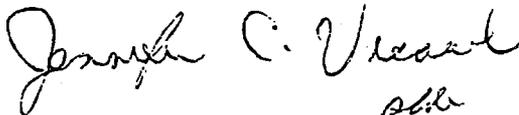
Dear Mr. Cheng:

HOK/K Industrial, Inc. has completed a Phase I Environmental Site Assessment of the Department of Energy Mound Building 87, located at DOE Mound in Miamisburg, Ohio. Our investigation included an on-site inspection; a review of United States Department of Energy environmental reports and building prints; examination of historical aerial photographs and maps; a review of federal and state regulatory agency records; and personal interviews. A detailed report of the investigation is enclosed.

We understand that DOE Miamisburg Area Office is relying upon the contents of this report to identify Recognized Environmental Conditions that relate to this property. Disclosure of the contents of this report is at your discretion, and HOK/K will not release additional copies without your written authorization. HOK/K Industrial, Inc. performed its investigation according to the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (Designation E 1527-94). The statements contained in this report are true and accurate to the best of our knowledge.

Sincerely,

HOK/K INDUSTRIAL, INC.



Jennifer C. Vicarel
Environmental Scientist

Reviewed by:



Cynthia C. Vanderhorst, AHES, LRA
Remediation Specialist

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT
OF
DOE MOUND BUILDING 87
DOE MOUND
MIAMISBURG, OHIO 45343-3020**

Prepared for:

**Mr. Sam Cheng
United States Department of Energy
Miamisburg Area Office
P.O. Box 3020
Miamisburg, Ohio 45343-3020**

Prepared by:

**HOK/K INDUSTRIAL, INC.
2490 Technical Drive
P.O. Box 3004
Miamisburg, Ohio 45343-3004**

October 25, 1996

H95234R

TABLE OF CONTENTS

LIST OF ACRONYMS

SECTION		PAGE
1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION	3
3.0	SITE DESCRIPTION	9
4.0	RECORDS REVIEW	17
5.0	SITE RECONNAISSANCE	27
6.0	NON-SCOPE CONCERNS	33
7.0	FINDINGS AND CONCLUSIONS	35
8.0	SIGNATURES OF ENVIRONMENTAL PROFESSIONALS	36
9.0	QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS	37

EXHIBITS

EXHIBIT A	DESCRIPTION OF TWELVE VOLUME SITE SCOPING REPORT
EXHIBIT B	PHOTOGRAPHS
EXHIBIT C	EDR REGULATORY DATABASE SEARCH
EXHIBIT D	COMPREHENSIVE TABULATION OF POTENTIAL RELEASE SITES
EXHIBIT E	BUILDING 87 WASTE MANAGEMENT INFORMATION: -OLD SANITARY SEWAGE DISPOSAL SYSTEM SLUDGE -CHEMICAL WASTE STORAGE AREA -PAST HAZARDOUS WASTE STORAGE AREA
EXHIBIT F	AERIAL PHOTOGRAPHS
EXHIBIT G	SANBORN MAP REQUEST RESPONSE
EXHIBIT H	BUILDING 87 TANK INFORMATION
EXHIBIT I	QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

ACRONYMS

AEA	Atomic Energy Act of 1954
AEC	Atomic Energy Commission
ACM	Asbestos-Containing Materials
AL	U.S. Department of Energy Albuquerque Operations Office
ASTM	American Society for Testing and Materials
BUSTR	Bureau of Underground Storage Tank Regulations
CAA	Clean Air Act
CEG	Conditionally Exempt Generator
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COD	Chemical Oxygen Demand
CWA	Clean Water Act
D&D	Decontamination and Decommissioning
DOE	U.S. Department of Energy
EMF	Electromagnetic Field
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration (Program)
ERDA	Energy Research and Development Administration
ERNS	Emergency Response Notification System
FFA	Federal Facility Agreement
FINDS	Facility Index System
FS	Feasibility Study
GSA	General Services Administration
HEPA	High Efficiency Particulate Air
LQG	Large Quantity Generator
LUST	Leaking Underground Storage Tank
M&O	Maintenance and Operations
MAT	Mound Applied Technologies
MCC	Monsanto Chemical Corporation
MMCIC	Miamisburg Mound Community Improvement Corporation
MRC	Monsanto Research Corporation
NPDES	National Pollutant Discharge Elimination System
OEPA	Ohio Environmental Protection Agency
PADS	PCB Activity Database
PCB	Polychlorinated Biphenyls
PRS	Potential Release Site
RAPCA	Regional Air Pollution Control Agency
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RI	Remedial Investigation
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
SHWS	State Hazardous Waste Site
SQG	Small Quantity Generator
SWMU	Solid Waste Management Unit
TRIS	Toxic Chemical Release Inventory System
TSD	Treatment, Storage, and Disposal Facility
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WHP	Well Head Protection (program)

1.0 EXECUTIVE SUMMARY

- 1.1 At the request of Mr. Sam Cheng of DOE Miamisburg Area Office, HOK/K Industrial, Inc. (HOK/K) has performed a Phase I Environmental Site Assessment of the Department of Energy Mound Building 87 located at DOE Mound in Miamisburg, Ohio. This work was performed in accordance with proposal H95-284R1, approved on December 11, 1995. HOK/K performed its investigation according to the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (Designation E 1527-94).

Our investigation included an on-site inspection; examination of historical aerial photographs and maps; a review of federal and state regulatory agency records; and personal interviews. The property inspection (site visit) took place on August 1, 1996, and was conducted by Ms. Jennifer Vicarel. They were accompanied by Mr. Mike Merker of DOE, and by Mr. Bob Ward of EG&G Mound Applied Technologies Maintenance and Operations Group (M&O). Significant exceptions to, or deletions from, our normal procedures, are described in Sections 2.3 and 2.4 of this report.

- ◆ The subject site is located at the Mound Plant, adjacent to the southern perimeter of Miamisburg, Ohio. The entire Mound facility is situated on 305 acres of land and has comprised more than 132 buildings.
- ◆ The subject property consists of the Mound Building 87 footprint and surrounding enclosure including landscaped areas, grass lawn, asphalt driveways, and concrete sidewalks and patios. Building 87 covers 38,882 square feet of space and was used for the destructive testing of explosives and the fabrication of electronic test systems in support of the U.S. weapons mission. The building contains office space, rest rooms, a cafeteria, three large explosive test cells, the electronic equipment to operate the test cells, and environmental chambers.

The building has not been used for U.S. weapons mission work for approximately three years. One test cell is currently used by outside private companies on a rental basis.

This assessment has revealed the following evidence of Recognized Environmental Conditions:

- ◆ Two 55-gallon drums marked as antifreeze and coolant were observed on the concrete pad at the northeast corner of the grassy courtyard on the east side of Building 87. The concrete pad is just outside an entrance door to Building 3. One of the drums' fill holes was open. Both drums seemed to have some fluid in them.

- ◆ A small dust collection system was observed in Room 128. The warning on the collection drum stated that it may contain explosives.
- ◆ A self-contained photo development machine is located in Room 150, the L Cell dark room. The photochemical tanks at the rear of the machine may still contain chemicals.
- ◆ A black oily stain was observed at the base of the middle transformer unit of the electrical substation at the northeast corner of the site building.

Detailed findings and recommendations are included in Section 7.0.

2.0 INTRODUCTION

2.1 Purpose

The purpose of this Phase I Environmental Site Assessment is to identify, when possible, any recognized environmental conditions (defined below) that may affect the subject property.

2.2 Special Terms and Conditions

2.2.1 Environmental Professional - A person having sufficient training and experience necessary to conduct site reconnaissance, interviews and other activities regarding a subject site according to standard practices. The environmental professional develops conclusions pertaining to recognized environmental conditions.

2.2.2 Environmental Site Assessment (ESA) - The process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to recognized environmental conditions. An environmental site assessment is both different from, and less rigorous than, an environmental audit.

2.2.3 Key Site Manager - The key site manager is the person identified by the owner of a property as having good knowledge of the uses and physical characteristics of the property. Mr. Bob Ward of EG&G M&O Staff was designated as the key site manager for this project.

2.2.4 Recognized Environmental Condition (REC) - The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicates an existing release, a likely release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

2.2.5 User - For the purposes of this report the user is designated as United States Department of Energy, Miamisburg Area Office.

2.2.6 List of Acronyms - A list of acronyms utilized in this report is presented immediately following the Table of Contents.

2.2.7 Special Conditions

The site area for this Phase I assessment consists of the DOE Mound Building 87 footprint and surrounding fenced enclosure including grass lawns, asphalt driveways, and concrete sidewalks and patios.

All of the buildings on the Mound Main Hill are aligned with Plant North, which is 25° 30'48.53" west of True North. Building 87, however, is not aligned with Plant North, but is on an axis just of few degrees west of True North. Thus, unless stated otherwise in the text, all directions in this report are referenced to True North.

At the request of the client, the Table of Contents for the Building 87 Phase I report exactly duplicates the Recommended Table of Contents from the ASTM Standard. Text discussions for certain ASTM sections have been merged to reduce redundancy, and the appropriate sections are referenced.

2.3 Limitations and Exceptions of Assessment

The Building 87 site area, as stated above, is completely covered by the building footprint and surrounding asphalt pavement. Therefore, soil conditions beneath these areas could not be observed.

One small room was locked during our site reconnaissance and could not be inspected. This room, the Single Point Pyrotechnic Preparation Room (Room 127), is currently used to store a great many hand tools and tool boxes and is locked against theft and vandalism.

2.4 Limiting Conditions and Methodology Used

2.4.1 On-Site Methodology

Environmental Professionals examined this site. This examination consisted of detailed inspection of the site and a border survey of neighboring properties.

2.4.2 Use of Previous Assessments

2.4.2.1 Building 87 is one of more than 132 buildings constructed on the original 182-acre tract of the Department of Energy Mound facility adjacent to Miamisburg, Ohio. Construction at the facility began in 1947. An additional 124-acre tract was acquired in 1981 and is still undeveloped. Numerous and overlapping maintenance programs and environmental

programs (including investigation, identification, and remediation of chemical releases) have operated at the Mound Plant over the ensuing half century. Extensive documentation of these programs has created a large library of public information concerning the Mound facility, including Building 87. HOK/K accessed these documents through the Mound Plant's CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act, or Superfund) Public Reading Room, the DOE Miamisburg Area Office CERCLA staff's document room, and from Mr. Mike Merker of DOE. A complete bibliography of the CERCLA Public Reading Room documents is available from DOE, Miamisburg Area Office.

Most of the historical Mound program data collected and reported prior to 1992 was conveniently summarized by EG&G Mound Applied Technologies, M&O contractor, in a twelve-volume Operable Unit 9 (OU 9) Site Scoping Report. To provide the reader with a regulatory framework for the reasons for producing that report, we have included the following excerpt from the Introduction of Volume 12 of the Site Scoping Report:

"The U.S. Department of Energy (DOE) Mound Plant, Miamisburg, Ohio ..., was placed on the ... CERCLA National Priorities List (NPL) on November 21, 1989 (54 Federal Register 48184). The placement of the Mound Plant on the NPL occurred as a consequence of historic disposal practices and releases of contaminants to the environment. The Mound Plant received an overall Hazard Ranking System (HRS) score of 34.61, which exceeded the threshold (28.51) for NPL listing (40 CFR 300, Appendix A). Pursuant to its NPL status, the DOE signed a CERCLA Section 120 Federal Facility Agreement (FFA) with the U.S. Environmental Protection Agency (EPA) that became effective October 11, 1990 (Administrative Docket #VW-'90-C-075). The Ohio EPA (OEPA) became a signatory to the agreement in July 1993. The terms of the FFA require that the DOE develop and implement remedial investigations (RIs) and feasibility studies (FSs) and conduct interim remedial actions in order to ensure that environmental impacts associated with past and present activities at the site are thoroughly investigated and appropriate action is taken to protect the public health, welfare, and the environment.

"The DOE Albuquerque Operations Office (AL) established the Environmental Restoration (ER) Program in 1984 to collect and assess environmental data in order to develop a conceptual site model, to assess both the nature and extent of contamination, and to identify potential exposure pathways and potential human and environmental receptors [at DOE facilities]. In order to provide the EPA with sufficient information and data gathered during these previous investigations, a multivolume scoping report, providing background information, [was] prepared. The

[OU 9] Site Scoping Report provides descriptions and summaries of the current conditions and characteristics of Mound Plant and consists of the following volumes:

1. Groundwater Data: February 1987 - July 1990 with Addendum
2. Geologic Log and Well Information Report
2. Addendum - Stratigraphic and Lithologic Logs
3. Radiological Site Survey
4. Engineering Map Series
5. Topographic Map Series
6. Photo History
7. Waste Management
8. Environmental Monitoring Data
8. Addendum - Vegetation and Foodstuff
9. Annotated Bibliography
10. Permits and Enforcement Actions
11. Spills and Response Actions
12. Site Summary Report"

2.4.2.2 Operable Unit 9 (OU9) is a designation of the Mound FFA/Environmental Restoration (ER) program for site-wide studies that provide the framework for compliance with the CERCLA RI/FS process. Investigations that are best conducted for the entire Mound Plant and its regional setting are included in OU9.

2.4.2.3 Final versions of the foregoing twelve volumes date between February 1992 and December 1994. A brief synopsis of these twelve volumes is excerpted from Volume 12, Site Summary Report, and is included herein as Exhibit A. Each volume references its own extensive bibliography.

HOK/K relied primarily on Operable Unit 9 Site Scoping Report: Volume 7 - Waste Management (February 1993), to provide a history of operations at Building 87. This information is discussed in Section 4.3.

HOK/K reviewed Operable Unit 9 Site Scoping Report: Volume 12 - Site Summary Report (September 1994), for a description of all Potential Release Sites (PRSs) at the Mound Plant, including Building 87. PRSs are informally defined potential areas of concern in which knowledge of historic or current use indicates that the site may be considered a solid waste management unit (SWMU, as defined by the Resource Conservation and Recovery Act, RCRA) or has been identified as an area with potential releases of concern. The Site Summary Report not only provides a detailed tabulation of the PRSs at the Mound, but also presents a thorough

synopsis of the chronology, authority, and application of the numerous interrelated federal and state regulatory programs in effect at the facility. A discussion of these regulatory records pertaining to the Building 87 Phase I assessment is presented in Section 4.0.

2.4.2.4 Building and construction information regarding the whole Mound facility and Building 87 in particular was culled from Mound Facility Physical Characterization (December, 1993), prepared by EG&G Mound Applied Technologies. Information from this document is incorporated into Sections 3.2 and 3.3 (Site and Vicinity Characteristics and Descriptions of Structures, Roads, and Other Improvements).

2.4.2.5 Tank information for the entire Mound facility, and Building 87 specifically, was collected from the Active Underground Storage Tank Plan, EG&G Mound (November, 1994) by Dames & Moore. These data are presented in Section 5.5.2, Underground Storage Tanks.

2.4.2.6 Section 5.7.2, Geology, of this report summarizes information from two phases of technical memoranda describing methods and results of the OU9 hydrogeologic investigations conducted by EG&G Mound Applied Technologies:

- ◆ OU9, Hydrogeologic Investigation: Bedrock Report (January 1994), and
- ◆ OU9, Hydrogeologic Investigation: Buried Valley Aquifer Report (March, 1994).

2.4.2.7 Although asbestos-containing materials (ACM) are not an ASTM-scope issue, at the client's request, HOK/K has included a discussion of ACM. Data compiled from asbestos surveys performed by PEI Associates in 1988 and Barge, Waggoner, Summer, and Cannon Inc. in 1993 were provided to HOK/K by Mr. Timothy Eilers of EG&G Mound Applied Technologies. The ACM data pertaining to Building 87 are described in Section 6.1.

2.4.2.8 As described, the whole Mound facility has been identified as an NPL site under investigation by the EPA and OEPA for radioactive and chemical contamination. Radioactive materials are not an ASTM-scope issue; however, HOK/K has reviewed the Volume 12 - Site Summary Report, which catalogues the potential release sites (including radioactive

releases) that have been identified at Mound by DOE/EG&G. Any potential radioactive release sites pertaining to the site area and detailed in the aforementioned document will be discussed in Section 4.1 of this assessment (Standard Environmental Record Sources, Federal and State).

2.4.3 Historical Information

Title and tax records were reviewed for this assessment to determine previous owners of the property. In addition, the large body of previous assessments, described in the foregoing subsection, provided the historical information as required by the ASTM Standard.

2.4.4 Records Review

Environmental Data Resources, Inc. of Southport, Connecticut, a regulatory database search company, was contracted to provide environmental regulatory information concerning the site and surrounding properties, consistent with the requirements of ASTM Standard E 1527-94. This information was reviewed by an Environmental Professional for indications of recognized environmental conditions.

Because the entire vicinity surrounding the Building 87 subject area is a Superfund NPL site, most of the detailed environmental regulatory information for Building 87 and adjacent properties (the Mound Plant) was obtained from public documents maintained in the EG&G Mound CERCLA Public Reading Room, as described in Section 2.4.2 above.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The Building 87 site of the U.S. DOE Mound Plant is located in the valley near the center of the Mound facility, which itself is situated adjacent to the south side of Miamisburg, Ohio in Sections 30 and 36 (Building 87 is in Section 36), Township 2 and Range 5 (from the Between the Miamis survey). Figure 1 shows the general location of the site. Figure 2 shows details of the site.

3.2 Site and Vicinity Characteristics

The subject site consists of the Mound Building 87 structure and surrounding grounds enclosed by a chain link security fence on the west and a decorative wrought iron fence on the north (refer to Figure 2 and Photographs 1 and 2 in Exhibit B). The security fence extends beyond Building 87 grounds to the south. In this direction, the site boundary is marked by a shallow drainage swale that runs parallel to Building 87's southern wall (Photograph 3). On the east side, two enclosed corridors lead from Building 87 to the adjacent Building 3. A small grassy courtyard is therefore formed on the east side of the site between the two corridors and the two buildings (Photograph 4).

Within the fenceline, the Building 87 site is characterized by a grass lawn on the west and south sides that extends around the southeast corner of the building to abut the southernmost corridor to Building 3 (Photographs 1 and 3). An asphalt driveway passes through the fence to the southwest corner of the site building (refer to Figure 2 and Photograph 1). Another asphalt driveway passes the fenceline at the southwest corner of the site, becoming a gravel drive for a short distance once it enters the site (see Figure 2). On the north (front) side and at the northeast corner of the site building are concrete sidewalks, landscaped beds with shrubs, and grass lawn (Photographs 2 and 5). The primary vehicle entrance to the site is at the northwest corner of Building 87, where an indentation in the building footprint provides room for a broad asphalt driveway and loading area and a concrete patio with three large transformers (see Figure 2 and Photographs 6 and 7).

The overall Mound facility is situated on 305 acres of land and has comprised more than 132 buildings having a total of nearly 1.4 million square feet of floor space (a number of buildings have been demolished over the last year). The original 182-acre site, purchased by the Manhattan Engineering District in 1946, is formed by two topographically high areas (hills) and a lower intermediate valley area. Building 87 is located in the intermediate valley, in an area that is generally known as the "Test Fire" area. The more recently-acquired 124-acre tract (1981) is generally undulating toward the southwest and is not currently developed.

The Mound Plant is bordered on the west by a Conrail Railroad line and the north-south trending Miami-Erie Canal. The northwest quadrant of the property slopes steeply (approximately 170 feet of relief) down to the Great Miami River flood plain. The northern boundary of the plant abuts an historic residential neighborhood of Miamisburg, Ohio. Mound Road marks the northern half of the eastern perimeter of the facility, then veers east away from the southern half of the eastern boundary. A golf course, the Miamisburg Mound State Memorial park, old agricultural fields, woodlots, and scattered residential properties border the Mound facility on the east. Benner Road forms the southern property line of the Mound Plant, with agricultural fields and farms occupying the lands beyond.

In the immediate vicinity of Building 87, the following adjacent buildings of the Mound facility are located:

BUILDING	SQUARE FOOTAGE	CURRENT USE	DIRECTION FROM BLDG. 87
NA	NA	Asphalt Roadways, Security Guard Shack, and Plant Drainage Ditch	North
35	2,500	Non-Destructive Testing Laboratory	Northeast
59	668	Neutron Radiography	Northeast
3	12,391	Test Fire Facility, Now Occupied by Star City	East
NA	NA	Grass Lawn, Open Fields, and Wooded Slope	Southeast and South
8	66	Magazine (in Bunker)	Southwest
5	314	Magazine (in Bunker)	Southwest
10	66	Magazine (in Bunker)	Southwest
20	303	Magazine (in Bunker)	Southwest
NA	NA	Open Fields, Asphalt Roadways, and Soil Aeration and Bioremediation Piles under Steel Canopy Structure	West
NA	NA	Asphalt Roadway, Small Woodlot, Plant Drainage Ditch	Northwest

3.3 Descriptions of Structures, Roads, and Other Improvements on the Site

Building 87 was constructed in 1987⁶ and covers 38,882 square feet of space. The building was used by EG&G for the destructive testing of explosives and the fabrication of electronic test systems in support of U.S. defense programs until approximately 1993. The building contains office space, rest rooms, a cafeteria, three explosive test cells, the electronic equipment to operate the test cells, and environmental chambers.

DOE and EG&G are currently in the process of evacuating from many Mound buildings in the expectation of releasing many of these buildings to the City of Miamisburg and the private sector. In this effort, EG&G has established a Safe Shutdown Division, whose staff enters a building where operations have terminated, clears out all miscellaneous supplies, personal belongings, trash, paper, etc.; inventories all installed equipment, office furniture, meters, and instruments for the City of Miamisburg; removes equipment for storage or auction where appropriate; cleans all surfaces of the remaining equipment or furnishings; and secures the unoccupied building. EG&G Safe Shutdown staff has completed most of this work in Building 87.

The Building 87 structure is of cement block construction with pre-cast concrete panel facade, and metal panel roof (Photographs 1, 4, 6, and 8). The rear (southern) wall of the building is also constructed of vertical metal panels, designed to blow outward in the event of an uncontrolled explosion (Photograph 3). The building is only one story, but includes a major penthouse structure over the central part of the building.

The interior of the building is finished in a variety of materials. The office area in the northeast section of the building (refer to Figure 2), including the cubicles, individual offices, conference room, and cafeteria, has carpeted floors, fabric wall coverings, and suspended ceiling panels (Photographs 9 to 11). The lobby, cafeteria kitchen, men's and women's locker/restrooms have ceramic tile floors, suspended ceiling panels, and painted plaster or wallboard over concrete block walls, except the restrooms which have ceramic tiled walls (Photographs 12 to 14). All office furnishings, installed cubicle modular units, conference table and equipment, and cafeteria tables and chairs are still in place.

The remaining rooms and corridors on the north half of the building have vinyl floor tiles, walls of both painted concrete block and painted wallboard or plaster over concrete block, and suspended ceiling panels. These rooms include a laboratory (Room 109, Photograph 15; empty except for work stations), a machine shop (Room 154, Photograph 16; with one band saw, a sink, and a fume hood), a supply room that has also been used for parts packaging (Room 102, Photograph 17; includes five technician's work tables, a parts storage unit, and various pieces of computer equipment), a former scanning electron microscope (SEM) laboratory (Room 103, Photograph 18; contains several workstations, computer equipment, tool and small parts storage), and a garage/receiving area (Room 101, Photograph 19; includes a drill press, some tools and meters).

The southern half of the building is occupied by three large identical suites pertaining to each of the three explosive test cells (Cell J, Cell K, and Cell L) in the building, plus the single point testing laboratory (refer to Figure 2). All of the rooms on the southern half of the building are equipped with copper grounding wire.

The single point testing laboratory (Room 126) has carpeted floors, painted wallboard over concrete block walls, and a high suspended panel ceiling (see Figure 2). The room is equipped with a small destructive testing cell (Photograph 20) and two environmental chambers with associated panels of computer control equipment, cameras, and meters (Photograph 21). In addition, a large quantity of portable computer hardware, cameras, meters, and other instruments are stored in several rows along the floor and on industrial shelves on the north side of the room (Photograph 22). This equipment has all been inventoried by EG&G Safe Shutdown staff.

The single point pyrotechnic preparation room was locked and not accessible during our site visit. According to Mr. Ward, the room is kept locked because is currently used for the storage of a number of expensive tool boxes filled with parts and tools.

Each of the three explosive test cell suites includes the test cell, the exterior cell chamber, a storage room, a photographic dark room, a camera room vestibule, an high explosives preparation room, and an inert preparation room (refer to Figure 2). In addition, each test cell shares a computer control room with the adjacent cell (L and K, K and J).

The above-ground destructive testing cells measure approximately 30 feet long and 15 feet wide. They are constructed of approximately one-foot thick riveted steel with fiberglass coating. They are designed to withstand the impact of a blast equivalent to that of 10,000 pounds of TNT. The cells have view ports along the side and a heavily reinforced entrance hatch accessed from the high explosives preparation rooms.

The exterior test cell chambers and control rooms are carpeted. The exterior test cell chambers also have fabric wall coverings and ceilings which reach to the metal panel roof. The exterior cell chambers are primarily equipped with approximately 10-foot long Cardin cameras used to record the explosion details inside the cells, along with some associated electrical and computer controls (Photograph 23). The primary computer control equipment for the test cells is located in the two control rooms. Each of these large rooms, finished with recessed lighting ceilings and painted plaster over concrete block walls, contains two triple-panel banks of computers and meters (Photograph 24).

The storage rooms, with vinyl floor tiles, suspended ceiling panels and painted plaster and painted concrete block walls, are lined with storage shelves holding excess circuit boards, computer equipment, meters, etc. (Photograph 25).

The photographic dark rooms (Rooms 135, 142, and 150) are equipped with workstations, a sink and a refrigerator, and are finished with black vinyl floor tiles and black vinyl wall and ceiling coverings with recessed lighting. All three dark rooms formerly housed a self-contained photographic development machine with two photochemical tanks attached to the rear of the machine. At the present time, only Room 150 still includes the development machine, which was removed from the other two dark rooms (Photograph 26 and 27).

The high explosives preparation rooms (Rooms 128, 129, 139, and 152) each contain one long workstation with sink and fume hood along the southern wall, and another long workstation down the center of the room. The walls are painted plaster on concrete block, the high ceilings are painted plaster with dropped fluorescent lighting fixtures, and the floors are vinyl tiles. Rooms 128 (single point), 129 (J Cell), and 139 (K Cell) are empty except for a few drawers containing cables, screws, and other parts. (Photograph 28). Room 152 (L Cell) is still being used by a private contractor, so various parts, tools, and samples are spread across the worktables (Photograph 29).

The inert preparation rooms (Rooms 131, 140, and 151) are finished with vinyl floor tiles, painted plaster on concrete block walls, suspended ceiling panels, and workstations installed around three sides of the rooms. Rooms 131 and 140 are predominantly empty except for a few tools and a drill press in Room 140. Room 151 is in use; thus, tools, parts, and test samples are laid out on the work counters (Photograph 30).

The southern corridor inside Building 87 is lined with a number of industrial storage cabinets. A few of these are empty, but most contain a variety of tools, parts, and excess instruments.

The southern corridor/walkway to Building 3 is filled with industrial storage cabinets on both sides of the passage (Photograph 31). Again, most of these cabinets contain inventoried parts, tools, meters, instruments, etc.

Most of the buildings at Mound, including Building 87, are predominantly heated by steam. There are two steam boilers located in the Powerhouse (Building P). The boilers generate saturated steam at 125 psig, which is distributed through above-ground pipes on elevated stanchions to the various buildings and the pressure is reduced to 30 psig for use in the buildings. The condensate is collected in the buildings in vented condensate receivers and is returned to the powerhouse for feed water to the boilers.

Many of Mound's buildings, including Building 87 are air conditioned by central chiller systems that chill and circulate an aqueous solution of 30 percent, by volume, ethylene glycol to the buildings through pipes elevated on above-ground stanchions. There are two central chiller systems: One is in the Powerhouse and one is in Building 95.

At Building 87, the above-ground steam and chiller pipes on stanchions are routed down from the Main Hill to the Test Fire area to the northeast corner of Building 87, from there along the south wall of the northern walkway to Building 3, to where the pipes enter the east side of Building 87 (Photographs 4 and 5).

All of the HVAC equipment (air handlers, condensate return machines, water heaters, etc.) at Building 87 is installed in the penthouse which occupies a long, narrow space along the center of the roof level. The electrical circuit panels and security system equipment are also located in the penthouse.

Potable water and sanitary services at Building 87 are provided by the Mound facility. The Mound Plant operates a potable water treatment plant (Building 24) that provides drinking water for the facility using groundwater produced from three on-site production wells (with a fourth well planned FY 1995-1996). The Mound facility also operates an on-site sanitary sewer treatment plant (Building 57) to manage the plant's sanitary wastewater pursuant to a National Pollutant Discharge Elimination System (NPDES) permit issued by OEPA.

3.4 Information Reported by User Regarding Environmental Liens or Specialized Knowledge or Experience

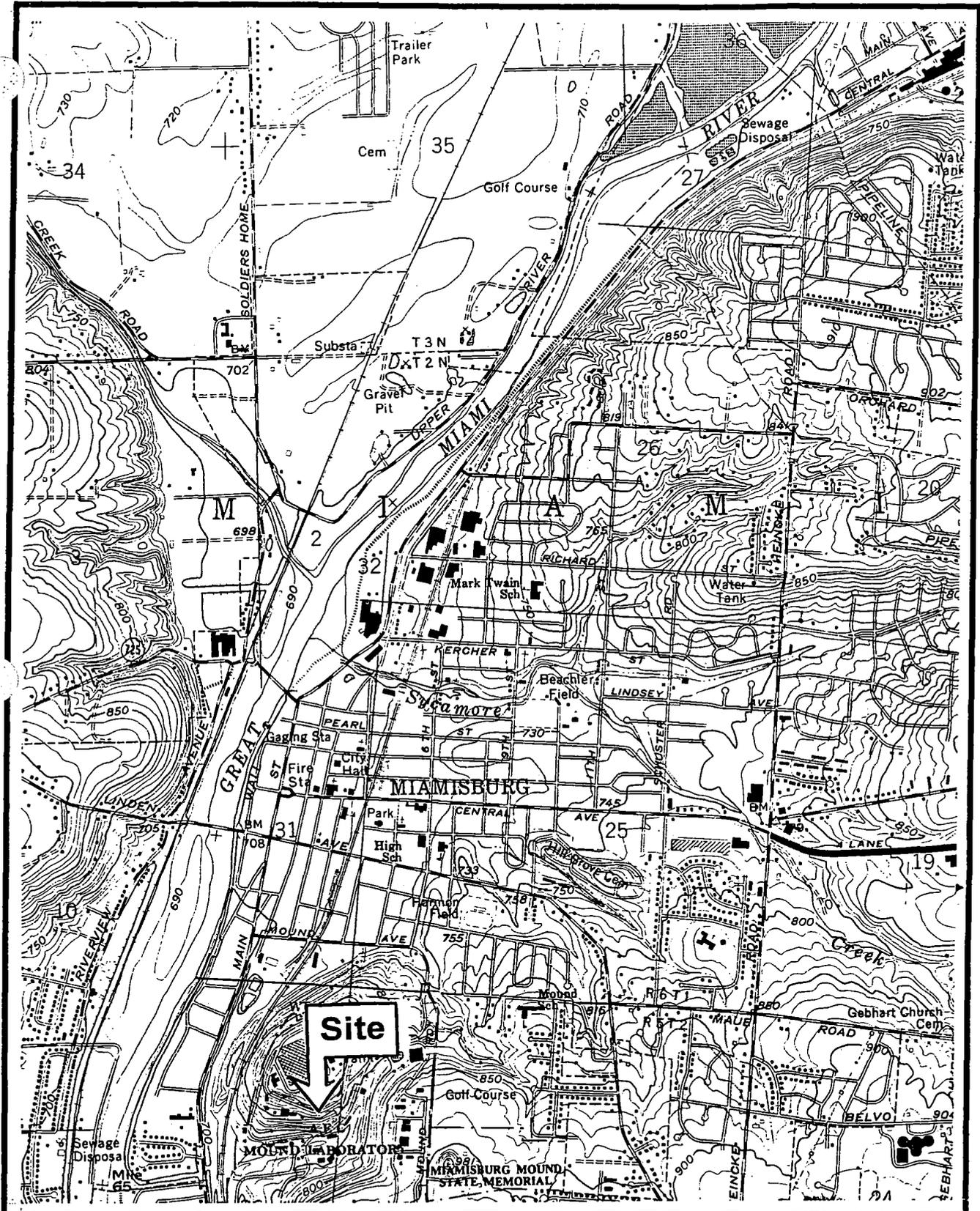
Mr. Mike Merker of DOE Miamisburg Area office was interviewed regarding site environmental liens. Mr. Merker indicated that there were no environmental liens or deed restrictions encumbering the property. Mr. Bob Ward of EG&G Mound Applied Technologies was interviewed during the site visit regarding the site history, current activities and waste disposal practices. His knowledge, and that of Mr. Merker, of recognized environmental conditions related to the current or previous use of this property is referenced and documented in the appropriate sections of this report.

3.5 Current Uses of the Property See Section 3.2.

3.6 Past Uses of the Property See Section 3.2 and Section 4.3.

3.7 Current and Past Uses of Adjoining Properties See Section 3.2.

3.8 Site Rendering, Map, or Site Plan See Figure 2.



OHIO

Approximate Scale

0 2000 4000 6000
FEET FEET FEET

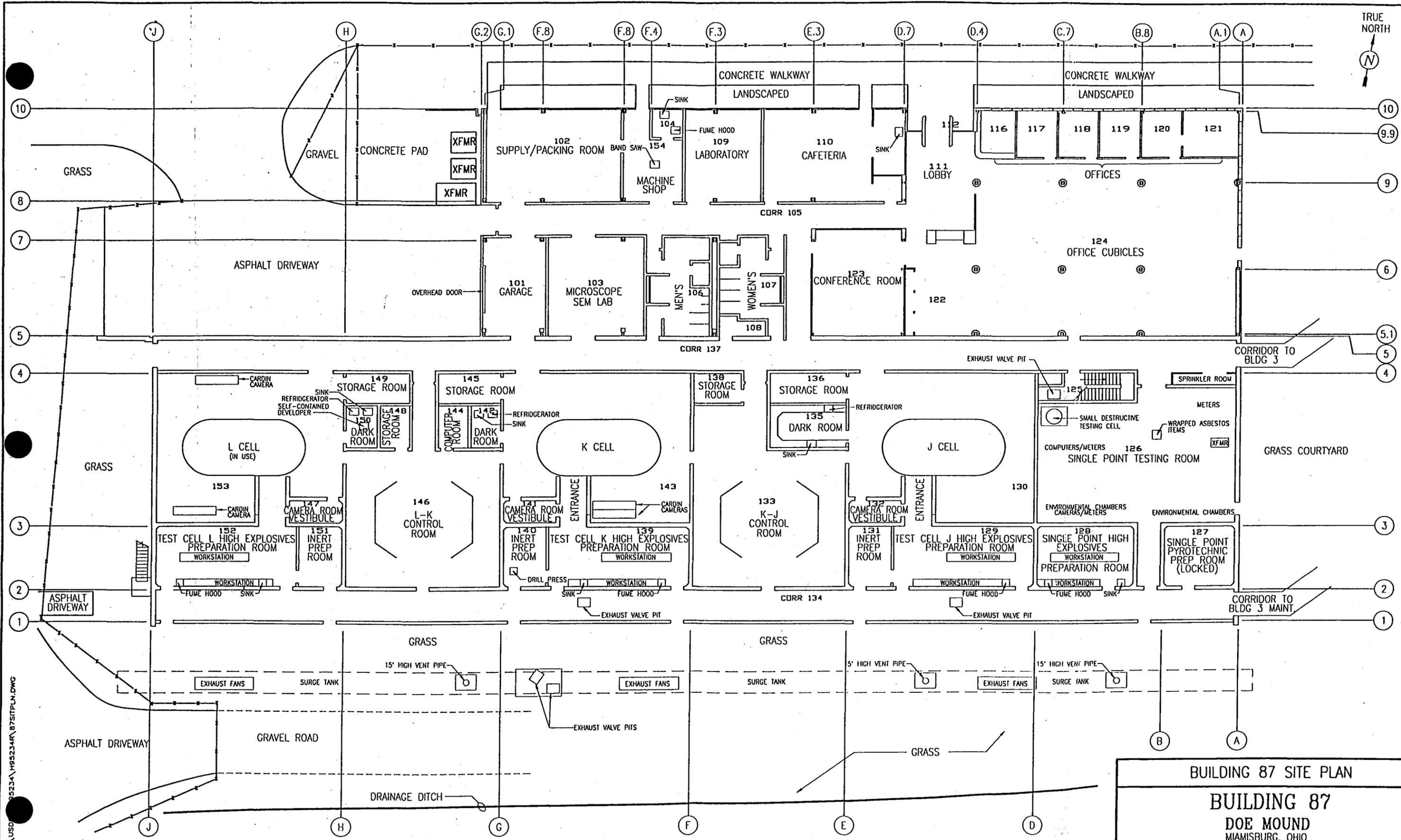
Reference: Miamisburg Quadrangle
 USGS 7.5 Minute Series (Topographic)
 1965, Photorevised 1987

Contour Interval 10 feet

Figure 1
 Building #87
 U.S. Department of Energy

HOK/K
 Industrial

Project: H95234R
 Drawn By: SRP
 Date: 8/26/86



F:\DATA\OES\USD\95234\H95234R\87SITEPLN.DWG

BUILDING 87 SITE PLAN
BUILDING 87
 DOE MOUND
 MIAMISBURG, OHIO

NOT TO SCALE

HOK/K
 Industrial

DWG. NO.:
 2490 TECHNICAL DR.
 MIAMISBURG, OHIO 45342
 TELEPHONE: 513-866-4211
Fig. 2

4.0 RECORDS REVIEW

4.1 Standard Environmental Record Sources, Federal and State

Environmental Data Resources, Inc. provided information regarding sites in the vicinity of the subject site which appear in regulatory agency summaries and databases. Sites under the jurisdiction of the following regulatory offices or programs were included in the EDR search report (provided in Exhibit C):

- ◆ Contaminated sites on the National Priorities List (NPL) which have been designated by the United States Environmental Protection Agency (EPA) as eligible for Superfund cleanup assistance;
- ◆ Sites which have been investigated or are scheduled for investigation, under authority of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA);
- ◆ Sites under investigation by the Ohio Environmental Protection Agency (OEPA) for possible hazardous waste are included in the OEPA Master Sites List. In the EDR report this list is referred to as State Hazardous Waste Sites (SHWS) records;
- ◆ Hazardous waste generator notifiers (LQG, SQG, and CEG) regulated under the Resource Conservation and Recovery Act (RCRA);
- ◆ RCRA hazardous waste treatment, storage, and disposal facilities (TSD);
- ◆ State licensed landfills;
- ◆ Leaking underground storage tanks (LUST) recorded with the Ohio Division of State Fire Marshal's Bureau of Underground Storage Tank Regulation (BUSTR);
- ◆ Underground storage tanks (UST) registered with BUSTR;
- ◆ Generators, transporters, commercial storers and/or brokers and disposers of polychlorinated biphenyls (PCBs) registered with EPA and recorded in the PCB Activity Database (PADS);
- ◆ Facilities that release toxic chemicals to the air, water, and land in reportable quantities under the Superfund Amendments and Reauthorization Act (SARA) Title III, Section 313, and which are identified in the Toxic Chemical Release Inventory System (TRIS);

- ◆ the United States Environmental Protection Agency Emergency Response Notification System's (ERNS) database of accidental releases of oil and hazardous substances.
- ◆ and "FINDS", a listing by the EPA of any site that has been reported to the agency as part of any regulatory requirement (e.g., permitting, hazardous waste generation) and does not necessarily indicate an environmental release.

There are fifteen sites within the appropriate radii (ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Sites Assessment Process Designation E1527-94), designated below as well as in the EDR Report which appears in Exhibit C.

PROPERTY NAME	ADDRESS AND PROXIMITY	STATUS
U.S. DOE Mound Plant	Mound Road Miamisburg, OH (target property)	NPL, PADS, CERCLIS, LUST, TRIS
D.J. Ceramics	611 S. Main St. Miamisburg, OH (W NW)	LUST
CG&R	901 S. Main St. Miamisburg, OH (W)	LUST
GMC Delco Products Div.	329 E. First St. Dayton (Miamisburg), OH (N NW)	RCRIS-SQG, FINDS
Dayton Public Schools	348 W. First St. Dayton (Miamisburg), OH (N NW)	RCRIS-SQG, FINDS
City of Miamisburg Pump Station	1021 S. Main St. Miamisburg, OH (W SW)	UST
Richard Church, Sr. Estate		LUST
Presto Adhesive Paper Co., Inc.	222 Mound Ave. Miamisburg, OH (N)	RCRIS-LQG, FINDS

PROPERTY NAME	ADDRESS AND PROXIMITY	STATUS
Technicote, Inc.	222 Mound Ave. Miamisburg, OH (N)	RCRIS-SQG, UST, LUST
Jack's Mobile	51 Center St. Germantown, OH (NNW)	LUST
Plocher Andrew Sons	418 E. First St. Dayton (Miamisburg), OH (N NW)	RCRIS-SQG, FINDS
Shell Oil Co.	1224 S. Main St. Dayton (Miamisburg), OH (SW)	UST
Point Store	155 S. Main St. Miamisburg, OH (N)	LUST
Miamisburg Water Treatment Plant	302 S. Riverview Miamisburg, OH (NW)	LUST
Miamisburg Well Field/ Unknown Source	302 S. Riverview Ave. Miamisburg, OH (NW)	SHWS (organics contamination of groundwater)

4.1.1 Except for the Mound Plant itself, on which rests the subject property, all of the remaining identified sites listed above are located north or west of the site. These directions place these other sites as much as 170 feet lower in elevation than the Mound Main Hill, thus they are downgradient (or downslope in terms of surface water, and probably groundwater, flow). In this position these other sites are very unlikely to adversely effect the soil or groundwater conditions at the subject site.

4.1.2 The Mound site, however, has been identified as a contaminated site on the National Priority List under CERCLA (Superfund) since 1989, as described above in the Previous Assessments section (2.4.2). The Mound site was originally listed as a consequence of historic disposal practices including use of a commercial/industrial landfill, various spills, and the use of underground storage tanks, resulting in the contamination of soils and drinking water. The original contaminants of concern were calcium cyanide, copper cyanide, plutonium and its compounds, specifically plutonium-238, and uranium and

its compounds. Following its listing as an NPL site, DOE signed a CERCLA Section 120 Federal Facilities Agreement (FFA) with EPA, effective October 11, 1990. OEPA entered into the agreement in July 1993. The FFA, and its implementation through the DOE Environmental Restoration Program, requires DOE to perform RI/FSs and conduct interim remedial actions to ameliorate the environmental impact associated with past and present activities in order to protect the public health, welfare, and the environment.

As a result of the investigations and documentation conducted to comply with the CERCLA cleanup process via the FFA/DOE ER program, DOE and its M&O contractor (EG&G Mound Applied Technologies) tabulated all the potential release sites identified under the various regulatory programs in effect at the site. Many additional contaminants of concern and types of operations were identified beyond the original NPL listing of site activities. A total of 345 PRSs have been identified and are described in the OU9 Site Scoping Report: Volume 12 - Site Summary Report, Appendix A. This table has been reproduced in Exhibit D of this report. Of these 345 PRSs, none were attributed to operations at Building 87; however, three were identified on or near the Building 87 site (refer to Figure 2 for locations):

- ◆ PRS 14 - Area C, Waste Storage Area (AKA Drum Staging Area and Chemical Waste Storage Area). This PRS describes an historical chemical storage area from which releases of volatile organic compounds are suspected, but not confirmed. The historical storage area was located 40 to 50 feet northwest of Building 87, just opposite the asphalt entrance drive to the site. The Volume 12 - Site Summary Report indicates that no further action is recommended for this PRS. Additional information on the chemical waste storage area is provided in Section 4.3.
- ◆ PRS 16 - Past Hazardous Waste Storage Area (AKA Old Building 72). This site refers to an historical hazardous waste storage area which superseded the chemical waste storage area described above, and which was built only about 50 feet south of PRS 14 and approximately 35 to 50 feet west of Building 87. The hazardous substances stored there included combustible and flammable liquids, waste oils, solvent-containing wastes, ignitable wastes, plating wastes, photo-processing wastes, polymeric wastes, and toxic wastes. The hazardous releases from this area to soil were reportedly minor and were historically remediated. No further action is recommended for this PRS, which is described in greater detail in Section 4.3.

- ◆ PRS 345 - Former Equipment Storage Area (Related to Site 16). This is an historical storage area located approximately 100 feet west of Building 87, according to the PRS Location Plan in Volume 12 - Site Summary Report. That document also indicates that the potential hazardous substances related to PRS 345 are the same as those for PRS 16. The report states that no analytical data is available to confirm any suspected contamination. The Volume 12 - Site Summary Report recommends no further action for this PRS.

In addition to the PRSs detailed in Volume 12 - Site Summary Report, DOE provided us with a revised Plate 1: PRS Location Plan from that report. The revised plan depicts an additional 58 PRSs, numbering from 346 to 403. These PRSs have not been catalogued into a convenient table, but were assigned numbers and located on Plate 1 by DOE CERCLA staff based on the findings of the Operable Unit (OU) 5 Phase I Investigation completed in June 1995. Three of these OU5 PRSs were identified in the vicinity of Building 87:

- ◆ PRS 352 - Located approximately 100 feet west of the southwest corner of Building 87.
- ◆ PRS 353 - Located approximately 20 feet out from the center point of the southern wall of Building 87.
- ◆ PRS 360 - Located halfway between PRS 14 and PRS 345, approximately 65 feet northwest of Building 87.

Although a concrete written description of these three OU5 PRSs was not readily available, discussions with DOE CERCLA staff indicated that they usually represent an area of elevated soil gas concentrations based on the results of the OU5 site-wide soil gas survey. The OU5 Phase I Investigation Report recommended no further action was necessary for the three PRSs described above.

- 4.1.3 In compliance with permit requirements under RCRA, the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), and the Clean Air Act (CAA), the Mound has applied for or has received permits for its surface water discharges, air emissions, and hazardous waste program. The Mound has submitted both a RCRA Part A and Part B Permit application and operates as a RCRA hazardous waste treatment and storage facility under interim status. Mound also maintains a NPDES surface water discharge permit with facility I.D. Number OH009857. Permits for the open burning of wastes involving explosives and other fuels have been issued by the Regional Air Pollution Control Agency (RAPCA). Other operations that produce particulate or vaporous emissions are registered with RAPCA and OEPA. The Mound also submits annual Emergency and Hazardous Chemical Inventory Forms to the

OEPA, pursuant to SARA Title III, the Emergency Planning and Community Right-to-Know Act. 1995 version of this report indicated that no chemicals are stored in quantities above regulatory thresholds.

4.1.4 DOE has legal authority derived from the Atomic Energy Act of 1954 (AEA) to conduct routine operations at Mound involving, among other things, underground tanks, equipment and other facilities. "Routine operations" include both the operation of currently active sites and the Decontamination & Decommissioning (D&D) of surplus sites. DOE has authority under the AEA to respond to any environmental contamination known or discovered for both active and inactive tanks. Because DOE has signed an FFA, it also has authority and responsibility derived from CERCLA and the FFA. The authorities of the AEA and CERCLA overlap, but CERCLA explicitly recognizes the integration of the overlapping authorities. At Mound, a D&D/ER Program agreement was established April 26, 1991, to define the soil activity responsibilities between the two programs.

4.2 Physical Setting Source(s)

See Figure 1 and Section 5.8.

4.3 Historical Use Information

A history of the site was developed to identify past uses that may have an environmental impact. HOK/K performed a review of title records at the Montgomery County Recorder's Office in Dayton, Ohio, to obtain a history of ownership. HOK/K also relied on previously published Mound documents, principally the OU 9 Site Scoping Report: Volume 7 - Waste Management (February 1993), to provide this history of ownership and operations.

A history of ownership for Building 87 must obviously reflect the ownership history of the Mound Plant. Title records indicate that the government of the United States of America acquired the three parcels representing the original 182-acre tract from individual owners between April and September, 1947. The United States government purchased the four lots representing the 124-acre tract between July and August, 1981. These properties had been owned by one individual and one investment company.

History of ownership and operation for the Mound facility is further detailed in the following information excerpted from Volume 7 - Waste Management:

"In the summer of 1942, the United States Army organized the Manhattan Engineer District for the purpose of developing an atomic bomb. This undertaking became known as the Manhattan Project. In 1943, the Director of Monsanto Chemical Company's (MCC's, now Monsanto Corporation's) Central Research Department in Dayton, Ohio accepted responsibility for the

Central Research Department in Dayton, Ohio accepted responsibility for the chemistry and metallurgy of radioactive polonium-210, and the Dayton Project was launched." MCC operated five units of the Dayton Project at various locations around the Dayton area. For Dayton Unit V (more formally the Dayton Engineer Works under the Dayton Engineer District), a 182-acre site on the outskirts of the town of Miamisburg in Montgomery County, Ohio, was selected in 1946 as the location of the permanent research facility in support of the Manhattan Project. "In July of 1946, Monsanto Research Corporation (MRC), a subsidiary of MCC, engaged the firm of Giffels and Vallet of Detroit, Michigan, to design the plant ... Construction of the new facility, consisting of 14 original buildings, began in February 1947 by Maxon Construction Co., Dayton, Ohio. The plant was the first permanent facility of the [Atomic Energy Commission] AEC, which had succeeded the wartime Manhattan Engineer District. The Mound Laboratory was occupied by MRC personnel in May 1948, and operations involving radionuclides began in January 1949.

"Mound is a government-owned and contractor-operated facility, originally administered under the Oak Ridge Operations Office of the AEC. The plant was assigned new production and development functions in 1955 when the administrative control was assumed by the AEC's Santa Fe operations office. The Santa Fe Operations Office was changed to the Albuquerque Operations Office in April 1956. In January 1975, the plant formally came under the Energy Research and Development Administration (ERDA) upon dissolution of the AEC. In October 1977, the plant was incorporated into the DOE complex and the facility designation changed from Mound Laboratory to Mound Plant. MRC was the sole operating contractor until October 1988, when EG&G-Mound Applied Technologies took over."

As described previously, Building 87 was constructed in 1987 to be used for the destructive testing of explosives and the fabrication of electronic test systems.

Few chemicals were used or wastes generated at Building 87 since its construction, other than the explosives in the test fire cells. The only chemicals used were reportedly small squirt bottle quantities of acetone or alcohol in the preparation laboratories, small quantities of lubricating oil in the machine shop, and photochemicals in each of the three test cell photographic dark rooms. The solvents and oil were reportedly used up in the small parts cleaning or machining operations. The photochemicals were utilized in self-contained film development machines which did not discharge rinsewaters. When change-out of photochemicals was required, the Mound Waste Management staff would handle the operation and disposal of photochemical wastes.

Prior to construction of Building 87, however, extensive storage of chemical wastes took place on the Building 87 property or in its immediate vicinity. These storage areas are documented in the Volume 7 - Waste Management document and excerpts are included in Exhibit E. The following paragraphs describe the chemical storage areas.

Prior to the 1960s, sanitary sludge from the old sewage disposal facility in the SD Building was spread around various open field areas of the Mound, including the open ground in the area around Building 87. The old sanitary sewage disposal facility treated sanitary wastewater and some process effluent from the Mound Plant. Sources of wastewater included restrooms, shower, laundry facilities, lab sinks, and rinse water from a metal-finishing operation. In the 1960s, the sanitary sludge was found to be slightly radioactive and open disposal was stopped. (Refer to Exhibit E for additional information.)

An historical chemical waste storage area was located just northeast of the site, on the north side of the asphalt roadway which runs in front of (north) of Building 87 and on the southern side of the plant drainage ditch (see Exhibit E). This area was used to stage hazardous chemical wastes before they were shipped off-plant for disposal. The area replaced the Area B drum storage area in 1976 and was itself replaced by the construction of the past hazardous waste storage area structure (old Building 72, described below) in 1982. The old Building 72 was constructed adjacent to and south of the chemical waste storage area.

The past hazardous waste storage area is the former location of Building 72 and was situated immediately (35 feet) west of Building 87. The building began operation in 1982. The building was used for storage, prior to off-plant shipment, of combustible and flammable liquids and waste oils, solvent-containing wastes, ignitable wastes, plating wastes, photoprocessing wastes, polymeric wastes, and toxic wastes generated at the Mound facility. Wastes were stored in sealed 55-gallon drums. The construction of Building 87 necessitated the removal of the structure. During the OEPA-approved closure activities, the concrete floor was broken up and disposed, and soil samples were collected and analyzed for contamination by halogenated volatile chemicals. Contaminated soils were identified, excavated, and shipped off-plant for disposal. Additional soil samples were collected from newly exposed soil, but no contamination was found. The building was dismantled and moved to its present location in early 1986 (refer to Exhibit E for additional information).

4.4 Additional Record Sources

4.4.1 Interviews

Interviews with Mr. Ward produced the following information regarding past practices and operations at Building 87:

History of Operations - Building 87 was used by EG&G for the destructive testing of all kinds of weapons systems for DOE Mound and the U.S. weapons mission from 1987 through 1993, when weapons mission work was curtailed. Since that time, Building 87 has been used by outside private companies for proprietary work. The companies rent the Building 87 facility on an as-needed basis. The only test cell in use at the present time is Test Cell L; the other two test cell suites have been closed, cleaned, and inventoried by EG&G Safe Shutdown staff. Currently, Test Cell L is being utilized to test automotive air bags.

4.4.2 Aerial Photographs

Aerial photographs from 1938, 1949, 1962, 1968, 1975, 1980, 1987, and 1995 were reviewed and copies are found in Exhibit F.

The 1938 photograph shows the Mound acreage as agricultural fields and undeveloped wood lots. The historic Miamisburg Indian Mound is visible for location reference.

The 1949 aerial shows the completed initial phase of construction on the Mound Main Hill. Approximately fourteen buildings are visible. Roadways on both the Main Hill and the eastern hill, are present. One road is visible passing through the intermediate valley.

The overall Mound facility, as depicted in the 1962, 1968, 1975, 1980, 1987, and 1995 photographs, shows continuing change and expansion. Since this report focuses on Building 87, we will not include a detailed description of these changes on the Mound, but will concentrate our discussion in the next sentences on Building 87 and its immediate vicinity.

The 1962 photograph reveals that a network of roads had been constructed in the Mound intermediate valley in what is known as the "Test Fire" area by this year. Several of the roadways cross what will become the Building 87 site. In addition, Building 12, the eastern of the two small test fire buildings, is also present in this photograph on the Building 87 site. Building 2, located east of the Building 3 property, is visible as well. The plant drainage ditch runs north of the Building 87 site, and open fields are evident to the west and south of the site. The bunkers for Magazines No. 4 and No. 9 can be seen south of the Building 87 southern field.

The 1968 aerial shows that Buildings 35 (northeast of Building 87), 3 (east of Building 87), and 18 (on the Building 87 site) had been erected by this year.

By 1975, a portion of Building 63 had been constructed northeast of the Building 87 site, adjacent to Building 35. Building 3 had been expanded to the east.

The 1980 photograph reveals no changes from the 1975 photograph except for the construction of Building 59 adjacent to Building 35.

The 1987 aerial shows the completed Building 87 structure. The Magazines No. 4 and No. 9 have been removed. The photograph shows that the roadways which will curve around Building 87 are not yet finished.

The Mound facility in the vicinity of Building 87 appears in its present day configuration in the 1995 photograph, with one exception. The large steel canopy structure, erected to protect the venting and bioremediation soil piles from the elements, is evident to the west of Building 87.

4.4.3 Historic Sanborn Fire Insurance Maps

Sanborn Map coverage was not available for the Mound facility. A copy of the Sanborn Map Request Response is included in Exhibit G.

4.4.4 Building Prints

A series of building prints were made available to HOK/K by Mr. Tom Bruggeman of EG&G Mound Applied Technologies.

The building prints, dated September, 1984 (with as-built drawings dated primarily August, 1988) show the Building 87 footprint, site topography and the extent of site work (grading, etc.), the plan of exterior utilities with associated details and sections, boring logs, and the landscape plan.

The Building 87 Demolition and Removal Plan from the set of building prints indicates that some existing structures had to be removed or demolished prior to construction of the building. These features include several portions of roadways (which were removed or rerouted), two existing buildings (probably Buildings 12 and 18, though the lettering is not very legible; these are believed to have housed small test fire chambers), an associated driveway/parking lot, sixteen trailers and associated concrete trailer pads, and two weapons magazines (Buildings 4 and 9?) just south of the Building 87 site.

The building prints also show that the former Building 72 (the past hazardous waste storage area) was located immediately (approximately 35 feet) west of Building 87. Refer to Section 4.3 for a more complete description of the past hazardous waste storage area.

5.0 INFORMATION FROM SITE RECONNAISSANCE AND INTERVIEWS

5.1 Interior Observations

5.1.1 Heating/Cooling

The heating and cooling system for Mound was described in Section 3.3. HVAC equipment at Building 87 is installed in the penthouse. Incoming steam and chiller brine supply pipes on raised stanchions lead down from the Main Hill to the northeast corner of Building 87 and enter the east side of the building. Steam, condensate, and chiller brine supply pipes are marked where present in rooms throughout the building.

An extensive blast exhaust system is installed approximately 20 feet from the southern side of Building 87. The system includes three huge underground surge tanks (described in Section 5.5.2) with associated exhaust fans mounted on concrete pads in the same area (see Figure 2 and Photograph 32).

5.1.2 Stains or Corrosion

Some blast corrosion and chipping was evident at the base of the plaster walls in some of the preparation rooms, particularly Room 140, the K Cell inert preparation room.

5.1.3 Drains and Sumps

Floor drains are located in the restrooms. Sinks are located in the restrooms, kitchenette, dark rooms, and high explosives preparation rooms.

Three exhaust valve pits, marked by square steel manhole covers, are located inside the site building (two in the southern corridor and one in Room 125 (stairwell to the penthouse)). A fourth exhaust valve pit is located under a concrete pad at the rear of the building (see Figure 2). The pits are concrete-lined and house the relief valves for the explosion exhaust system. Mr. Ward noted that groundwater occasionally seeps into these pits.

5.2 Exterior Observations

5.2.1 Pits, Ponds, or Lagoons

No ponds or lagoons are located in the vicinity of Building 87. A subgrade exhaust valve pit is located on the southern (rear) side of the building, as described in Section 5.1.3 above.

5.2.2 Stained Soil or Pavement, Stressed Vegetation

No stained soil or pavement or stressed vegetation was evident on the exterior of Building 87 during the site visit, except at the base of the central transformer unit in the electrical substation at the northwest corner of the site building. An oily black stain was observed both at the base of the transformer housing and on the underlying concrete pad (Photograph 34).

5.2.3 Wells

There was no evidence of wells (such as a roadbox or pipe stick-up) on the Building 87 property. However, a monitor well casing (pipe stickup) was observed across the roadway from the vehicle entrance drive at the northwest corner of Building 87 (Photograph 35).

5.2.4 Odors

No unusual odors were noted within Building 87.

5.2.5 Hazardous Waste

No hazardous waste is currently generated in operations at Building 87. However, two 55-gallon drums were observed at the northeast corner of the grassy courtyard formed between Buildings 87 and 3 and the two enclosed walkways (Photographs 36 and 37). The two drums were staged against the exterior wall of Building 3, outside an exit door. Both had rusted lids with collected rainwater. One had an open fill hole. Both were marked as antifreeze and coolant. Mr. Ward did not know the origin of these drums, but believed them to come from Building 3 operations. See Section 7.0, Summary of Findings.

A small dust collection system was observed in the single point high explosives preparation room (Room 128). The dust collection drum was labeled with a warning "MAY CONTAIN EXPLOSIVE WASTE" (Photograph 38). See Section 7.0, Summary of Findings.

Two instruments labeled as containing asbestos were observed in the center of the single point testing room (Room 126, Photograph 39). The two items were partially or completely wrapped in plastic. Mr. Ward indicated that these items are scheduled for disposal in the immediate future. See Section 7.0, Summary of Findings.

5.2.6 Waste Water

No process wastewater is generated in Building 87.

Stormwater is directed northwestward in the vicinity of Building 87 toward the plant drainage ditch, which flows northeast-southwest less than 100 feet northwest of Building 87. In addition, a drainage swale flows west along the southern boundary of the Building 87 site (see Figure 2).

5.2.7 Septic Systems

There was no evidence of septic systems (such as leaching field or septic tank vent pipes) in the vicinity of Building 87. According to Mound documentation, there are no septic systems on the Mound Plant because it is serviced by a sanitary sewage treatment plant.

5.3 Hazardous Substances in Connection with Identified Uses

According to Mr. Ward, the photochemicals have been drained from the Room 150 self-contained photo development machine and disposed, but upon review of our photographs (illuminated by the flash) some fluid appeared to be in the Fixit tank (Photograph 27). See Section 7.1, Summary of Findings.

At the present time, no other hazardous substances in connection with identified uses are located in Building 87.

5.4 Hazardous Substance Containers and Unidentified Substance Containers

There were no unidentified substance containers noticed during the Building 87 site walkover. Refer to 5.3 for discussion of hazardous substance containers.

5.5 Storage Tanks

5.5.1 Above-Ground Storage Tanks

No above-ground storage tanks were observed at the Building 87 site during the site walkover.

5.5.2 Underground Storage Tanks (USTs)

Three 51,700-gallon underground explosive surge tanks are located 20 feet from the southern wall of Building 87, in line with the exhaust fans and vent pipes (Photograph 32). The surge tanks are each constructed of 10-foot thick reinforced concrete pipe that measures 90 feet long (see Figure 2). The tanks are part of the explosion blast exhaust system associated with the destructive

testing cells. They are identified as Tanks 263, 264, and 265 in the Active Underground Storage Tank Plan (referenced in Section 2.4.2.5, with excerpt included in Exhibit H).

5.6 Indications of Polychlorinated Biphenyls (PCB's)

Under the Toxic Substances Control Act (TSCA), the EPA regulates the manufacture, distribution and use of PCBs. PCBs are a known carcinogen and are persistent in the environment. They were formerly widely used in the dielectric fluid of electrical transformers and capacitors, and in the oil of hydraulic systems. PCBs are also present in the ballasts of fluorescent lamps.

An electrical substation is located at the northwest corner of Building 87 (Photograph 7). Three large transformer cabinets are mounted on the concrete pad at this location. A placard on the central transformer states that these are not PCB-containing transformers (i.e., the transformer oil contains less than 500 parts per million (ppm) PCBs). The transformer housings appeared to be in good condition, but as mentioned in Section 5.2.2, there was evidence of leakage at the base of the middle transformer unit (Photograph 34). See Section 7.0, Summary of Findings.

Fluorescent lighting is used throughout Building 87. Fluorescent lamp ballasts contain a small capacitor that may contain high concentrations of PCBs (greater than 900,000 ppm). All lamp ballasts showing a manufacture date through 1979 should be regarded as containing PCBs. If a ballast is not labeled "No PCBs," it should be considered to contain PCBs regardless of the date of manufacture.

Used lamp ballasts that are leaking PCB material are fully regulated under CERCLA and TSCA and must be incinerated at a TSCA approved incinerator. Used, non-leaking PCB-containing lamp ballasts are eligible for disposal as municipal solid waste, although EPA encourages proper disposal of PCB materials in a chemical waste landfill or a high temperature incinerator, which completely destroys the PCB material. However, incineration is costly and landfill disposal carries the potential for future cleanup liability. Lamp ballasts can be successfully recycled, and facilities disposing of waste fluorescent lamp ballasts should consider this disposal alternative.

5.7 Indications of Solid Waste Disposal

Solid waste was not observed in the site building. However, several of the rooms were filled with miscellaneous office equipment, instruments, machining equipment, etc., that is awaiting auction or distribution to the City of Miamisburg.

In addition, some items of scrap metal are staged at the edge of the entrance driveway at the northwest corner of Building 87 (Photograph 6).

5.8 Physical Setting Analysis

5.8.1 Surface Topography

A map of the area is included in Figure 1. This map is based on the U.S.G.S. 1965 (photorevised 1974) 7.5 Minute Topographic Map of the Miamisburg, Ohio Quadrangle. The facility elevation ranges between 720 and 900 feet msl.; the Building 87 site is at 740 msl. Based on an evaluation of the surface topography, surface water flows in all directions away from the Mound Main Hill. However, in the vicinity of Building 87, surface water is assumed to flow northwestward to the plant drainage ditch and ultimately westward toward the Miami River.

5.8.2 Geology

An extensive site-wide (OU 9) hydrogeologic investigation has been completed by EG&G for the Mound Plant. The five technical memoranda written as part of the hydrogeologic investigation were cited in Section 2.5.2. Only a brief summary of geologic highlights for the Mound vicinity are described below.

The bedrock at the Mound Plant is comprised of marine shales and limestones of the Ordovician System within the Cincinnati Series.

The nature and distribution of natural fractures studied during the referenced investigation indicate that a fracture carapace (zone at the surface) is superimposed on the bedrock beneath Mound Plant. This fracture carapace is believed to consist of a network of interconnected vertical and bedding plane fractures that are water-saturated in the lower parts and unsaturated in the upper parts.

The aquifer system at the Mound Plant consists of two different hydrogeologic environments: groundwater flow through the bedrock beneath the hills and groundwater flow within the unconsolidated glacial deposits and alluvium associated with the Buried Valley Aquifer in the Great Miami River valley. The bedrock flow system is dominated by fracture flow; the Buried Valley Aquifer is dominated by porous flow with interbedded gravel deposits providing the major pathway for water movement. The Buried Valley Aquifer occupies the southwestern quadrant of the Mound site.

Based on the available data, the fracture carapace and underlying, relatively unfractured bedrock have different hydraulic characteristics. The fracture carapace has permeability values ranging from 0.09 to 0.9 ft/dy and the underlying bedrock has permeabilities that range from 1.3×10^{-3} to 2.9×10^{-2} ft/dy. The permeability of the fracture carapace and bedrock that underlie the Mound Plant is at least three orders of magnitude less than the Buried Valley Aquifer, which has an average permeability of 500 to 1,500 ft/dy. Because of this quality, the Buried Valley Aquifer has been designated a sole source aquifer consistent with the Safe Drinking Water Act.

The Mound Plant maintains three drinking water production wells completed in the Buried Valley Aquifer, along the western edge of the facility. Miamisburg Water District production wells are located approximately one-half mile northwest of the Mound facility on the other side of the Great Miami River.

5.9 Other Conditions of Concern

See Section 7.0, Summary of Findings.

5.10 Site Plan

See Figure 2.

6.0 NON-SCOPE CONCERNS

Certain areas are considered beyond the ASTM standard scope of the Phase I Environmental Site Assessment. These areas are provided for informational purposes below.

6.1 Suspected Asbestos-Containing Material

ACM in buildings can be found in three forms: sprayed or troweled on ceilings and walls (surfacing materials); insulation around pipes, ducts, boilers, and tanks (pipe and boiler insulation); other products such as ceiling and floor tiles and wall boards (miscellaneous materials). ACM is of greatest concern when it is friable. Friable material can be crumbled, pulverized, or reduced to powder by hand pressure.

Asbestos surveys of most of the Mound buildings were performed for EG&G by PEI Associates in 1988 and Barge, Waggoner, Sumner, and Cannon Inc. in 1993. No asbestos surveys were conducted of Building 87 because it was constructed after 1983 when the EPA friable asbestos-containing building materials ban went into effect. The only suspect ACM in this building is the non-friable floor materials. They must be assumed to be ACM until they are analyzed and proved to be non-ACM.

6.2 Lead Paint

Lead based paint was used almost exclusively in the U.S. prior to the 1970's. Congress established maximum lead concentrations in residential paint in 1978. Due to the age of the building (constructed in 1987) it is unlikely that lead based paint has been used within the buildings. The risk of a lead based paint hazard exists when the painted surfaces are damaged (cracked, chipped, loosened, chewed). Analysis of the paint would be necessary to determine if there is lead paint and if a lead hazard exists.

6.3 Radon

The results of radon testing of 35 buildings in the same zip code as this site (45342) are on file with the Regional Air Pollution Control Agency in Dayton, Ohio, and were provided in the EDR report in Exhibit C. The average reading for the basement area of tested buildings was 5.963 picocuries/liter as compared to the EPA recommended standard of 4.0 picocuries/liter.

Radon levels are very site specific, depending heavily on location and the building ages and construction. Radon does not normally pose a threat in commercial or industrial buildings for several reasons. The fresh air which enters the structure and the venting provided can reduce the buildup of the radon gas. In addition, human exposure in these facilities is usually limited to eight hours per day. EPA's recommended standard of 4.0 picocuries/liter is based on the assumption of sixteen hours exposure per day.

A simple screening test can be performed to determine actual on-site radon levels.

6.4 Electromagnetic Fields

There is high-power electrical substation at the northwest corner of the subject building. Electromagnetic radiation originates from the electromagnetic fields (EMFs) which surround electrical conductors, such as electrical transmission lines. Epidemiologic studies have linked an increased risk of childhood leukemia for children living in homes which are near high-power transmission lines. Research in this area is ongoing, and, at present, there are no regulations or guidelines for exposure to electromagnetic radiation. One study found that fields of less than 2 milligauss may be acceptable. This research has been conducted for children exposed at their residences. The estimated electrical field is expected to drop to 2 milligauss at approximately 200 feet from the power line. Development plans for this site should consider the possible effects of EMF.

6.5 Fluorescent Lamps

Fluorescent lamps are used for lighting throughout this facility. Fluorescent lamps contain on average between 35 and 75 milligrams of elemental mercury and trace amounts of other hazardous heavy metals (e.g., cadmium and lead). Mercury is highly toxic to humans and animals, causing both immediate and long-term effects.

According to current federal law, used fluorescent lamps are considered a solid waste. Used fluorescent lamps are not listed as a hazardous waste under Code of Federal Regulations, Volume 40, Part 262.11 (40 CFR 262.11), but under RCRA, used fluorescent lamps are subject to evaluation against the RCRA hazardous waste characteristics, including the toxicity characteristic. The Toxicity Characteristic Leaching Procedure (TCLP) is a test to determine if a waste is characteristically hazardous. The regulatory limit for mercury is 0.2 milligram/liter. If TCLP results from fluorescent lamp samples show that mercury concentrations equal or exceed this limit, the waste must be managed as a hazardous waste. Conversely, if TCLP results are below the 0.2 mg/L mercury limit, the waste is not considered hazardous and can be managed as municipal solid waste.

In Ohio, used fluorescent lamps must be initially characterized to determine if they are hazardous via the TCLP test. If used fluorescent lamps are characteristically hazardous and bound for disposal, lamps must be managed in compliance with all of Ohio's applicable hazardous waste requirements. If, however, the characteristically hazardous used lamps are bound for recycling or reclamation, they are not considered a solid waste and are not subject to Ohio's hazardous waste requirements. Facilities using and disposing of fluorescent lamps should evaluate their disposal program and should consider recycling or reclamation as an alternative to other disposal methods.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

8.1 The following individuals wrote and/or reviewed this document:

Prepared by:



Jennifer C. Vicarel
Environmental Scientist

Reviewed by:



Cynthia C. Vanderhorst, AHES, LRA
Remediation Specialist

**9.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS PARTICIPATING
IN PHASE I ENVIRONMENTAL SITE ASSESSMENT**

Resumes for the following employees are attached as Exhibit I:

- ◆ Cynthia C. Vanderhorst, AHES, LRA
Remediation Specialist

- ◆ Jennifer C. Vicarel
Environmental Scientist

EXHIBIT A

DESCRIPTION OF TWELVE VOLUME SITE SCOPING REPORT

(CAA). Mound Plant, however, conducts its routine operations under the Atomic Energy Act of 1954 (AEA). One of the goals of this report is to ensure that all PRSs are properly evaluated for their inclusion or omission from the ER Program.

1.2. OVERVIEW OF MOUND PLANT SCOPING PROCESS

Prior to signing the FFA, the DOE collected and interpreted data to develop a Site conceptual model to assess both the nature and extent of contamination and to identify potential exposure pathways and potential human and environmental receptors. The multivolume scoping report, compiled under the guidance of the FFA Statement of Work, provides descriptions and summaries of current conditions and characteristics of the Mound Plant Site. The volumes are arranged to provide a systematic data set as follows:

- Volume 1 Groundwater Data: February 1987 - July 1990 (Final February 1992). Provides a tabulation of laboratory reports of groundwater sample analyses from ER Program monitoring wells, plant supply wells and groundwater seeps collected from February 1987 to July 1990, before the FFA became effective.
- Volume 2 Geologic Log and Well Information Report (Final May 1992). Provides a location map, and construction and borehole lithology details for monitoring and production wells on and adjacent to Mound Plant that have been used to collect environmental samples. Selected residential and municipal wells are also included where appropriate.
- Volume 2 Addendum Stratigraphic and Lithologic Logs (Final June 1992). Provides stratigraphic and lithologic information including borehole logs and borehole location maps compiled from plant engineering, planning, and foundation studies and contaminant infiltration and movement investigations.
- Volume 3 Radiological Site Survey (Final June 1993). Provides a summary and tabulation of available radiological data collected at Mound Plant with emphasis on the extensive radiological characterization investigation conducted by Mound Plant during the Site Survey Project (Stought et al. 1988).
- Volume 4 Engineering Map Series (Final February 1992). Provides a series of engineering maps of the Site, including plant utilities, potable water and condensate cooling lines, process piping and tanks, municipal utilities adjacent to the plant, surrounding land uses and easements, adjacent property owners, and copies of the boundary survey conducted in 1982. All maps were reproduced at a scale of 1 inch = 200 ft and use the Ohio State Plane coordinate system.
- Volume 5 Topographic Map Series (Final February 1992). Provides a series of topographic maps of the Mound Plant and adjacent areas, including a topographic map with 2-ft contours, a map of surface water features, a digitized topographic map of the northern part of the site before the plant was constructed in 1946, and a contour map with 10-ft contours that estimates the amounts of cut and fill performed from 1946 to 1986, principally along the plant drainage ditch. All maps were reproduced at a scale of 1 inch = 200 ft and use the Ohio State Plane coordinate system.

- Volume 6 Photo History Report (Final February 1992). Provides a series of interpretive maps compiled from historical aerial photos of Mound Plant that span the years 1959 to 1981. Maps of the upper and lower valley areas were compiled for 1959, 1964, 1968, 1973, 1975, 1979, and 1981, as these areas were known to have been used for waste disposal and experienced significant changes in morphology and terrain elevation.
- Volume 7 Waste Management Report (Final February 1993). Provides a description of the history of ownership and operation of the plant with emphasis on the generation, treatment, storage, and disposal of hazardous wastes through the perspective of the major programs and projects at the plant. Also provides a summary list of the hazardous substances generated through process information. This tabulation was used to compile the list of analytical parameters for the Operable Unit 9 RI/FS (DOE 1993a).
- Volume 8 Environmental Monitoring Data: 1976-1989 (Final February 1992). Provides summaries and tabulations of environmental sampling conducted by Mound Plant as part of the ongoing environmental surveillance program, the Potable Water Standards Project (Dames and Moore 1976a,b) and the Plutonium Soil Inventory Program (MRC 1977). Analytical data included tritium, plutonium-238, uranium-233, uranium-234, and uranium-238 in surface water and silt samples collected from the Great Miami River from 1974 to 1989, tritium in groundwater from the Buried Valley aquifer from 1975 to 1990, and plutonium-238 in regional soils measured in 1977.
- Volume 8 Addendum Vegetation and Foodstuff (Draft March 1994). Provides summary of analytical data on tritium and plutonium-238 concentrations in vegetation (grass) and foodstuff (fish, vegetables and milk) for the years 1972 to 1991. Data was collected and reported as part of the Mound Plant environmental monitoring and surveillance program required by DOE.
- Volume 9 Annotated Bibliography (Final February 1993). Provides an annotated list of reports prepared for the Site prior to the signing of the FFA. The bibliography includes reports prepared by government agencies, subcontractors, scientific journal articles, and maps and drawings that may be relevant to the preparation of the RI/FS. Reports published or compiled since the effective date of the FFA are beyond the scope of Volume 9.
- Volume 10 Permits and Enforcement Actions (Final May 1992). Provides a summary of past and present permits and registrations requested and received by Mound Plant, as well as a summary of enforcement actions. As a government-owned, contractor-operated facility, Mound Plant must operate not only in compliance with Executive Orders and Orders of the DOE, but also with federal and state statutes and regulations, and corporate policies. This report includes only those activities relating to compliance with federal, state, and county environmental regulations and statutes. Conditions of discharges and other permit limitations were beyond the scope of the report. Copies of permits of interest were copied in the appendix of the report.
- Volume 11 Spills and Response Actions (Final March 1992). Provides summaries of past product and hazardous substance spills, including amounts and locations and the response actions conducted. Data were compiled from records and incident reports of the Mound Plant safety office. Limited data were also available from the health physics office. Only incidents that resulted in a spill or an environmental release are included in this report. Laboratory and tabletop accidents, releases that were entirely contained within buildings, and personal injuries and radiation or hazardous substance exposures that did not apparently result in an environmental release were beyond the scope of this report. Summaries of response actions conducted by the EPA and OEPA are also included.

EXHIBIT B

PHOTOGRAPHS



PHOTO 1:
WEST SIDE OF BUILDING 87
VIEW SOUTH



PHOTO 2:

VIEW ALONG NORTH WALL OF
BUILDING 87
VIEW EAST



PHOTO 3:

SOUTH SIDE OF BUILDING 87
DRAINAGE SWALE AND GRAVEL ROAD
ON FAR RIGHT - VIEW EAST



PHOTO 4:
GRASSY COURTYARD ON EAST
SIDE OF BUILDING 87
VIEW SOUTHWEST



PHOTO 5:

VIEW NORTH TOWARD
NORTHEAST CORNER OF BUILDING 87

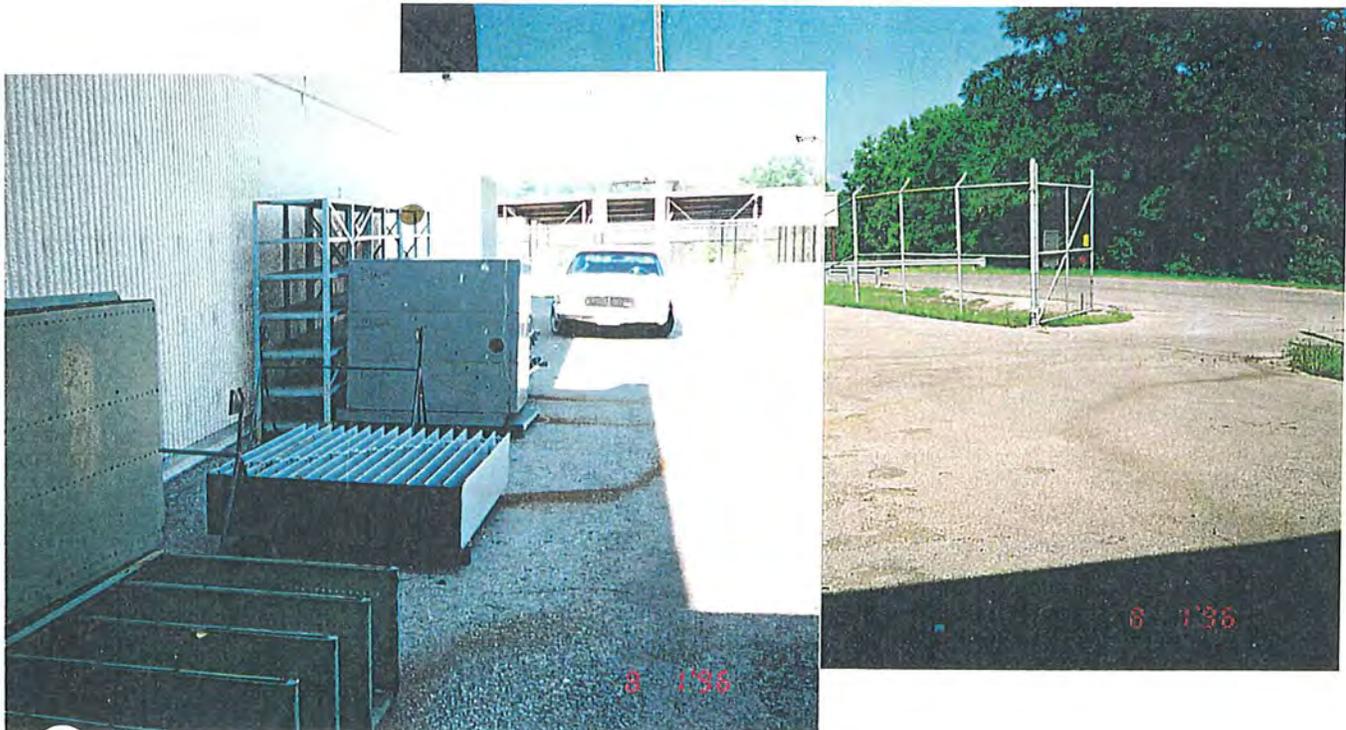


PHOTO 6:

DRIVEWAY AT NORTHWEST
CORNER OF BUILDING 87
VIEW WEST



PHOTO 7:

ELECTRICAL SUBSTATION AT
NORTHWEST CORNER OF
BUILDING 87



PHOTO 8:

VIEW OF METAL PANEL ROOF
AND HILLSIDE SOUTH OF
BUILDING 87



PHOTO 9:

OFFICE CUBICLES
ROOM 124, BUILDING 87



PHOTO 10:
CONFERENCE ROOM
BUILDING 87



PHOTO 11:
CAFETERIA
BUILDING 87



PHOTO 12:

LOBBY
BUILDING 87



PHOTO 13:

CAFETERIA KITCHEN
BUILDING 87



PHOTO 14:

WOMEN'S RESTROOM
BUILDING 87

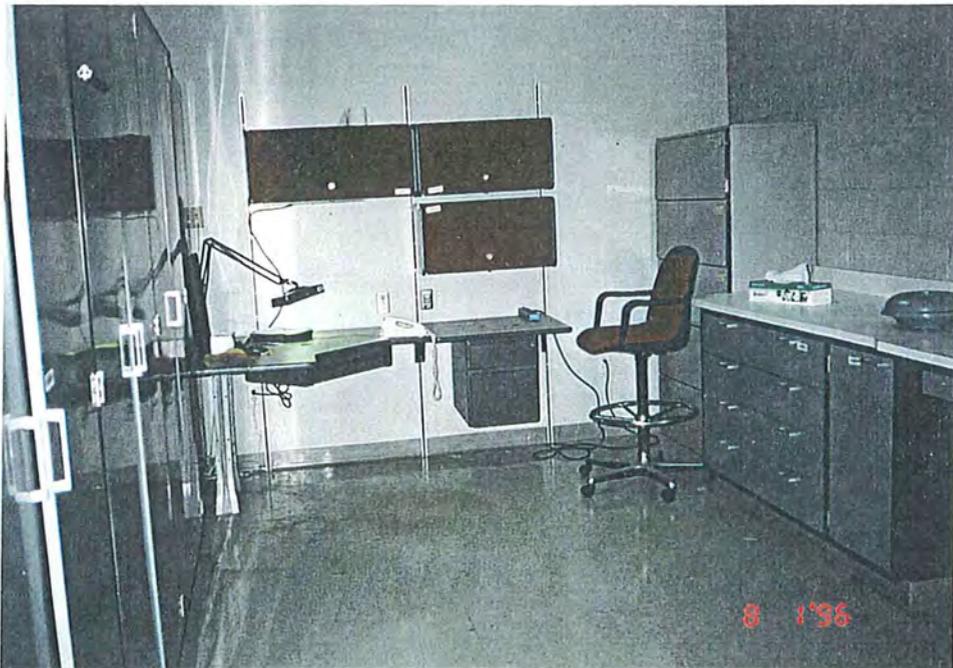


PHOTO 15:

LABORATORY
ROOM 109, BUILDING 87



PHOTO 16:

MACHINE SHOP WITH
BAND SAW
ROOM 154, BUILDING 87



PHOTO 17:

SUPPLY ROOM
ROOM 102, BUILDING 87



PHOTO 18:
SEM LAB
ROOM 103, BUILDING 87

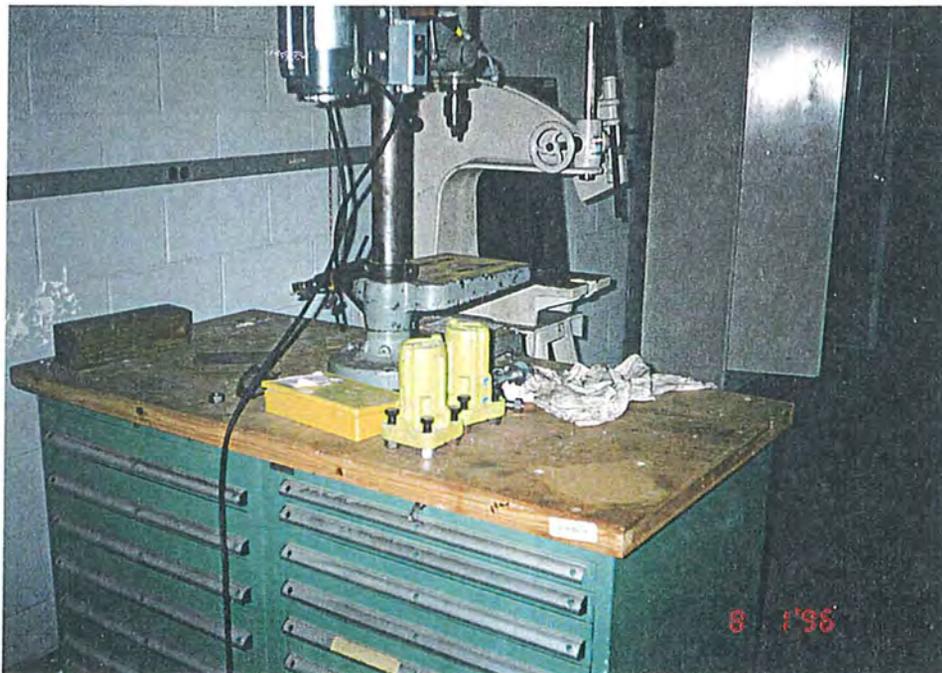


PHOTO 19:
GARAGE WITH DRILL
ROOM 101, BUILDING 87



PHOTO 20:

SMALL DESTRUCTIVE TESTING CELL
ROOM 126, BUILDING 87



PHOTO 21:

ENVIRONMENTAL CHAMBER (BLUE)
AND METERS/COMPUTERS
ROOM 126, BUILDING 87



PHOTO 22:
ROWS OF SURPLUS METERS,
INSTRUMENTS, ETC.
ROOM 126, BUILDING 87

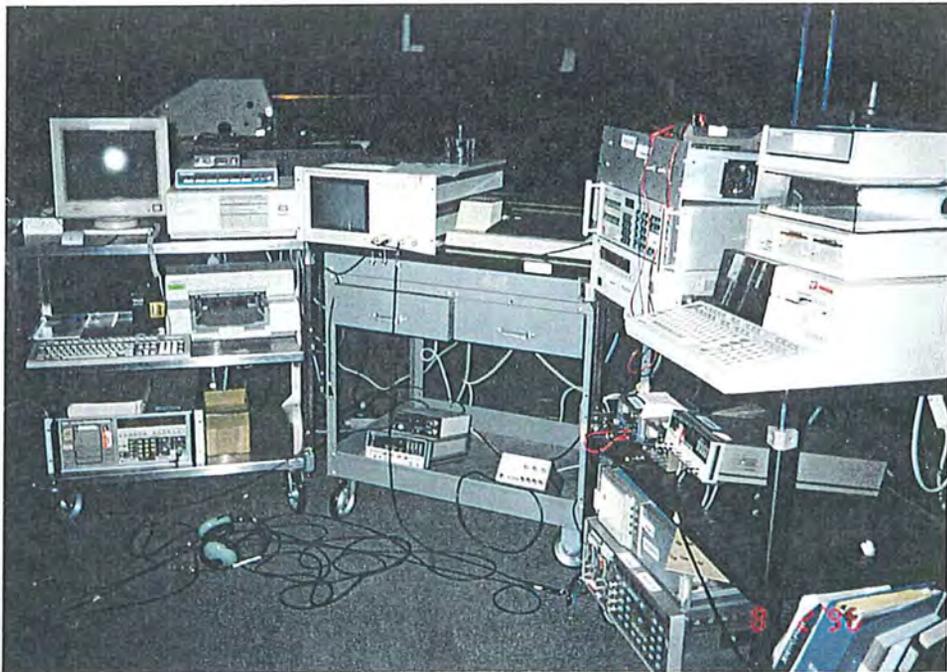


PHOTO 23:
CARDIN CAMERA COMPUTER
EQUIPMENT IN CELL
ROOM 153, BUILDING 87

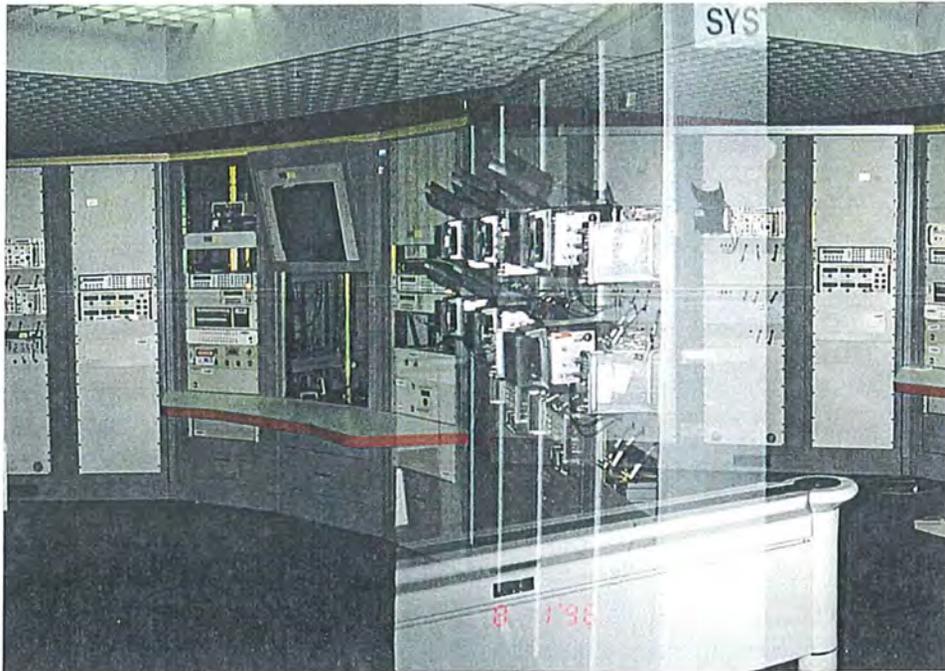


PHOTO 24:

J-K CONTROL ROOM
ROOM 133
(POOR QUALITY PHOTO)

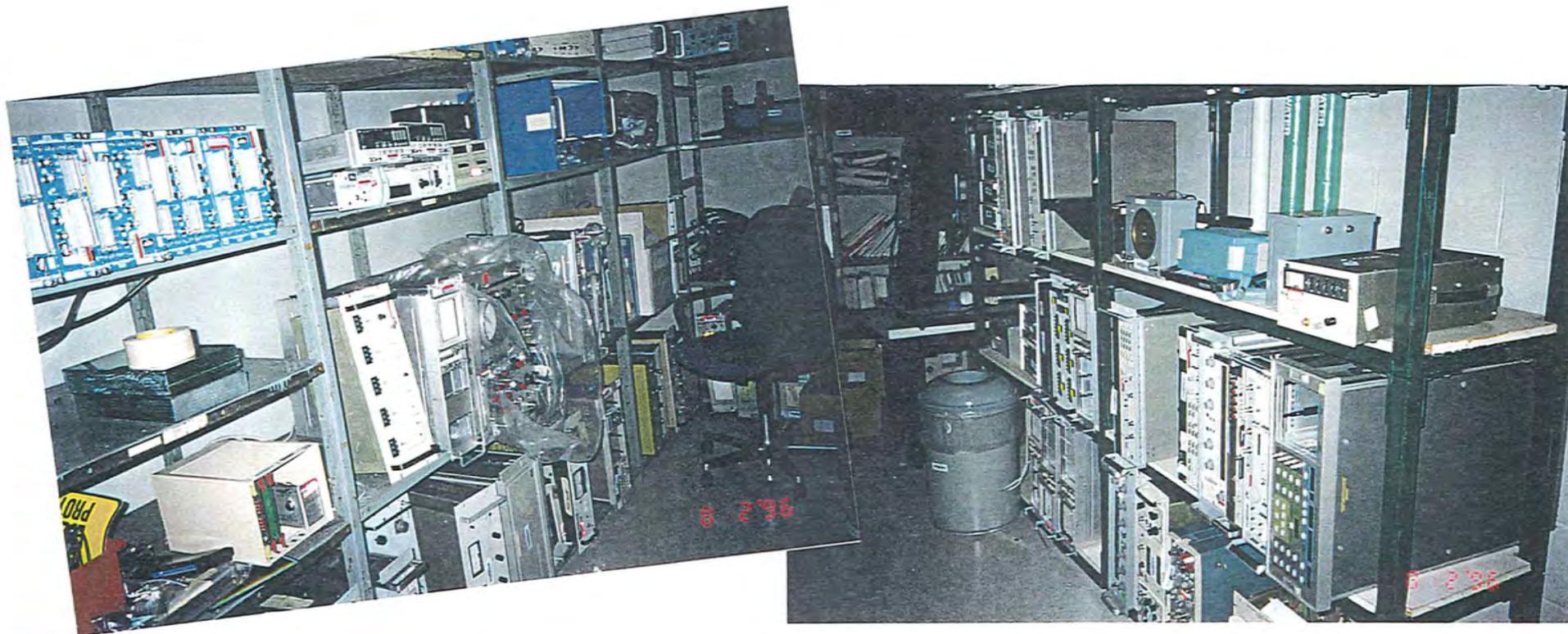


PHOTO 25:

CELL L STORAGE ROOM
ROOM 149



PHOTO 26:

SELF-CONTAINED PHOTO DEVELOPER
CELL L DARK ROOM
ROOM 150



PHOTO 27:

PHOTO CHEMICAL TANKS ON
PHOTO DEVELOPER MACHINE
ROOM 150



PHOTO 28:

J CELL HIGH EXPLOSIVES
PREPARATION ROOM
ROOM 129

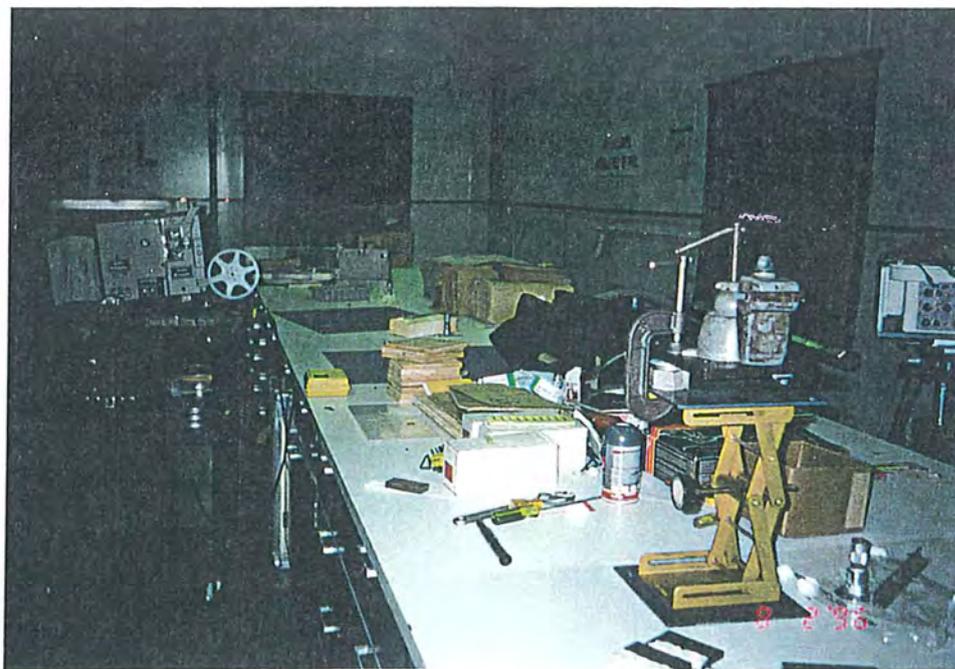


PHOTO 29:

L CELL HIGH EXPLOSIVES
PREPARATION ROOM
ROOM 152

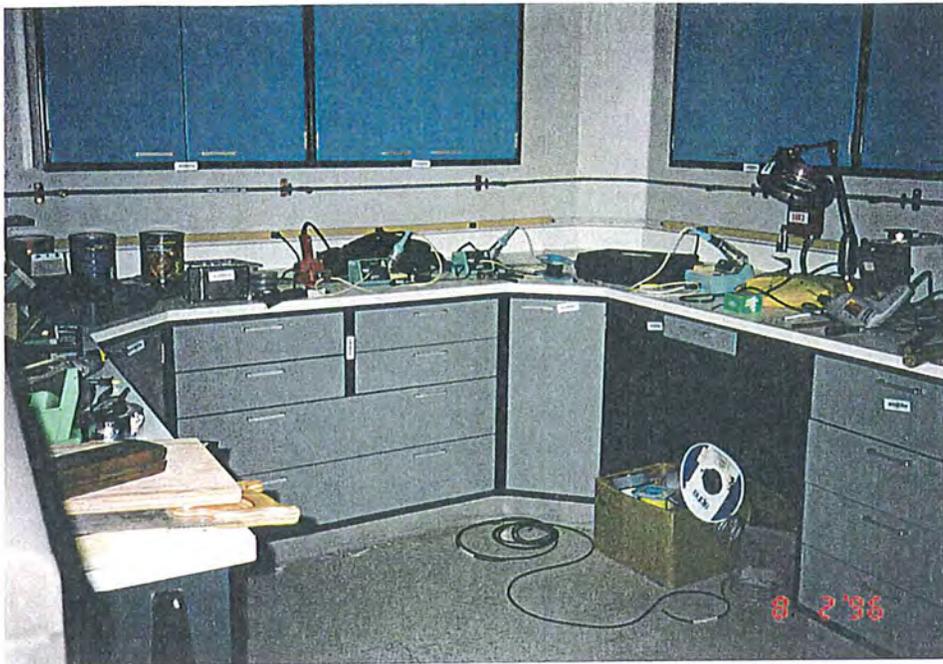


PHOTO 30:

L CELL INERT PREPARATION ROOM
ROOM 151



PHOTO 31:

INDUSTRIAL CABINETS
IN SOUTHERN CORRIDOR
TO BUILDING 3



PHOTO 32:

EXPLOSION EXHAUST FANS
ON CONCRETE PADS
ALONG SOUTH SIDE

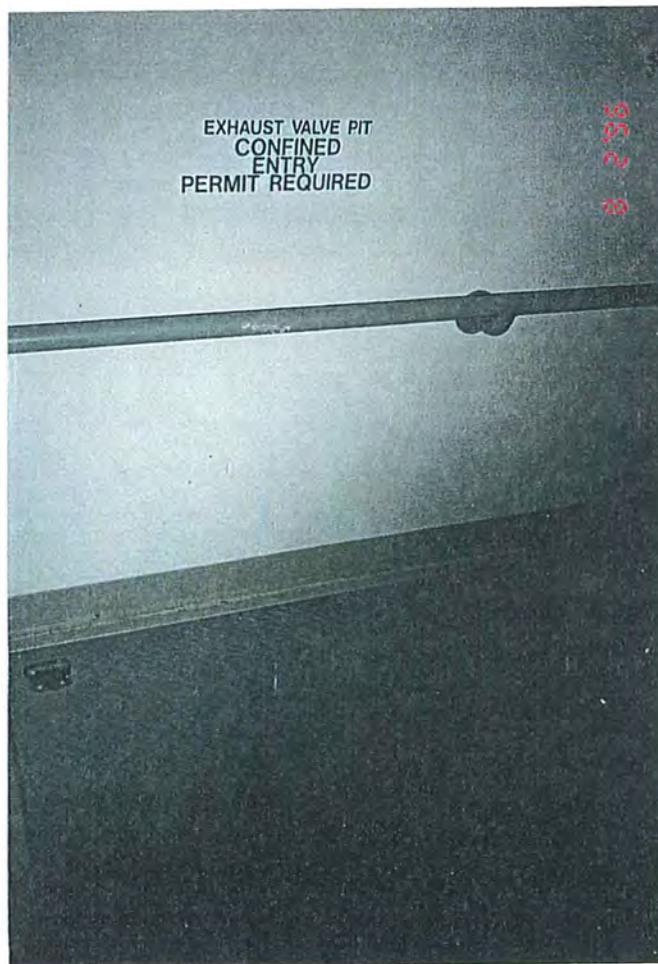


PHOTO 33:

EXHAUST VALVE PIT IN
SOUTHERN CORRIDOR
BUILDING 87, CORRIDOR 134



PHOTO 34:

OILY STAIN AT BASE OF
TRANSFORMER
NORTHWEST CORNER



PHOTO 35:

MONITOR WELL PIPE STICK-UP
ACROSS FROM NORTHWEST CORNER
OF BUILDING 87



PHOTO 36:

DRUMS AT NORTH CORNER OF
GRASSY COURTYARD
EAST SIDE OF BUILDING 87



PHOTO 37:

DRUMS AT NORTHEAST CORNER
OF GRASSY COURTYARD
EAST SIDE OF BUILDING 87

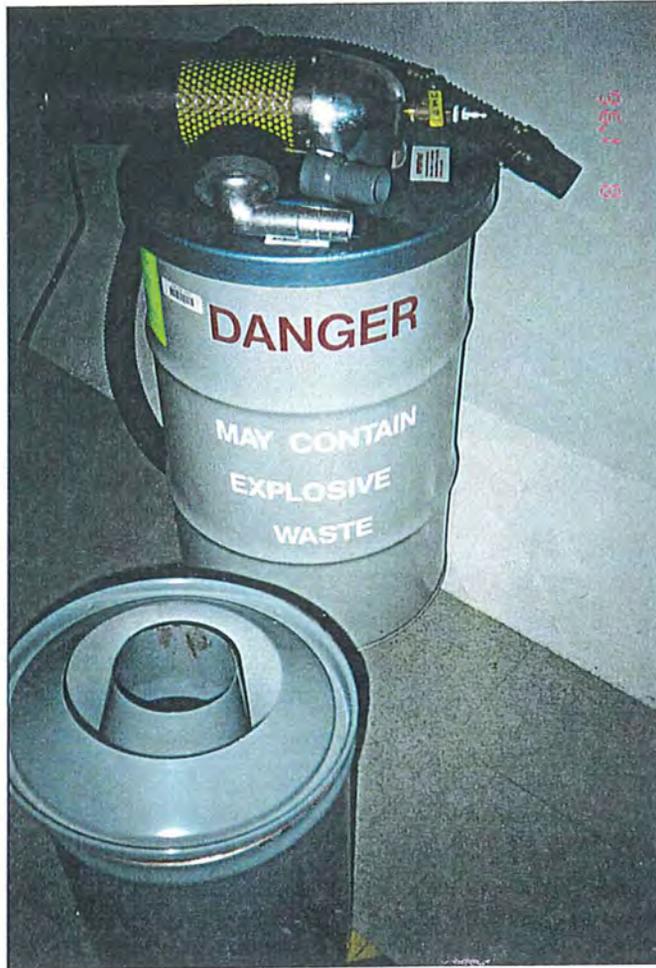


PHOTO 38:

SMALL DUST COLLECTION
SYSTEM IN ROOM 128

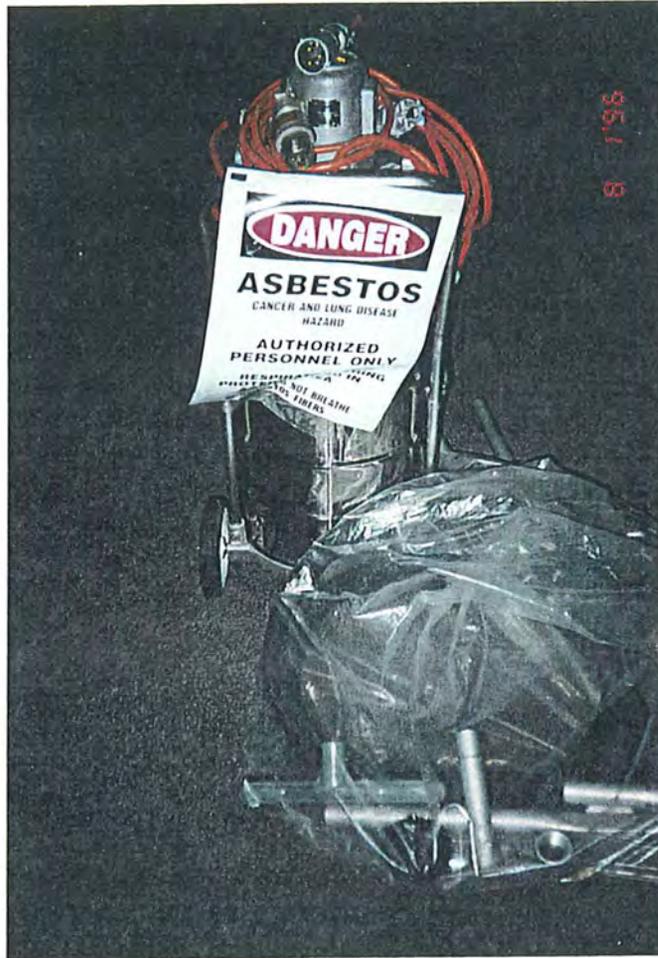


PHOTO 39:
ASBESTOS-CONTAINING
ITEMS IN ROOM 126

EXHIBIT C

EDR REGULATORY DATABASE SEARCH

Environmental Data Resources, Inc. Of Southport, Connecticut, provided a regulatory database search of the mound facility dated December 13, 1995. This search met the specific requirements of ASTM Standard Practice for Environmental Site Assessments (E 1527-94) with the addition of a 1 mile radius search for the immediate area. However, ASTM requires an update of this information every six months. An updated reported has been issued and received by HOK/K on October 23, 1996. The necessary adjustments have been completed in Exhibit C. However, the more recent report (October 23, 1996) has a radius search meeting the requirements of ASTM. There was no additional radius search implemented in this revised report. HOK/K has provided both reports in Exhibit C.

**The EDR-Radius Map
with GeoCheck™**

**US Dept.-Energy Mound Facility
Mound Road
Miamisburg, OH 45343**

Inquiry Number: 141429.1s

October 23, 1996



**Environmental
Data
Resources, Inc.**

Creators of Toxicheck/®

***The Source*
For Environmental
Risk Management
Data**

**3530 Post Road
Southport, Connecticut 06490**

Nationwide Customer Service

**Telephone: 1-800-352-0050
Fax: 1-800-231-6802**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary.....	ES1
Topographic Map.....	2
GeoCheck Summary.....	3
Overview Map.....	5
Detail Map.....	6
Map Summary - All Sites.....	7
Map Summary - Sites with higher or the same elevation as the Target Property.....	8
Map Findings.....	9
Orphan Summary.....	18
 <u>APPENDICES</u>	
GeoCheck Version 2.1.....	A1
EPA Waste Codes.....	A6
Government Records Searched / Data Currency Tracking Addendum.....	A7

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The search met the specific requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-94, or custom distances requested by the user.

The address of the subject property for which the search was intended is:

MOUND ROAD
MIAMISBURG, OH 45343

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the subject property or within the ASTM E 1527-94 search radius around the subject property for the following Databases:

Delisted NPL:..... NPL Deletions
 RCRIS-TSD:..... Resource Conservation and Recovery Information System
 CERC-NFRAP:..... Comprehensive Environmental Response, Compensation, and Liability Information System
 CORRACTS:..... Corrective Action Report
 SWF/LF:..... Licensed Solid Waste Facilities
 RAATS:..... RCRA Administrative Action Tracking System
 RCRIS-SQG:..... Resource Conservation and Recovery Information System
 RCRIS-LQG:..... Resource Conservation and Recovery Information System
 HMIRS:..... Hazardous Materials Information Reporting System
 PADS:..... PCB Activity Database System
 ERNS:..... Emergency Response Notification System
 NPL Liens:..... Federal Superfund Liens
 TSCA:..... Toxic Substances Control Act
 MLTS:..... Material Licensing Tracking System
 RODS:..... Records Of Decision
 CONSENT:..... Superfund (CERCLA) Consent Decrees
 OH Spills:..... Includes Reported Incidents, Spills or Releases to The Environment
 Coal Gas:..... Former Manufactured gas (Coal Gas) Sites.

Unmapped (orphan) sites are not considered in the foregoing analysis.

Search Results:

Search results for the subject property and the search radius, are listed below:

Subject Property:

The subject property was identified in the following government records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
US DOE MOUND PLANT MOUND RD MIAMISBURG, OH 45342	CERCLIS FINDS NPL TRIS LUST	OH6890008984

EXECUTIVE SUMMARY

Surrounding Properties:

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the subject property includes a tolerance of -10 feet. Sites with an elevation equal to or higher than the subject property have been differentiated below from sites with an elevation lower than the subject property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in *bold Italics* are in multiple databases.

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data comes from the Ohio Environmental Protection Agency's Master Sites List.

A review of the State Haz. Waste list, as provided by EDR, and dated 12/31/1995 has revealed that there is 1 State Haz. Waste site within approximately 1 Mile of the subject property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
MIAMISBURG WELL FIELD / UNK SO	302 S RIVERVIEW AVE	7	17

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data comes from the Department of Commerce Division of State Fire Marshal's List of Reported Petroleum Underground Storage Tank Release Incidents.

A review of the LUST list, as provided by EDR, and dated 04/01/1996 has revealed that there are 5 LUST sites within approximately 0.5 Miles of the subject property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
CG&R	901 S MAIN ST	A1	11
DJ CERAMICS	611 S MAIN ST	3	13
RICHARD CHURCH SR ESTATE	[REDACTED]	4	14
TECHNICOTE INC	222 MOUND AVE	5	15
JACKS MOBILE	51 CENTER ST	6	16

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data comes from the Department of Commerce Division of State Fire Marshal's Facility File.

A review of the UST list, as provided by EDR, and dated 07/16/1996 has revealed that there is 1 UST site within approximately 0.25 Miles of the subject property.

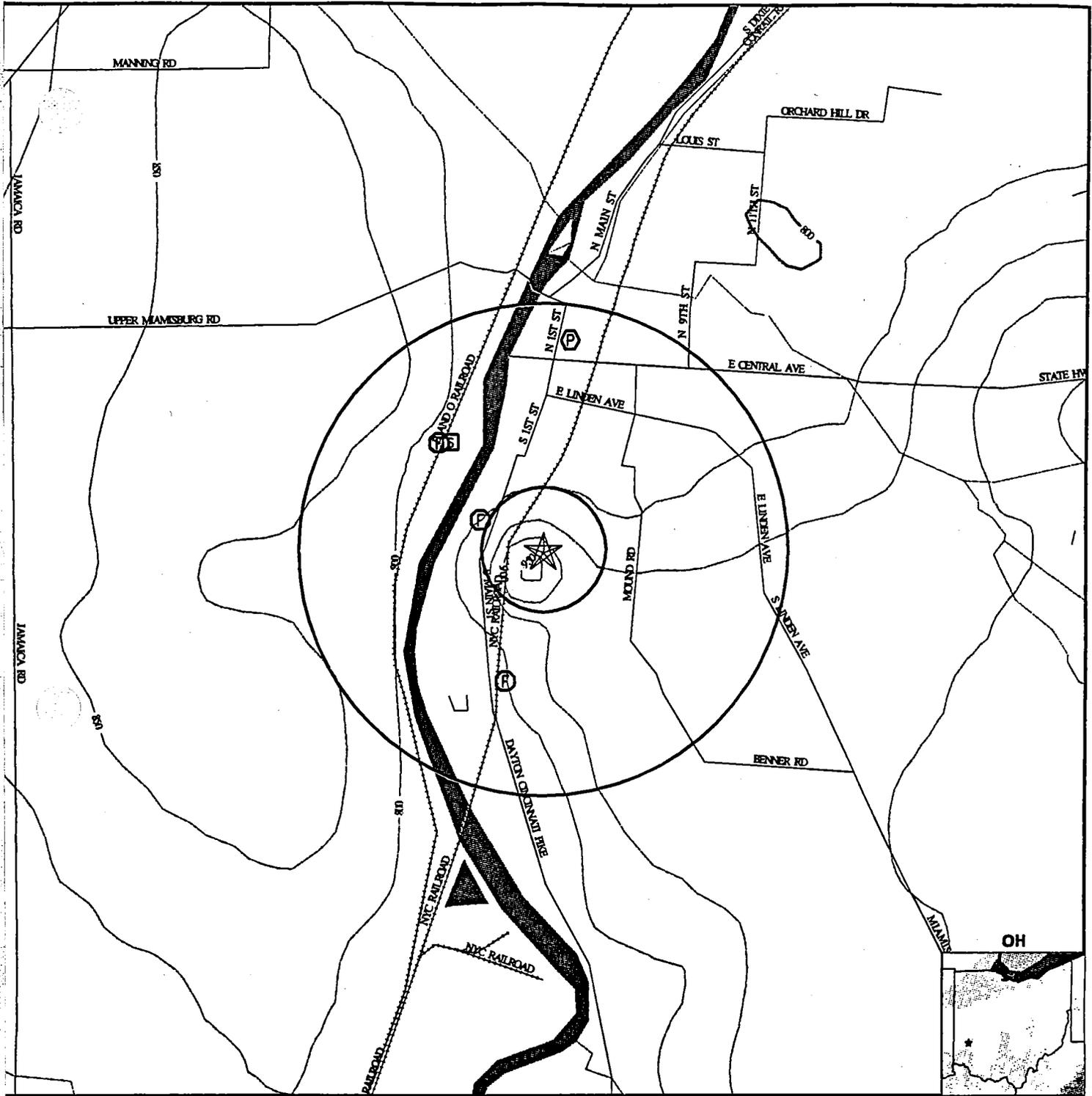
<u>Lower Elevation</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
CG & R	901 S MAIN ST	A2	12

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
US DOE MOUND FACILITY	PADS,RCRIS-LQG,RCRIS-TSD
MIAMI TWP SERVICE DEPT	CORRACTS,State Haz. Waste
US DEPT OF ENERGY	LUST
MOUND FACILITY	LUST
MOUND PLANT (DOE)	LUST
AT&T	LUST
MIAMI TOWNSHIP SERVICE DEPT	UST
U.S. DEPT OF ENERGY	UST
AT&T	UST
MOUND FLEXIBLE CIRCUITS CORPORATION	RCRIS-SQG
EG & G STAR CITY INC	RCRIS-SQG
MONARCH MARKING SYSTEMS INC	FINDS,RCRIS-LQG
MOUND PLANT MOUND RD.	ERNS
MOUND PLANT 1 MOUND AVE	ERNS
US DEPT OF ENERGY MOUND PLT	FINDS
US DOE MOUND PLT	FINDS

TOPOGRAPHIC MAP - 141429.1s - HOK/K Industrial



Source: US Geological Survey 1-Degree Digital Elevation Model
 Compiled 09/15/92



- ✓ - Major Roads
- ✓ - Contour lines (25 foot interval unless otherwise shown)
- ✓ - Waterways

- ⊙ - Earthquake epicenter, Richter 5 or greater.
- (F) (S) - Closest well according to (F)ederal or (S)tate database in quadrant.
- (P) - Closest public water supply well.

TARGET PROPERTY: US Dept.-Energy Mound Facility
ADDRESS: Mound Road
CITY/STATE/ZIP: Miamisburg OH 45343
LAT/LONG: 39.6308 / 84.2886

CUSTOMER: HOK/K Industrial
CONTACT: Nicolas Dionne
INQUIRY #: 141429.1s
DATE: October 23, 1996 5:20 pm

GEOCHECK VERSION 2.1 SUMMARY

GEOLOGIC AGE IDENTIFICATION†

Geologic Code: O3
 Era: Paleozoic
 System: Ordovician
 Series: Upper Ordovician (Cincinnatian)

ROCK STRATIGRAPHIC UNIT†

Category: Stratified Sequence

GROUNDWATER FLOW INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, including well data collected on nearby properties, regional groundwater flow information (from deep aquifers), or surface topography.‡

General Topographic Gradient: General North
 General Hydrogeologic Gradient: No hydrogeologic data available.

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2439084-F3 MIAMISBURG, OH

FEDERAL DATABASE WELL INFORMATION

<u>WELL QUADRANT</u>	<u>DISTANCE FROM TP</u>	<u>LITHOLOGY</u>	<u>DEPTH TO WATER TABLE</u>
Northern	1/2 - 1 Mile	Colluvium	13 ft.
Southern	1/2 - 1 Mile	Outwash	Not Reported
Western	1/4 - 1/2 Mile	Not Reported	24 ft.

STATE DATABASE WELL INFORMATION

<u>WELL QUADRANT</u>	<u>DISTANCE FROM TP</u>
Northern	1/2 - 1 Mile
Southern	>2 Miles

PUBLIC WATER SUPPLY SYSTEM INFORMATION (EPA-FRDS)

Searched by Nearest Well.

NOTE: PWS System location is not always the same as well location.

PWS Name: MIAMI CRUISE-INN CONCESSION
 MANAGER
 BOX 103, STATE ROUTE 25
 MIAMISBURG, OH 45342

Location Relative to TP: 1/2 - 1 Mile North

Well currently has or has had major violation(s): No

† Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS-11 (1994).

‡ U.S. EPA Ground Water Handbook, Vol I: Ground Water and Contamination, Office of Research and development EPA/625/6-90/016a, Chapter 4, page 76, September 1990.

GEOCHECK VERSION 2.1 SUMMARY

AREA RADON INFORMATION

MONTGOMERY COUNTY, OH

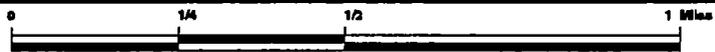
Number of sites tested: 35

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
Living Area - 1st Floor	2.966 pCi/L	77%	23%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	5.963 pCi/L	67%	27%	7%

OVERVIEW MAP - 141429.1s - HOK/K Industrial



- ★ - Indicates TARGET PROPERTY.
- ▲ - Indicates sites at elevations higher than or equal to the target property.
- - Indicates sites at elevations lower than the target property.
- - Coal Gasification Sites (if requested)
- National Priority List Sites
- Landfill Sites

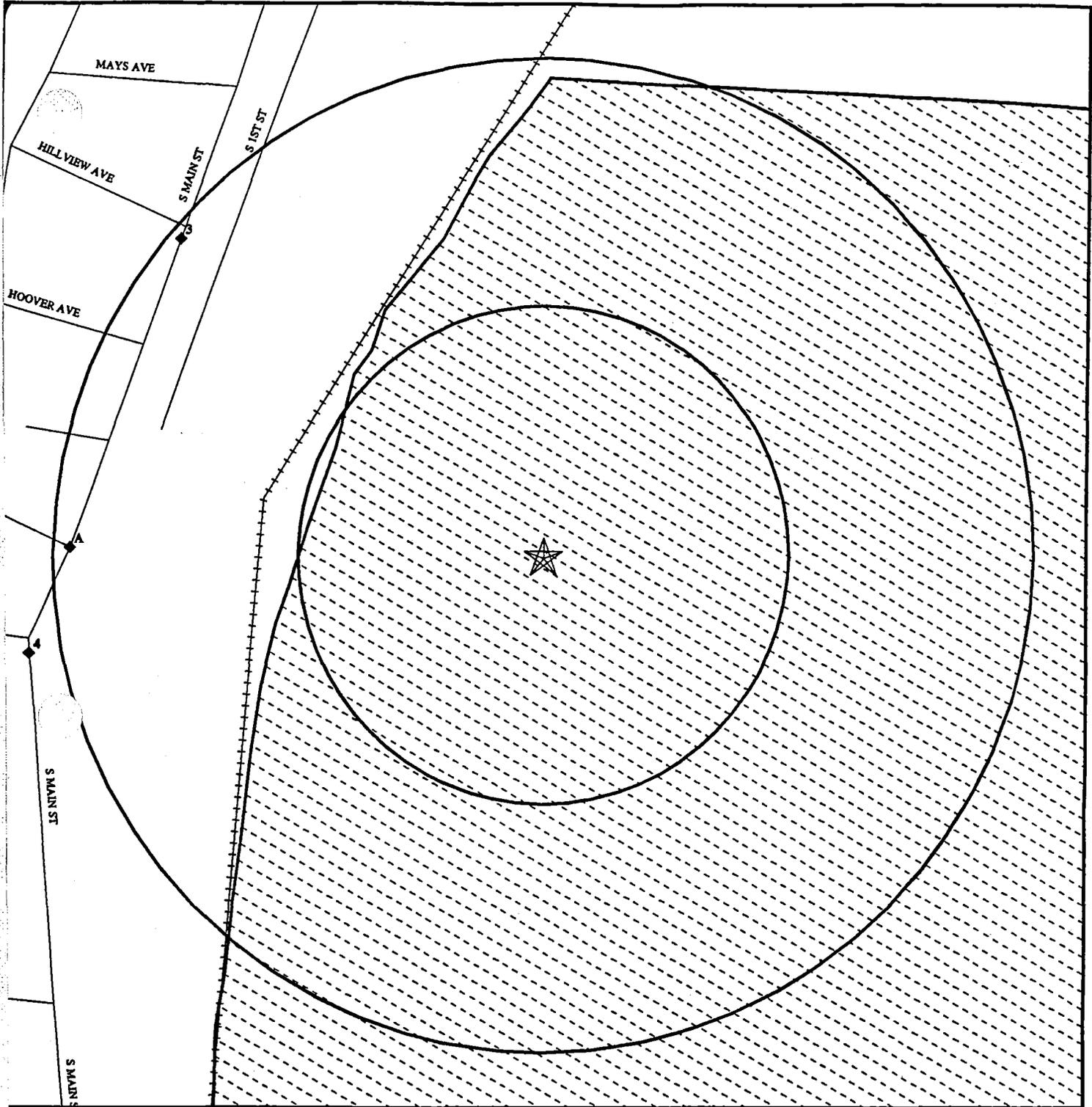


-  - Power transmission lines (USGS DLG, 1993)
-  - Oil & Gas pipelines (USGS DLG, 1993)

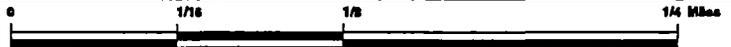
TARGET PROPERTY: US Dept.-Energy Mound Facility
 ADDRESS: Mound Road
 CITY/STATE/ZIP: Miamisburg OH 45343
 LAT/LONG: 39.6308 / 84.2886

CUSTOMER: HOK/K Industrial
 CONTACT: Nicolas Dionne
 INQUIRY #: 141429.1s
 DATE: October 23, 1996 5:18 pm

DETAIL MAP - 141429.1s - HOK/K Industrial



- Indicates TARGET PROPERTY.
- Indicates sites at elevations higher than or equal to the target property.
- Indicates sites at elevations lower than the target property.
- Coal Gasification Sites (if requested)
- Sensitive Receptors
- National Priority List Sites
- Fill Sites



-  - Power transmission lines (USGS DLG, 1993)
-  - Oil & Gas pipelines (USGS DLG, 1993)

TARGET PROPERTY: US Dept.-Energy Mound Facility
 ADDRESS: Mound Road
 CITY/STATE/ZIP: Miamisburg OH 45343
 LAT/LONG: 39.6308 / 84.2886

CUSTOMER: HOK/K Industrial
 CONTACT: Nicolas Dionne
 INQUIRY #: 141429.1s
 DATE: October 23, 1996 5:19 pm

MAP FINDINGS SUMMARY SHOWING ALL SITES

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL	X	1.000	0	0	0	0	NR	0
Delisted NPL		TP	NR	NR	NR	NR	NR	0
RCRIS-TSD		1.000	0	0	0	0	NR	0
State Haz. Waste		1.000	0	0	0	1	NR	1
CERCLIS	X	0.500	0	0	0	NR	NR	0
CERC-NFRAP		TP	NR	NR	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST	X	0.500	0	2	3	NR	NR	5
UST		0.250	0	1	NR	NR	NR	1
RAATS		TP	NR	NR	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
TRIS	X	TP	NR	NR	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
ROD		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
OH Spills		TP	NR	NR	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

**MAP FINDINGS SUMMARY SHOWING
ONLY SITES HIGHER THAN OR THE SAME ELEVATION AS TP**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL	X	1.000	0	0	0	0	NR	0
Delisted NPL		TP	NR	NR	NR	NR	NR	0
RCRIS-TSD		1.000	0	0	0	0	NR	0
State Haz. Waste		1.000	0	0	0	0	NR	0
CERCLIS	X	0.500	0	0	0	NR	NR	0
CERC-NFRAP		TP	NR	NR	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST	X	0.500	0	0	0	NR	NR	0
UST		0.250	0	0	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
TRIS	X	TP	NR	NR	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
ROD		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
OH Spills		TP	NR	NR	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

NPL
 Region
 Target
 Property

US DOE MOUND PLANT
 MOUND RD
 MIAMISBURG, OH 45342

CERCLIS
 FINDS
 NPL
 TRIS
 LUST

1000190772
 OH6890008984

CERCLIS Classification Data:

Site Incident Category: Not reported
 Ownership Status: FEDERALLY OWNED
 EPA Notes: Not reported

Federal Facility: YES
 NPL Status: CURRENTLY ON THE FINAL NPL

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	11/01/1980
Assessment:	PRELIMINARY ASSESSMENT	Completed:	03/25/1986
Assessment:	SCREENING SITE INSPECTION	Completed:	07/14/1989
Assessment:	HAZARD RANKING DETERMINED	Completed:	07/14/1989
Assessment:	PROPOSAL TO NPL	Completed:	07/14/1989
Assessment:	FINAL LISTING ON NPL	Completed:	11/24/1989
Assessment:	TECHNICAL ASSISTANCE	Completed:	Not reported
Assessment:	TECHNICAL ASSISTANCE	Completed:	Not reported
Assessment:	REMOVAL ACTION	Completed:	Not reported
Assessment:	COMBINED RI/FS	Completed:	06/12/1995
Assessment:	REMEDIAL ACTION	Completed:	Not reported
Assessment:	REMEDIAL DESIGN	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	06/12/1995
Assessment:	COMBINED RI/FS	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	COMBINED RI/FS	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported

CERCLIS Site Status:

This site is currently under investigation by the government to assess the extent of further action

CERCLIS Alias Name(s):

US DOE MOUND FACIL
 MOUND PLANT (USDOE)

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

US DOE MOUND PLANT (Continued)

1000190772

NPL:

ID:	05OH073
Date Listed:	11/21/89 (FINAL)
EPA/ID:	Not reported
Haz. Rank Score:	34.61
Status:	LISTED ON NPL
Rank:	Not reported
Group:	15
Ownership:	Federal
Ownership:	Govt. Owned, Contract. Oper.
Permit:	NPDES
Permit:	Air
Permit:	RCRA Interim Status
Permit:	Radioactive
Site Activities:	Landfill, Comm./Indus.
Site Activities:	Spill
Site Activities:	Tank, below ground
Site Condition:	Contam. Drinking Water
Waste Type:	Metals
Waste Type:	Radioactive Substances
Contaminant:	Media Affected:
CALCIUM CYANIDE	Not reported
COPPER CYANIDE	Not reported
PLUTONIUM AND COMPOUNDS, NOS (PU	Not reported
URANIUM AND COMPOUNDS, NOS (U)	Not reported
PLUTONIUM 238	Surface Water
Distance to nearest Population:	Not reported
Population within a 1 Mile Radius:	Not reported
Population within a 2 Mile Radius:	Not reported
Population within a 4 Mile Radius:	Not reported
Vertical Distance to Aquifer:	21 Feet to 75 Feet
Ground Water Use:	Used as Drinking Water, Alternative Source not Available
Distance to nearest Surface Water:	Not reported

Other Pertinent Environmental Activity Identified at Site:

facility with active water discharge permit.
 facility which is monitored or permitted for air emissions under the Clean Air Act.
 civil judicial and administrative enforcement case against facility.
 federal facility that has submitted specific environmental project budget plans.
 facility is a PCB generator, storer, transporter or permitted disposer.

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

US DOE MOUND PLANT (Continued)

1000190772

LUST:

Facility ID: 570630
Report No: 5791084
Facility Tel: 513-865-4020
Owner: US DEPT OF ENERGY

Incident ID: 579108400
Facility Track: 0
Responsibility: -0-

-0-
-0-, OH -0-

Operator: -0-
-0-

-0-, OH -0-
-0-

Inspector: -0-
Fiscal Track: F900

Revised Date: 07/16/91
Coordinator: Central Office Corrective Actions

Facility Status: Initial Corrective Action Program Report

Classification: Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.

Trust Fund: Incident eligible for LTF oversight and/or spending - a suspected or confirmed release of petroleum from a regulated UST.

Emerg Response: 2
Vacant: -, -0-

Response By: -0-
County Num: 57

Authorized By: HODNETT
Remarks: 0

Authorize Date: 07/12/91

Summary: -0-
Added Date: 12/18/89
Response Srch: -0-

Entry By: UNGER
Priority: 2

Facility ID: -0-
Report No: 5791084
Facility Tel: -0-
Owner: -0-

Incident ID: 579108402
Facility Track: 2
Responsibility: -0-

-0-
-0-, OH -0-

Operator: -0-
-0-

-0-, OH -0-
-0-

Inspector: -0-
Fiscal Track: F900

Revised Date: 11/15/94
Coordinator: Central Office Closure

Facility Status: Reported

Classification: Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.

Trust Fund: Other hazardous substance or hazardous material related incident.

Emerg Response: 2
Vacant: -, -0-

Response By: -0-
County Num: 57

Authorized By: MCCLURE
Remarks: -0-

Authorize Date: 11/14/94

Summary: -0-
Added Date: 12/28/92
Response Srch: -0-

Entry By: UNGER
Priority: 2

A1
West
1/8-1/4
Lower

CG&R
901 S MAIN ST
MIAMISBURG, OH 45342

LUST

S101565590
N/A

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

CG&R (Continued)

S101565590

LUST:

Facility ID:	572444	Incident ID:	574126900
Report No:	5741269	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	12/19/95
Fiscal Track:	FY94	Coordinator:	Central Office Closure
Facility Status:	No Further Action		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	MCCLURE	Authorize Date:	12/18/95
Remarks:	-0-		
Summary:	CLOS RPT RECD		
Added Date:	07/26/94	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

**A2
West
1/8-1/4
Lower**

**C G & R
901 S MAIN ST
MIAMISBURG, OH 45342**

UST

**U001964188
N/A**

UST:

Facility ID:	0-572444	Tank ID:	1
Capacity:	2,000	Tank Status:	Remv
Tank Age:	32	Material:	Bare Steel
Product:	Gasoline		
Owner:	JAMES PECKOCK		
			
Piping Material:	Bare Steel	Facility Contact:	Not reported
Piping Type:	Not Marked	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

C G & R (Continued)

U001964188

Facility ID:	0-572444	Tank ID:	2
Capacity:	3,000	Tank Status:	Remv
Tank Age:	32	Material:	Bare Steel
Product:	Gasoline		
Owner:	JAMES PECOCK		

Piping Material:	Bare Steel	Facility Contact:	Not reported
Piping Type:	Not Marked	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

Facility ID:	0-572444	Tank ID:	3
Capacity:	3,000	Tank Status:	Remv
Tank Age:	32	Material:	Bare Steel
Product:	Gasoline		
Owner:	JAMES PECOCK		

Piping Material:	Bare Steel	Facility Contact:	Not reported
Piping Type:	Not Marked	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

Facility ID:	0-572444	Tank ID:	4
Capacity:	550	Tank Status:	Remv
Tank Age:	32	Material:	Bare Steel
Product:	Used Oil		
Owner:	JAMES PECOCK		

Piping Material:	Bare Steel	Facility Contact:	Not reported
Piping Type:	Not Marked	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

3
NW
1/8-1/4
Lower

DJ CERAMICS
611 S MAIN ST
MIAMISBURG, OH 45342

LUST

S101424591
N/A

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

DJ CERAMICS (Continued)

S101424591

LUST:

Facility ID:	-0-	Incident ID:	575048600
Report No:	5750486	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	-0-
Fiscal Track:	FY95	Coordinator:	Central Office Closure
Facility Status:	Reported		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	04/20/95
Remarks:	-0-		
Summary:	-0-		
Added Date:	04/20/95	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

4
West
1/4-1/2
Lower

RICHARD CHURCH SR ESTATE

LUST

**S101565323
N/A**

LUST:

Facility ID:	571192	Incident ID:	570118000
Report No:	5701180	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	Not reported		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	04/21/92
Fiscal Track:	F900	Coordinator:	Central Office Closure
Facility Status:	No Further Action		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Response:	2	Response By:	-0-
Vacant:	1, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	04/17/92
Remarks:	0		
Summary:	CLOS RPT RECD		
Added Date:	05/24/90	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

5
North
1/4-1/2
Lower

TECHNICOTE INC
222 MOUND AVE
MIAMISBURG, OH 45342

RCRIS-SQG
UST
LUST

1000243045
OHD980896468

RCRIS:

Owner: TECHNICOTE
(312) 555-1212

Contact: TOM BLOSSER

Waste	Quantity	Info Source
D001	.00000 (N)	Notification

(P) = Pounds , (K) = Kilograms , (M) = Metric Tons , (T) = Tons , (N) = Not Reported

There are 1 compliance/violation record(s) reported at this site:

Evaluation	Date	Violations
COMPLIANCE EVALUATION INSPECTION (CEI)	14-JAN-88	YES

LUST:

Facility ID:	570319	Incident ID:	573000600
Report No:	5730006	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	-0-
Fiscal Track:	FY93	Coordinator:	Central Office Closure
Facility Status:	Reported		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	01/11/93
Remarks:	-0-		
Summary:	-0-		
Added Date:	01/11/93	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

TECHNICOTE INC (Continued)

1000243045

UST:

Facility ID:	0-570319	Tank ID:	1
Capacity:	8,000	Tank Status:	Remv
Tank Age:	Unk	Material:	Bare Steel
Product:	HAZ-69742-89-8		
Owner:	TECHNICOTE, INC. 222 MOUND AVE MIAMISBURG, OH 45342 County: Montgomery		
Piping Material:	Bare Steel	Facility Contact:	MILES D. TREECE
Piping Type:	Suction -- Valve	Telephone:	(513) 859-4448
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		
Facility ID:	0-570319	Tank ID:	2
Capacity:	8,000	Tank Status:	Remv
Tank Age:	Unk	Material:	Bare Steel
Product:	Not reported		
Owner:	TECHNICOTE, INC. 222 MOUND AVE MIAMISBURG, OH 45342 County: Montgomery		
Piping Material:	Bare Steel	Facility Contact:	MILES D. TREECE
Piping Type:	Suction -- Valve	Telephone:	(513) 859-4448
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		
Facility ID:	0-570319	Tank ID:	3
Capacity:	500	Tank Status:	Remv
Tank Age:	Unk	Material:	Bare Steel
Product:	Not reported		
Owner:	TECHNICOTE, INC. 222 MOUND AVE MIAMISBURG, OH 45342 County: Montgomery		
Piping Material:	Bare Steel	Facility Contact:	MILES D. TREECE
Piping Type:	Suction -- Valve	Telephone:	(513) 859-4448
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

6
NNW
1/4-1/2
Lower

JACKS MOBILE
51 CENTER ST
GERMANTOWN, OH -0-

LUST

S101565406
N/A

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

JACKS MOBILE (Continued)

S101565406

LUST:

Facility ID: 570757	Incident ID: 571148402
Report No: 5711484	Facility Track: 2
Facility Tel: -0-	Responsibility: -0-
Owner: -0-	
-0-	
-0-, OH -0-	
-0-	
Operator: -0-	
-0-	
-0-, OH -0-	
-0-	
Inspector: -0-	Revised Date: 12/02/94
Fiscal Track: FY91	Coordinator: Central Office Corrective Actions
Facility Status: No Further Action	
Classification: Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.	
Trust Fund: Incident eligible for LTF oversight and/or spending - a suspected or confirmed release of petroleum from a regulated UST.	
Emerg Response: 2	Response By: -0-
Vacant: -, -0-	County Num: 57
Authorized By: ORD	Authorize Date: 11/29/94
Remarks: -0-	
Summary: -0-	
Added Date: -0-	Entry By: UNGER
Response Srch: -0-	Priority: 2

7
NW
1/2-1
Lower

**MIAMISBURG WELL FIELD / UNK SOURCE
302 S RIVERVIEW AVE
MIAMISBURG, OH 45342**

SHWS

**S100037719
N/A**

SHWS:

Facility ID: 557-1359	EPA ID: NOT ASSIGNED
Facility Type: None	

ORPHAN SUMMARY

City	EDR ID	Site Name	Site	ss	Zip	Database(s)	City ID
MIAMISBURG	9011149	MOUND PLANT MOUND RD.				ERNS	
MIAMISBURG	9002897	MOUND PLANT 1 MOUND AVE				ERNS	
MIAMISBURG	S100763612	MIAMI TWP SERVICE DEPT	8580 MIAMISBURG SPRINGBORO RD		45342	LUST	579313
MIAMISBURG	U000894728	MIAMI TOWNSHIP SERVICE DEPT	8580 MIAMISBURG-SPRINGBORO RD		45342	UST	0-579313
MIAMISBURG	U001431645	U.S. DEPT OF ENERGY	MOUND AVE		45343	UST	0-570630
MIAMISBURG	S101565646	US DEPT OF ENERGY	120 MOUND AVE (94 CLOSURE)		45343	LUST	570630
MIAMISBURG	S100648052	MOUND FACILITY	MOUND RD (MAIN HILL AREA BY POWE		45343	LUST	-0-
MIAMISBURG	S100648051	MOUND PLANT (DOE)	MOUND AVE (BLDG 34)		45343	LUST	-0-
MIAMISBURG	1000962299	US DEPT OF ENERGY MOUND PLT	MOUND AVE		45343	FINDS	
MIAMISBURG	1000792602	US DOE MOUND PLT	MOUND RD		45343	FINDS	
MIAMISBURG	1001090583	MOUND FLEXIBLE CIRCUITS CORPORATION	720 MOUND RD BLDG 4241		45342	RCRIS-SQG	
MIAMISBURG	1000842207	US DOE MOUND FACILITY	MOUND RD		45343	PADS, RCRIS-LQG, RCRIS-TSD, CORRACTS, SHWS	
MIAMISBURG	1001029422	EG & G STAR CITY INC	1 MOUND RD		45343	RCRIS-SQG	
MIAMISBURG	1000154644	MONARCH MARKING SYSTEMS INC	ST RTE 725 AND BYERS RD		45342	FINDS, RCRIS-LQG	
NEW CASTLE	S100645642	AT&T	SR 36A		45343	LUST	167059
NEW CASTLE	U001635336	AT&T	US RT 36		45343	UST	0-167059

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
MOUND PLANT MOUND RD. MIAMISBURG, OH	ERNS	9011149 N/A
MOUND PLANT 1 MOUND AVE MIAMISBURG, OH	ERNS	9002897 N/A
MIAMI TWP SERVICE DEPT 8580 MIAMISBURG SPRINGBORO RD MIAMISBURG, OH 45342	LUST	S100763612 N/A

LUST:

Facility ID:	579313	Incident ID:	573055000
Report No:	5730550	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	07/22/93
Fiscal Track:	FY93	Coordinator:	Central Office Closure
Facility Status:	No Further Action		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	07/07/93
Remarks:	-0-		
Summary:	-0-		
Added Date:	04/12/93	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number	EPA ID Number
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MIAMI TWP SERVICE DEPT (Continued)

S100763612

Facility ID:	579313	Incident ID:	573055001
Report No:	5730550	Facility Track:	1
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	03/22/94
Fiscal Track:	FY93	Coordinator:	Central Office Closure
Facility Status:	No Further Action		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Respse:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	03/18/94
Remarks:	-0-		
Summary:	-0-		
Added Date:	12/15/93	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

MIAMI TOWNSHIP SERVICE DEPT
8580 MIAMISBURG-SPRINGBORO RD
MIAMISBURG, OH 45342

UST

U000894728
N/A

UST:

Facility ID:	0-579313	Tank ID:	1
Capacity:	1,000	Tank Status:	Remv
Tank Age:	20	Material:	Bare Steel
Product:	Gasoline		
Owner:	MIAMI TOWNSHIP TRUSTEES 2700 LYONS RD MIAMISBURG, OH 45342 County: Montgomery		
Piping Material:	Galvanized Steel	Facility Contact:	HAROLD W. MEIER
Piping Type:	Suction -- No Valve	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		
Facility ID:	0-579313	Tank ID:	2
Capacity:	1,000	Tank Status:	Remv
Tank Age:	20	Material:	Bare Steel
Product:	Diesel		
Owner:	MIAMI TOWNSHIP TRUSTEES 2700 LYONS RD MIAMISBURG, OH 45342 County: Montgomery		
Piping Material:	Galvanized Steel	Facility Contact:	HAROLD W. MEIER
Piping Type:	Suction -- No Valve	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number	EPA ID Number
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MIAMI TOWNSHIP SERVICE DEPT (Continued)

U000894728

Facility ID:	0-579313	Tank ID:	3
Capacity:	1,000	Tank Status:	Remv
Tank Age:	20	Material:	Bare Steel
Product:	Used Oil		
Owner:	MIAMI TOWNSHIP TRUSTEES 2700 LYONS RD MIAMISBURG, OH 45342 County: Montgomery		
Piping Material:	Galvanized Steel	Facility Contact:	HAROLD W. MEIER
Piping Type:	Gravity Fed	Telephone:	Not reported
Remed. Des. Tanks:	Tightness Testing		
Remed. Des. Piping:	Line Tightness		

U.S. DEPT OF ENERGY
MOUND AVE
MIAMISBURG, OH 45343

UST

U001431645
N/A

UST:

Facility ID:	0-570630	Tank ID:	1
Capacity:	550	Tank Status:	Remv
Tank Age:	Unk	Material:	Unknown
Product:	Diesel		
Owner:	U.S. DEPT. OF ENERGY PO BOX 66 MIAMISBURG, OH 45343 County: Montgomery		
Piping Material:	Unknown	Facility Contact:	JAMES A. MORLEY
Piping Type:	Not reported	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		
Facility ID:	0-570630	Tank ID:	2
Capacity:	Unknown	Tank Status:	Curr
Tank Age:	Unk	Material:	Unknown
Product:	UNK		
Owner:	U.S. DEPT. OF ENERGY PO BOX 66 MIAMISBURG, OH 45343 County: Montgomery		
Piping Material:	Unknown	Facility Contact:	JAMES A. MORLEY
Piping Type:	Not reported	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		
Facility ID:	0-570630	Tank ID:	3
Capacity:	Unknown	Tank Status:	Curr
Tank Age:	Unk	Material:	Unknown
Product:	UNK		
Owner:	U.S. DEPT. OF ENERGY PO BOX 66 MIAMISBURG, OH 45343 County: Montgomery		
Piping Material:	Unknown	Facility Contact:	JAMES A. MORLEY
Piping Type:	Not reported	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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MOUND FACILITY (Continued)

S100648052

LUST:

Facility ID:	-0-	Incident ID:	579108403
Report No:	5791084	Facility Track:	3
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	-0-
Fiscal Track:	F900	Coordinator:	Central Office Corrective Actions
Facility Status:	Reported		
Classification:	Unknown source and/or responsible person		
Trust Fund:	A suspected or confirmed release of petroleum from a UST not regulated by RCRA subtitle I.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	HODNETT	Authorize Date:	09/28/93
Remarks:	-0-		
Summary:	-0-		
Added Date:	09/28/93	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

MOUND PLANT (DOE)
MOUND AVE (BLDG 34)
MIAMISBURG, OH 45343

LUST

S100648051
N/A

LUST:

Facility ID:	-0-	Incident ID:	579108401
Report No:	5791084	Facility Track:	1
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	11/16/94
Fiscal Track:	F900	Coordinator:	Central Office Closure
Facility Status:	No Further Action		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	MCCLURE	Authorize Date:	11/15/94
Remarks:	-0-		
Summary:	-0-		
Added Date:	-0-	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

DETAILED ORPHAN LISTING

Site	Database(s)	EPA ID Number	EDR ID Number
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US DEPT OF ENERGY MOUND PLT
MOUND AVE
MIAMISBURG, OH 45343

FINDS 1000962299
OH0000323576

US DOE MOUND PLT
MOUND RD
MIAMISBURG, OH 45343

FINDS 1000792602
OHD987039856

MOUND FLEXIBLE CIRCUITS CORPORATION
720 MOUND RD BLDG 4241
MIAMISBURG, OH 45342

RCRIS-SQG 1001090583
OHR000011569

RCRIS:

Owner: XOLOX HOLDING CORPORATION
(219) 432-0661

Contact: Not reported

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D000	.00000 (N)	Notification	D002	.00000 (N)	Notification
D008	.00000 (N)	Notification	F006	.00000 (N)	Notification

(P) = Pounds , (K) = Kilograms , (M) = Metric Tons , (T) = Tons , (N) = Not Reported

US DOE MOUND FACILITY
MOUND RD
MIAMISBURG, OH 45343

PADS 1000842207
RCRIS-LQG OH6890008984
RCRIS-TSD
CORRACTS
SHWS

RCRIS:

Owner: US DOE
(513) 865-3271

Contact: HARRY HILL
(513) 865-3271

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D001	.00000 (N)	Notification	D002	.00000 (N)	Notification
D003	.00000 (N)	Notification	D004	.00000 (N)	Notification
F001	.00000 (N)	Notification	F003	.00000 (N)	Notification
F004	.00000 (N)	Notification	F005	.00000 (N)	Notification
F007	.00000 (N)	Notification	F009	.00000 (N)	Notification
K044	.00000 (N)	Notification	P018	.00000 (N)	Notification
P106	.00000 (N)	Notification	U009	.00000 (N)	Notification
U019	.00000 (N)	Notification	U021	.00000 (N)	Notification
U037	.00000 (N)	Notification	U044	.00000 (N)	Notification
U052	.00000 (N)	Notification	U056	.00000 (N)	Notification
U075	.00000 (N)	Notification	U080	.00000 (N)	Notification
U108	.00000 (N)	Notification	U121	.00000 (N)	Notification
U122	.00000 (N)	Notification	U134	.00000 (N)	Notification
U135	.00000 (N)	Notification	U138	.00000 (N)	Notification
U140	.00000 (N)	Notification	U144	.00000 (N)	Notification
U147	.00000 (N)	Notification	U151	.00000 (N)	Notification
U154	.00000 (N)	Notification	U158	.00000 (N)	Notification
U159	.00000 (N)	Notification	U160	.00000 (N)	Notification

DETAILED ORPHAN LISTING

Site _____ Database(s) _____ EDR ID Number
 EPA ID Number _____

US DOE MOUND FACILITY (Continued)

1000842207

U161	.00000 (N)	Notification	U167	.00000 (N)	Notification
U168	.00000 (N)	Notification	U188	.00000 (N)	Notification
U201	.00000 (N)	Notification	U213	.00000 (N)	Notification
U220	.00000 (N)	Notification	U223	.00000 (N)	Notification
U226	.00000 (N)	Notification	U238	.00000 (N)	Notification
U239	.00000 (N)	Notification	F001	18.14400 (N)	Part A
F003	2.04100 (N)	Part A	F004	.00900 (N)	Part A
F005	1.81400 (N)	Part A	F007	.45300 (N)	Part A
F009	.22600 (N)	Part A	K044	.01100 (N)	Part A
P018	.00000 (N)	Part A	P106	.00000 (N)	Part A
U009	.00400 (N)	Part A	U019	.03400 (N)	Part A
U021	.00000 (N)	Part A	U037	.00200 (N)	Part A
U044	.03100 (N)	Part A	U056	.02700 (N)	Part A
U075	.01100 (N)	Part A	U080	.01100 (N)	Part A
U108	.00400 (N)	Part A	U121	.05600 (N)	Part A
U122	.03100 (N)	Part A	U134	.02900 (N)	Part A
U135	.00400 (N)	Part A	U138	.00400 (N)	Part A
U140	.00400 (N)	Part A	U144	.00400 (N)	Part A
U147	.00400 (N)	Part A	U151	.00500 (N)	Part A
U158	.00000 (N)	Part A	U160	.00400 (N)	Part A
U161	.00200 (N)	Part A	U167	.00400 (N)	Part A
U168	.00400 (N)	Part A	U188	.01100 (N)	Part A
U201	.00400 (N)	Part A	U213	.00400 (N)	Part A
U223	.29400 (N)	Part A	U238	.04500 (N)	Part A
D001	.19200 (N)	Part A	D002	3.81000 (N)	Part A
D003	.04500 (N)	Part A	D004	.00400 (N)	Part A

(P) = Pounds , (K) = Kilograms , (M) = Metric Tons , (T) = Tons , (N) = Not Reported

There are 8 compliance/violation record(s) reported at this site:

Evaluation	Date	Violations
COMPLIANCE EVALUATION INSPECTION (CEI)	20-SEP-94	YES
COMPLIANCE EVALUATION INSPECTION (CEI)	23-JUN-93	YES
COMPLIANCE EVALUATION INSPECTION (CEI)	07-JUL-92	YES
COMPLIANCE EVALUATION INSPECTION (CEI)	29-JUL-91	YES
COMPLIANCE EVALUATION INSPECTION (CEI)	31-JUL-90	YES
COMPLIANCE EVALUATION INSPECTION (CEI)	13-SEP-89	YES
COMPLIANCE EVALUATION INSPECTION (CEI)	24-AUG-88	YES
OTHER EVALUATION	24-AUG-88	YES

SHWS:

Facility ID: 557-0864 EPA ID: OH6890008984
 Facility Type: Active, On Federal National Priorities List

EG & G STAR CITY INC
 1 MOUND RD
 MIAMISBURG, OH 45343

RCRIS-SQG 1001029422
 OHR000004713

DETAILED ORPHAN LISTING

Site _____ Database(s) _____ EDR ID Number
 _____ EPA ID Number _____

EG & G STAR CITY INC (Continued)

1001029422

RCRIS:

Owner: USDOE - AREA MGR
 (513) 865-3252

Contact: Not reported

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D000	.00000 (N)	Notification	D001	.00000 (N)	Notification
D002	.00000 (N)	Notification	D003	.00000 (N)	Notification
D007	.00000 (N)	Notification	F001	.00000 (N)	Notification
F002	.00000 (N)	Notification	F003	.00000 (N)	Notification
F005	.00000 (N)	Notification	U002	.00000 (N)	Notification
U108	.00000 (N)	Notification			

(P) = Pounds , (K) = Kilograms , (M) = Metric Tons , (T) = Tons , (N) = Not Reported

MONARCH MARKING SYSTEMS INC
 ST RTE 725 AND BYERS RD
 MIAMISBURG, OH 45342

FINDS 1000154644
 RCRIS-LQG OHD044573053

RCRIS:

Owner: PITNEY BOWES
 (203) 356-5000

Contact: TOM DERBY

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D001	.00000 (N)	Notification	F001	.00000 (N)	Notification
F003	.00000 (N)	Notification	F005	.00000 (N)	Notification

(P) = Pounds , (K) = Kilograms , (M) = Metric Tons , (T) = Tons , (N) = Not Reported

There are 2 compliance/violation record(s) reported at this site:

Evaluation	Date	Violations
COMPLIANCE EVALUATION INSPECTION (CEI)	17-FEB-88	YES
OTHER EVALUATION	17-FEB-88	YES

AT&T
 SR 36A
 NEW CASTLE, OH 45343

LUST S100645642
 N/A

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number	EPA ID Number
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AT&T (Continued)

S100645642

LUST:

Facility ID:	167059	Incident ID:	163205800
Report No:	1632058	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	03/17/94
Fiscal Track:	FY94	Coordinator:	Central Office Corrective Actions
Facility Status:	Initial Corrective Action Program Report		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Incident eligible for LTF oversight and/or spending - a suspected or confirmed release of petroleum from a regulated UST.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	16
Authorized By:	GILL	Authorize Date:	03/04/94
Remarks:	-0-		
Summary:	-0-		
Added Date:	10/19/93	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

AT&T
US RT 36
NEW CASTLE, OH 45343

UST

U001635336
N/A

UST:

Facility ID:	0-167059	Tank ID:	1
Capacity:	2,000	Tank Status:	Remv
Tank Age:	30	Material:	Cath. Steel
Product:	Diesel		
Owner:	AT&T		
	21 COLONIAL DR RM 116		
	PISCATAWAY, NJ 08854		
	County: Pennsylvania		
Piping Material:	Galvanized Steel	Facility Contact:	KEN G. SMITH
Piping Type:	Suction -- No Valve	Telephone:	(217) 788-2450
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

**GEOCHECK VERSION 2.1 ADDENDUM
FEDERAL DATABASE WELL INFORMATION**

Well Closest to Target Property (Northern Quadrant)

BASIC WELL DATA

Site ID:	393813084174700	Distance from TP:	1/2 - 1 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1990	County:	Montgomery
Altitude:	701.28 ft.	State:	Ohio
Well Depth:	91.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	13.00 ft.	Prim. Use of Site:	Observation
Date Measured:	11141990	Prim. Use of Water:	Unused

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary-Holocene
Principal Lithology of Unit:	Colluvium
Further Description:	TOPSOIL

WATER LEVEL VARIABILITY

Not Reported

**GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION**

Well Closest to Target Property (Southern Quadrant)

BASIC WELL DATA

Site ID:	393724084172900	Distance from TP:	1/2 - 1 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1964	County:	Montgomery
Altitude:	698.00 ft.	State:	Ohio
Well Depth:	226.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	Not Reported	Prim. Use of Site:	Withdrawal of water
Date Measured:	Not Reported	Prim. Use of Water:	Industrial

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary-Pleistocene
Principal Lithology of Unit:	Outwash
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Not Reported

**GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION**

Well Closest to Target Property (Western Quadrant)

BASIC WELL DATA

Site ID:	393757084173600	Distance from TP:	1/4 - 1/2 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1955	County:	Montgomery
Altitude:	691.00 ft.	State:	Ohio
Well Depth:	95.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	24.13 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	12311975	Prim. Use of Water:	Public supply

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

**GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION**

Water Well Information:

Well Within 1/2 - 1 Mile of Target Property (Northern Quadrant)

PWS ID:	5701212	Population Served:	18,500
Latitude:	0393813	Longitude:	0841744
Owner:	MIAMISBURG,CITY OF		
Source:	Ground		

Well Within >2 Miles of Target Property (Southern Quadrant)

PWS ID:	8301412	Population Served:	7,800
Latitude:	0393505	Longitude:	0841733
Owner:	SPRINGBORO,VLG.OF-CHAUTAUQUA		
Source:	Ground		

GEOCHECK VERSION 2.1
PUBLIC WATER SUPPLY SYSTEM INFORMATION

Searched by Nearest Well.

PWS SUMMARY:

PWS ID:	OH5736712	PWS Status:	Active	Distance from TP:	1/2 - 1 Mile
Date Initiated:	Not Reported	Date Deactivated:	Not Reported	Dir relative to TP:	North
PWS Name:	MIAMI CRUISE-INN CONCESSION MANAGER BOX 103, STATE ROUTE 25 MIAMISBURG, OH 45342				

Addressee / Facility Type:	Not Reported
Facility Name:	Not Reported

Facility Latitude:	39 38 34	Facility Longitude:	084 17 12
City Served:	Not Reported:		
Treatment Class:	Treated	Population Served:	101 - 500 Persons

Well currently has or has had major violation(s): No

EPA Waste Codes Addendum

Code	Description
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D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA/NTIS

Telephone: 703-603-8904

CERCLIS: CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/31/96

Date Made Active at EDR: 06/03/96

Database Release Frequency: Monthly

Date of Data Arrival at EDR: 04/23/96

Elapsed ASTM days: 41

Date of Last EDR Contact: 07/17/96

ERNS: Emergency Response Notification System

Source: EPA/NTIS

Telephone: 202-260-2342

ERNS: Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/95

Date Made Active at EDR: 02/19/96

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 01/26/96

Elapsed ASTM days: 24

Date of Last EDR Contact: 08/12/96

NPL: National Priority List

Source: EPA

Telephone: 703-603-8852

NPL: National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, it is EDR's policy to plot NPL sites greater than approximately 300 acres in size as areas (polygons). A polygon boundary is based upon EPA's defined Area of Impact (AOI) for the particular NPL site. The AOI may be the boundaries of the property, the boundaries as determined by the extent of plume migration, or other such boundaries as defined by EPA. Sites smaller in size are point-geocoded at the site's address.

Date of Government Version: 06/01/96

Date Made Active at EDR: 07/17/96

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 06/25/96

Elapsed ASTM days: 22

Date of Last EDR Contact: 06/19/96

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS

Telephone: 703-308-7907

RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 07/01/96

Date Made Active at EDR: 10/09/96

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/07/96

Elapsed ASTM days: 63

Date of Last EDR Contact: 06/05/96

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDERAL NON-ASTM RECORDS:

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices
Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: Varies
Database Release Frequency: Varies

Date of Last EDR Contact: Varies
Date of Next Scheduled EDR Contact: 09/01/95

CORRACTS: Corrective Action Report

Source: EPA
Telephone: 703-308-7907

CORRACTS: CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 04/10/95
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/27/96
Date of Next Scheduled EDR Contact: 12/16/96

FINDS: Facility Index System

Source: EPA/NTIS
Telephone: 800-908-2493

FINDS: Facility Index System. FINDS contains both facility information and "pointers" to other sources that contain more detail. These include: RCRIS, PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]), CERCLIS, DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), FRDS (Federal Reporting Data System), SIA (Surface Impoundments), CICIS (TSCA Chemicals in Commerce Information System), PADS, RCRA-J (medical waste transporters/disposers), TRIS and TSCA.

Date of Government Version: 09/30/95
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/05/96
Date of Next Scheduled EDR Contact: 10/07/96

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation
Telephone: 202-366-4555

HMIRS: Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/95
Database Release Frequency: Annually

Date of Last EDR Contact: 07/29/96
Date of Next Scheduled EDR Contact: 10/28/96

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 02/13/96
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/15/96
Date of Next Scheduled EDR Contact: 10/14/96

NPL LIENS: Federal Superfund Liens

Source: EPA
Telephone: 205-564-4267

NPL LIENS: Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 09/10/96
Date of Next Scheduled EDR Contact: 11/25/96

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-260-3992

PADS: PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/14/94

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/21/96

Date of Next Scheduled EDR Contact: 11/18/96

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RAATS: RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.

Date of Government Version: 04/17/95

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/16/96

Date of Next Scheduled EDR Contact: 12/16/96

ROD: Records Of Decision

Source: NTIS

Telephone: 703-416-0703

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/31/95

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/07/96

Date of Next Scheduled EDR Contact: 12/02/96

TRIS: Toxic Chemical Release Inventory System

Source: EPA/NTIS

Telephone: 202-260-2320

TRIS: Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/92

Database Release Frequency: Annually

Date of Last EDR Contact: 09/11/96

Date of Next Scheduled EDR Contact: 09/30/96

TSCA: Toxic Substances Control Act

Source: EPA/NTIS

Telephone: 202-260-1444

TSCA: Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site. USEPA has no current plan to update and/or re-issue this database.

Date of Government Version: 01/31/95

Database Release Frequency: Annually

Date of Last EDR Contact: 09/16/96

Date of Next Scheduled EDR Contact: 12/16/96

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF OHIO ASTM RECORDS:

LUST: List of Reported Petroleum Underground Storage Tank Release Incidents

Source: Department of Commerce

Telephone: 614-752-7926

LUST: Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/01/96

Date Made Active at EDR: 06/06/96

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 04/25/96

Elapsed ASTM days: 42

Date of Last EDR Contact: 07/15/96

SHWS: Master Sites List

Source: Ohio Environmental Protection Agency

Telephone: 614-644-3143

SHWS: State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 12/31/95

Date Made Active at EDR: 04/30/96

Database Release Frequency: Annually

Date of Data Arrival at EDR: 04/07/96

Elapsed ASTM days: 23

Date of Last EDR Contact: 09/16/96

SWF/LF: Licensed Solid Waste Facilities

Source: Ohio Environmental Protection Agency

Telephone: 614-644-2621

SWF/LF: Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/01/96

Date Made Active at EDR: 09/23/96

Database Release Frequency: Annually

Date of Data Arrival at EDR: 08/19/96

Elapsed ASTM days: 35

Date of Last EDR Contact: 07/31/96

UST: Facility File

Source: Department of Commerce

Telephone: 614-752-7926

UST: Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 07/16/96

Date Made Active at EDR: 08/13/96

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 07/19/96

Elapsed ASTM days: 25

Date of Last EDR Contact: 07/16/96

STATE OF OHIO NON-ASTM RECORDS:

SPILLS: Includes Reported Incidents, Spills or Releases to The Environment

Source: Ohio EPA

Telephone: 614-644-2084

SPILLS: All reported incidents, spills or releases to the environment.

Date of Government Version: 12/31/93

Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/19/96

Date of Next Scheduled EDR Contact: 12/16/96

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Historical and Other Database(s)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

DELISTED NPL: Delisted NPL Sites

Source: EPA
Telephone: 703-603-8769

DELISTED NPL: The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

NFRAP: No Further Remedial Action Planned

Source: EPA/NTIS
Telephone: 703-416-0702

NFRAP: As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

FRDS: Federal Reporting Data System

Source: EPA/Office of Drinking Water
Telephone: 202-260-2805

FRDS provides information regarding public water supplies and their compliance with monitoring requirements, maximum contaminant levels (MCL's), and other requirements of the Safe Drinking Water Act of 1986.

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals who, due to their fragile immune systems, are deemed to be especially sensitive to environmental discharges. These typically include the elderly, the sick, and children. While the exact location of these sensitive receptors cannot be determined, EDR indicates those facilities, such as schools, hospitals, day care centers, and nursing homes, where sensitive receptors are likely to be located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1994 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Water Dams: National Inventory of Dams

Source: Federal Emergency Management Agency

Telephone: 202-646-2801

WATER DAMS: National computer database of more than 74,000 dams maintained by the Federal Emergency Management Agency.

Ohio Public Water Systems

Source: Ohio EPA, Division of Drinking and Groundwater

Telephone: 614-644-2752

**The EDR-Radius Map
with GeoCheck™**

**US Department of Energy
Off Mound Rd.
Miamisburg, OH 45432**

Inquiry Number: 100553.1s

December 13, 1995

EDR : **Environmental
Data
Resources, Inc.**
: **Creators of Toxicheck/®**

***The Source*
For Environmental
Risk Management
Data**

**3530 Post Road
Southport, Connecticut 06490**

Nationwide Customer Service

**Telephone: 1-800-352-0050
Fax: 1-800-231-6802**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary.....	ES1
Topographic Map.....	2
GeoCheck Summary.....	3
Overview Map.....	4
Detail Map.....	5
Map Summary - All Sites.....	6
Map Summary - Sites with higher or the same elevation as the Target Property.....	7
Map Findings.....	8
Orphan Summary.....	19
 <u>APPENDICES</u>	
GeoCheck Version 2.1.....	A1
EPA Waste Codes.....	A6
Government Records Searched / Data Currency Tracking Addendum.....	A9

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The search met the specific requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-94, or custom distances requested by the user.

The address of the subject property for which the search was intended is:

OFF MOUND RD.
MIAMISBURG, OH 45432

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the subject property or within the ASTM E 1527-94 search radius around the subject property for the following Databases:

Delisted NPL:	NPL Deletions
RCRIS-TSD:	Resource Conservation and Recovery Information System
CERC-NFRAP:	Comprehensive Environmental Response, Compensation, and Liability Information System
CORRACTS:	Corrective Action Report
State LF:	Licensed Solid Waste Facilities
RAATS:	RCRA Administrative Action Tracking System
HMIRS:	Hazardous Materials Information Reporting System
ERNS:	Emergency Response Notification System
NPL Liens:	Federal Superfund Liens
TSCA:	Toxic Substances Control Act
MLTS:	Material Licensing Tracking System
RODS:	Records Of Decision
CONSENT:	Superfund (CERCLA) Consent Decrees
OH Spills:	Not reported
Coal Gas:	Former Manufactured gas (Coal Gas) Sites

Unmapped (orphan) sites are not considered in the foregoing analysis.

Search Results:

Search results for the subject property and the search radius, are listed below:

Subject Property:

The subject property was not listed in any of the databases searched by EDR.

EXECUTIVE SUMMARY

Surrounding Properties:

Sites with an elevation equal to or higher than the subject property are in the left hand column; those with a lower elevation are in the right hand column. Page numbers refer to the EDR Radius Map report where detailed data on individual sites may be reviewed.

Sites listed in *bold italics* are in multiple databases.

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 09/01/1995 has revealed that there is 1 NPL site within approximately 1.33 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
<i>US DOE MOUND PLANT</i>	<i>8</i>	<i>US DOE MOUND PLANT</i>	<i>8</i>

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data comes from the Ohio Environmental Protection Agency's Master Sites List.

A review of the State Haz. Waste list, as provided by EDR, and dated 04/01/1995 has revealed that there is 1 State Haz. Waste site within approximately 1.33 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
		MIAMISBURG WELL FIELD / UNK SOURC	18

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 08/31/1995 has revealed that there is 1 CERCLIS site within approximately 0.83 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
<i>US DOE MOUND PLANT</i>	<i>8</i>	<i>US DOE MOUND PLANT</i>	<i>8</i>

EXECUTIVE SUMMARY

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data comes from the Department of Commerce Division of State Fire Marshal's List of Reported Petroleum Underground Storage Tank Release Incidents.

A review of the LUST list, as provided by EDR, and dated 11/01/1995 has revealed that there are 7 LUST sites within approximately 0.83 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
<i>US DOE MOUND PLANT</i>	<i>8</i>	<i>US DOE MOUND PLANT</i>	<i>8</i>
		<i>DJ CERAMICS</i>	<i>10</i>
		<i>CG&R</i>	<i>11</i>
		<i>RICHARD CHURCH SR ESTATE</i>	<i>13</i>
		<i>TECHNICOTE INC</i>	<i>14</i>
		<i>POINT STORE</i>	<i>17</i>
		<i>MIAMISBURG WATER TREATMENT PLT</i>	<i>17</i>

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data comes from the Department of Commerce Division of State Fire Marshal's Facility File.

A review of the UST list, as provided by EDR, and dated 09/01/1995 has revealed that there are 3 UST sites within approximately 0.58 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
		<i>CITY OF MIAMISBURG PUMP STATIO</i>	<i>12</i>
		<i>TECHNICOTE INC</i>	<i>14</i>
		<i>SHELL OIL CO. #23420931760</i>	<i>16</i>

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-SQG list, as provided by EDR, and dated 05/31/1995 has revealed that there are 4 RCRIS-SQG sites within approximately 0.58 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
		<i>GMC DELCO PRODUCTS DIV</i>	<i>12</i>
		<i>DAYTON PUBLIC SCHOOLS</i>	<i>12</i>
		<i>TECHNICOTE INC</i>	<i>14</i>
		<i>PLOCHER ANDREW SONS</i>	<i>16</i>

EXECUTIVE SUMMARY

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-LQG list, as provided by EDR, and dated 05/31/1995 has revealed that there is 1 RCRIS-LQG site within approximately 0.58 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
		<i>PRESTO ADHESIVE PAPER CO INC</i>	<i>13</i>

PADS: The PCB Activity Database identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required to notify the United States Environmental Protection Agency of such activities. The source of this database is the U.S. EPA.

A review of the PADS list, as provided by EDR, and dated 10/14/1994 has revealed that there is 1 PADS site within approximately 0.33 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
<i>US DOE MOUND PLANT</i>	<i>8</i>	<i>US DOE MOUND PLANT</i>	<i>8</i>

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 07/27/1994 has revealed that there are 3 FINDS sites within approximately 0.33 Miles of the subject property.

<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
<i>US DOE MOUND PLANT</i>	<i>8</i>	<i>US DOE MOUND PLANT</i>	<i>8</i>
		<i>GMC DELCO PRODUCTS DIV</i>	<i>12</i>
		<i>DAYTON PUBLIC SCHOOLS</i>	<i>12</i>

TRIS: The Toxic Chemical Release Inventory System identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313. The source of this database is the U.S. EPA.

A review of the TRIS list, as provided by EDR, and dated 12/31/1992 has revealed that there is 1 TRIS site within approximately 0.33 Miles of the subject property.

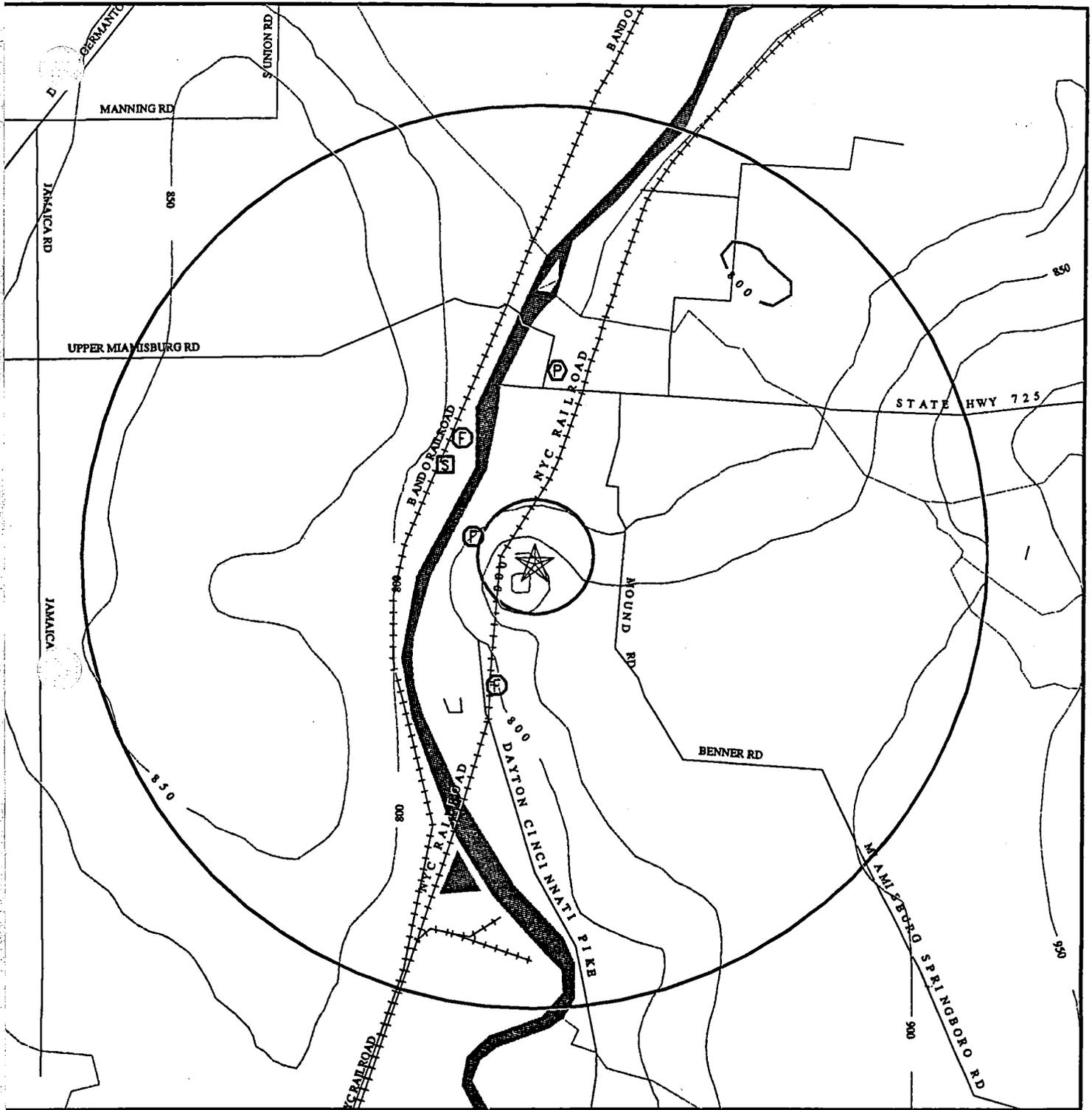
<u>Equal/Higher Elevation</u>	<u>Page</u>	<u>Lower Elevation</u>	<u>Page</u>
<i>US DOE MOUND PLANT</i>	<i>8</i>	<i>US DOE MOUND PLANT</i>	<i>8</i>

EXECUTIVE SUMMARY

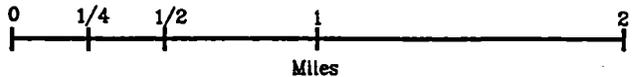
Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
PHILLIPS SAND & GRAVEL	FINDS,CERC-NFRAP,State Haz. Waste
US DOE MOUND FACILITY*	State Haz. Waste
DYES PENNZOIL	LUST
TOMS QUICK LUBE	LUST
KNOLLWOOD GARDEN CENTER	LUST
BOONE WATER SYSTEMS, INC.	UST,LUST
UNKNOWN	LUST
CATES SALES & SERVICE	UST
KNOLLWOOD MARATHON	UST
DYE'S KNOLLWOOD PENNZOIL	UST
TOM'S SUTO QUICK LUBE SERVIC I	UST
KNOLLWOOD FLORIST, INC.	UST
PENNZOIL	UST
GARY L. JESTICE	UST
WYLIE F. FAULKNER	UST
C G & R	UST
THE POINTE	UST
FRALEY FENCE	UST
CITY OF MIAMISBURG	UST
MONARCH MARKING SYS INC	UST
UES INC	RCRIS-SQG

TOPOGRAPHIC MAP - 100553.1s - HOK/K Industrial



Source: US Geological Survey 1-Degree Digital Elevation Model
 Compiled 09/15/92



- Major Roads

- Contour lines (25 foot interval unless otherwise shown)

- Airways

☉ - Earthquake epicenter, Richter 5 or greater.

ⓕ Ⓢ - Closest well according to (F)ederal or (S)tate database in quadrant.

Ⓟ - Closest public water supply well.



TARGET PROPERTY: US Department of Energy
 ADDRESS: Off Mound Rd.
 CITY/STATE/ZIP: Miamisburg OH 45432
 LAT/LONG: 39.6312 / 84.2884

CUSTOMER: HOK/K Industrial
 CONTACT: Shelby R. Politte
 INQUIRY #: 100553.1s
 DATE: December 13, 1995

GEOCHECK VERSION 2.1 SUMMARY

GEOLOGIC AGE IDENTIFICATION†

Geologic Code: O3
 Era: Paleozoic
 System: Ordovician
 Series: Upper Ordovician (Cincinnatian)

ROCK STRATIGRAPHIC UNIT†

Category: Stratified Sequence

GROUNDWATER FLOW INFORMATION

General Topographic Gradient: General North
 General Hydrogeologic Gradient: The hydrogeologic data for this report indicates that groundwater flow generally is to the South. However, because of the number and/or location of wells, the various depths of aquifers or other insufficient data, the direction of groundwater flow is uncertain.

Note: In a general way, the water table typically conforms to surface topography.‡

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2439084-F3 MIAMISBURG, OH

FEDERAL DATABASE WELL INFORMATION

<u>WELL QUADRANT</u>	<u>DISTANCE FROM TP</u>	<u>LITHOLOGY</u>	<u>DEPTH TO WATER TABLE</u>
North	1/2 - 1 Mile	Sand and silt	12 ft.
South	1/2 - 1 Mile	Outwash	Not Reported
West	1/4 - 1/2 Mile	Not Reported	24 ft.

STATE DATABASE WELL INFORMATION

<u>WELL QUADRANT</u>	<u>DISTANCE FROM TP</u>
Northern	1/2 - 1 Mile
Southern	>2 Miles

PUBLIC WATER SUPPLY SYSTEM INFORMATION (EPA-FRDS)

Searched by Nearest Well.

Location Relative to TP: 1/2 - 1 Mile North
 PWS Name: MOUND PLANT
 MANAGER, MAINTENANCE EG&G
 PO BOX 3000
 MIAMISBURG, OH 45343

Well currently has or has had major violation(s): No

AREA RADON INFORMATION

MONTGOMERY COUNTY, OH

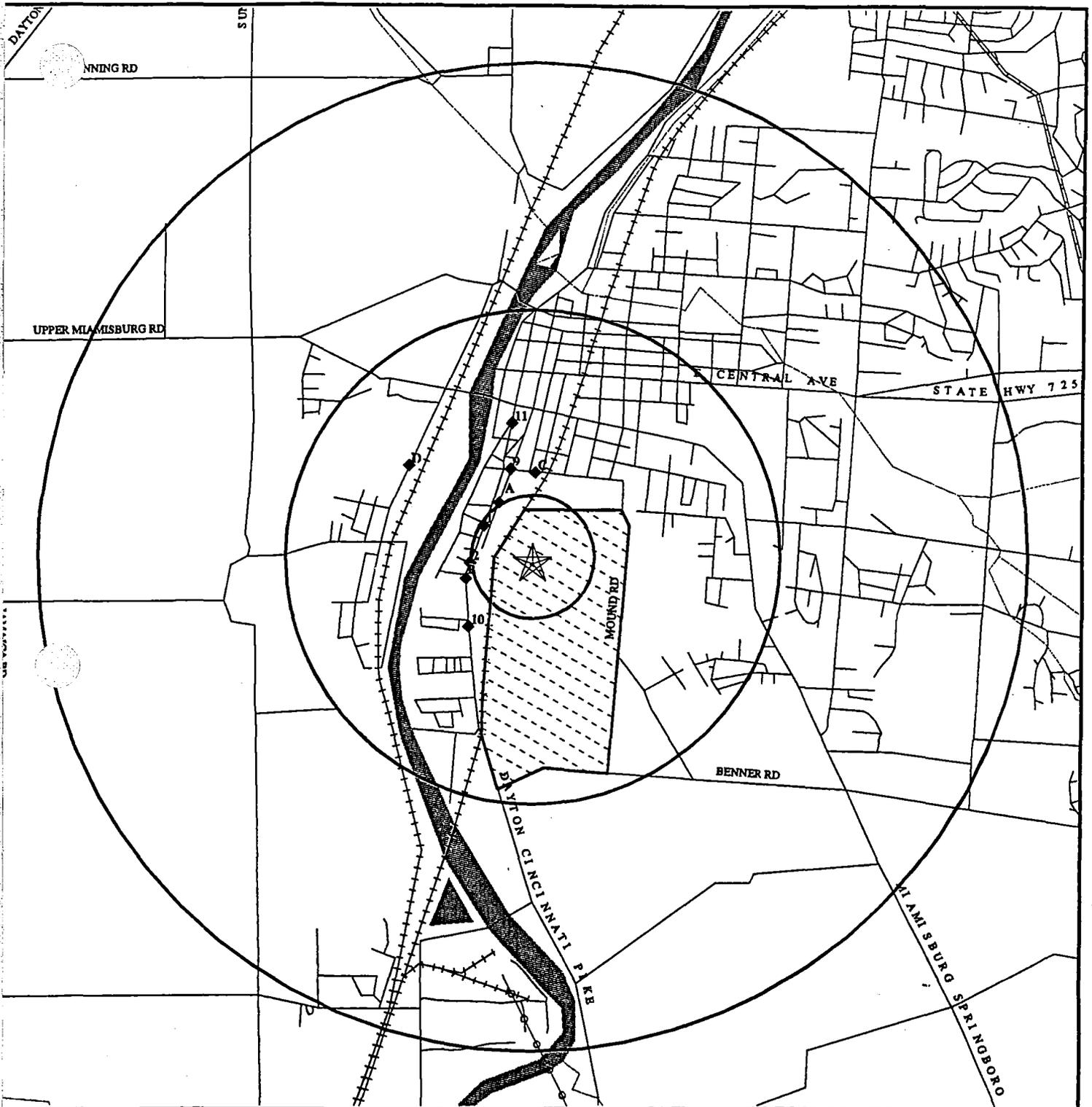
Number of sites tested: 35

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
Living Area - 1st Floor	2.966 pCi/L	77%	23%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	5.963 pCi/L	67%	27%	7%

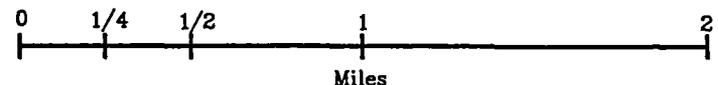
† Source: P.G. Schnuben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

‡ U.S. EPA Ground Water Handbook, Vol I: Ground Water and Contamination, Office of Research and development EPA/625/6-90/016a, Chapter 4, page 78, September 1990.

OVERVIEW MAP - 100553.1s - HOK/K Industrial



- Indicates TARGET PROPERTY.
- Indicates sites at elevations higher than or equal to the target property.
- Indicates sites at elevations lower than the target property.
- Coal Gasification Sites (if requested)
- National Priority List Sites

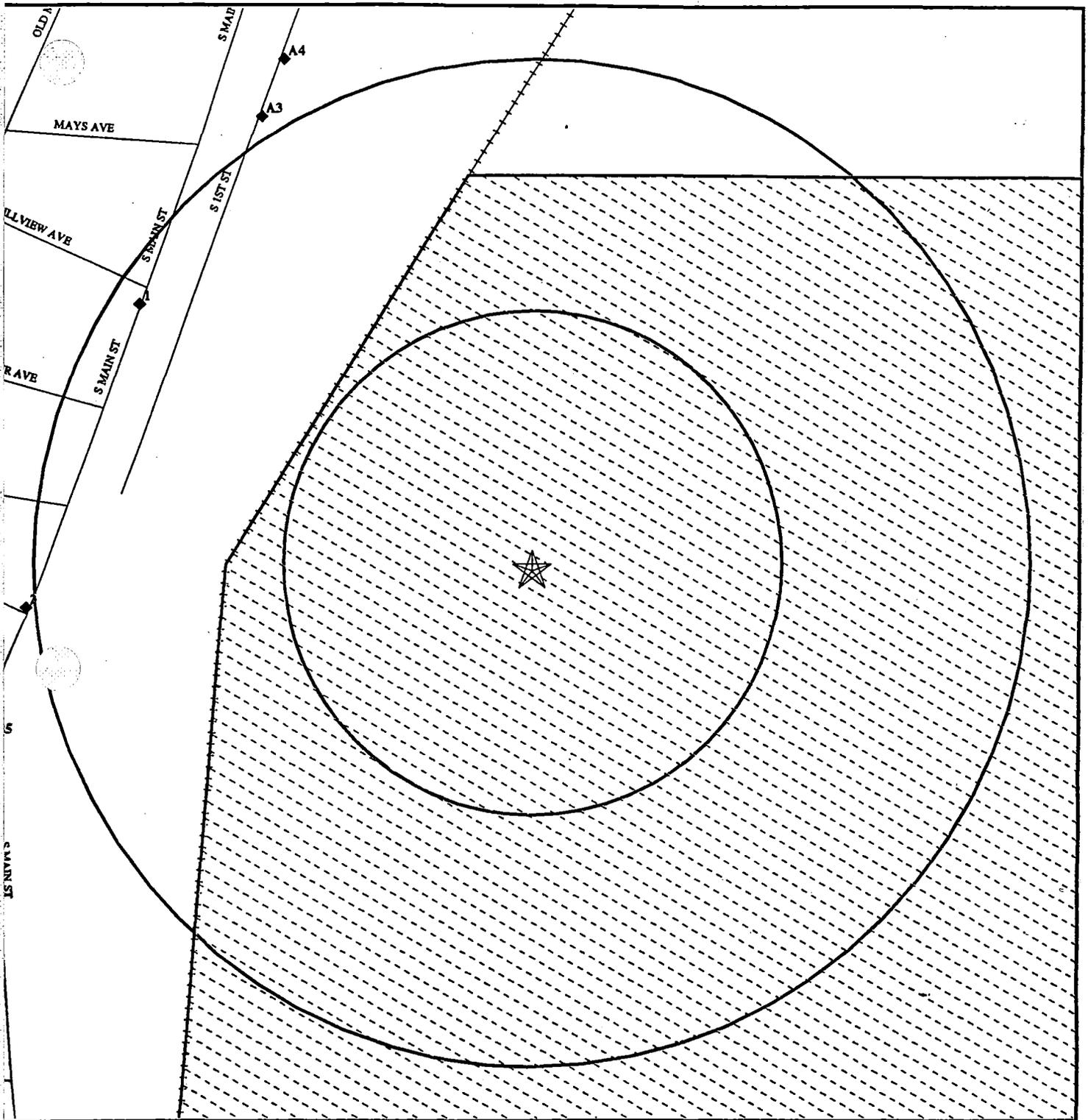


- Power transmission lines (USGS DLG, 1993)
- Oil & Gas pipelines (USGS DLG, 1993)

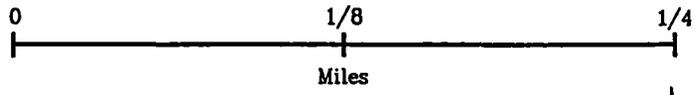
TARGET PROPERTY: US Department of Energy
ADDRESS: Off Mound Rd.
CITY/STATE/ZIP: Miamisburg OH 45432
LAT/LONG: 39.6312 / 84.2884

CUSTOMER: HOK/K Industrial
CONTACT: Shelby R. Politte
INQUIRY #: 100553.1s
DATE: December 13, 1995

DETAIL MAP - 100553.1s - HOK/K Industrial



- Indicates TARGET PROPERTY.
- Indicates sites at elevations higher than or equal to the target property.
- Indicates sites at elevations lower than the target property.
- Coal Gasification Sites (if requested)
- Sensitive Receptors
- National Priority List Sites



-  - Power transmission lines (USGS DLG, 1993)
-  - Oil & Gas pipelines (USGS DLG, 1993)

TARGET PROPERTY: US Department of Energy
 ADDRESS: Off Mound Rd.
 CITY/STATE/ZIP: Miamisburg OH 45432
 LAT/LONG: 39.6312 / 84.2884

CUSTOMER: HOK/K Industrial
 CONTACT: Shelby R. Politte
 INQUIRY #: 100553.1s
 DATE: December 13, 1995

MAP FINDINGS SUMMARY SHOWING ALL SITES

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.330	1	0	0	0	0	1
Delisted NPL		0.330	0	0	0	NR	NR	0
RCRIS-TSD		1.330	0	0	0	0	0	0
State Haz. Waste		1.330	0	0	0	1	0	1
CERCLIS		0.830	1	0	0	0	NR	1
CERC-NFRAP		0.330	0	0	0	NR	NR	0
CORRACTS		1.330	0	0	0	0	0	0
State Landfill		0.830	0	0	0	0	NR	0
LUST		0.830	1	1	3	2	NR	7
UST		0.580	0	0	3	0	NR	3
RAATS		0.330	0	0	0	NR	NR	0
RCRIS Sm. Quan. Gen.		0.580	0	0	4	0	NR	4
RCRIS Lg. Quan. Gen.		0.580	0	0	1	0	NR	1
HMIRS		0.330	0	0	0	NR	NR	0
PADS		0.330	1	0	0	NR	NR	1
ERNS		0.330	0	0	0	NR	NR	0
FINDS		0.330	1	0	4	NR	NR	5
TRIS		0.330	1	0	0	NR	NR	1
NPL Liens		0.330	0	0	0	NR	NR	0
TSCA		0.330	0	0	0	NR	NR	0
MLTS		1.330	0	0	0	0	0	0
ROD		1.330	0	0	0	0	0	0
CONSENT		1.330	0	0	0	0	0	0
OH Spills		0.330	0	0	0	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

**MAP FINDINGS SUMMARY SHOWING
ONLY SITES HIGHER THAN OR THE SAME ELEVATION AS TP**

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
NPL		1.330	0	0	0	0	0	0
Delisted NPL		0.330	0	0	0	NR	NR	0
RCRIS-TSD		1.330	0	0	0	0	0	0
State Haz. Waste		1.330	0	0	0	0	0	0
CERCLIS		0.830	0	0	0	0	NR	0
CERC-NFRAP		0.330	0	0	0	NR	NR	0
CORRACTS		1.330	0	0	0	0	0	0
State Landfill		0.830	0	0	0	0	NR	0
LUST		0.830	0	0	0	0	NR	0
UST		0.580	0	0	0	0	NR	0
RAATS		0.330	0	0	0	NR	NR	0
RCRIS Sm. Quan. Gen.		0.580	0	0	0	0	NR	0
RCRIS Lg. Quan. Gen.		0.580	0	0	0	0	NR	0
HMIRS		0.330	0	0	0	NR	NR	0
PADS		0.330	0	0	0	NR	NR	0
ERNS		0.330	0	0	0	NR	NR	0
FINDS		0.330	0	0	0	NR	NR	0
TRIS		0.330	0	0	0	NR	NR	0
NPL Liens		0.330	0	0	0	NR	NR	0
TSCA		0.330	0	0	0	NR	NR	0
MLTS		1.330	0	0	0	0	0	0
ROD		1.330	0	0	0	0	0	0
CONSENT		1.330	0	0	0	0	0	0
OH Spills		0.330	0	0	0	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

NPL
Region

US DOE MOUND PLANT
MOUND RD
MIAMISBURG, OH 45342

PADS
CERCLIS
FINDS
NPL
TRIS
LUST

1000190772
OH6890008984

CERCLIS Classification Data:

Site Incident Category: Not reported
Ownership Status: FEDERALLY OWNED
EPA Notes: Not reported

Federal Facility: YES
NPL Status: CURRENTLY ON THE FINAL NPL

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	11/01/1980
Assessment:	PRELIMINARY ASSESSMENT	Completed:	03/25/1986
Assessment:	SCREENING SITE INSPECTION	Completed:	07/14/1989
Assessment:	HAZARD RANKING DETERMINED	Completed:	07/14/1989
Assessment:	PROPOSAL TO NPL	Completed:	07/14/1989
Assessment:	FINAL LISTING ON NPL	Completed:	11/24/1989
Assessment:	TECHNICAL ASSISTANCE	Completed:	Not reported
Assessment:	TECHNICAL ASSISTANCE	Completed:	Not reported
Assessment:	REMOVAL ACTION	Completed:	Not reported
Assessment:	COMBINED RI/FS	Completed:	06/12/1995
Assessment:	REMEDIAL ACTION	Completed:	Not reported
Assessment:	REMEDIAL DESIGN	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	06/12/1995
Assessment:	COMBINED RI/FS	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	COMBINED RI/FS	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	COMBINED RI/FS	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	COMBINED RI/FS	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported
Assessment:	COMBINED RI/FS	Completed:	Not reported
Assessment:	RECORD OF DECISION	Completed:	Not reported

CERCLIS Site Status:

This site is currently under investigation by the government to assess the extent of further action

CERCLIS Alias Name(s):

US DOE MOUND FACIL
MOUND PLANT (USDOE)

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

US DOE MOUND PLANT (Continued)

1000190772

NPL:

ID:	05OH073
Date Listed:	11/21/89 (FINAL)
EPA/ID:	Not reported
Haz. Rank Score:	34.61
Status:	LISTED ON NPL
Rank:	Not reported
Group:	15
Ownership:	Federal
Ownership:	Govt. Owned, Contract. Oper.
Permit:	NPDES
Permit:	Air
Permit:	RCRA Interim Status
Permit:	Radioactive
Site Activities:	Landfill, Comm./Indus.
Site Activities:	Spill
Site Activities:	Tank, below ground
Site Condition:	Contam. Drinking Water
Waste Type:	Metals
Waste Type:	Radioactive Substances
Contaminant:	Media Affected:
CALCIUM CYANIDE	Not reported
COPPER CYANIDE	Not reported
PLUTONIUM AND COMPOUNDS, NOS (PU)	Not reported
URANIUM AND COMPOUNDS, NOS (U)	Not reported
PLUTONIUM 238	Surface Water
Distance to nearest Population:	Not reported
Population within a 1 Mile Radius:	Not reported
Population within a 2 Mile Radius:	Not reported
Population within a 4 Mile Radius:	Not reported
Vertical Distance to Aquifer:	21 Feet to 75 Feet
Ground Water Use:	Used as Drinking Water, Alternative Source not Available
Distance to nearest Surface Water:	Not reported

Other Pertinent Environmental Activity Identified at Site:

facility has active water discharge permits
 facility has an emission permit under the Clean Air Act
 civil judicial and administrative enforcement cases against facility
 facility is a PCB generator, storer, transporter or permitted disposer

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site _____ Database(s) _____ EDR ID Number
EPA ID Number

US DOE MOUND PLANT (Continued)

1000190772

LUST:

Facility ID:	570630	Incident ID:	579108400
Report No:	5791084	Facility Track:	0
Facility Tel:	513-865-4020	Responsibility:	-0-
Owner:	US DEPT OF ENERGY		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	07/16/91
Fiscal Track:	F900	Coordinator:	Central Office Corrective Actions
Facility Status:	Initial Corrective Action Program Report		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Incident eligible for LTF oversight and/or spending - a suspected or confirmed release of petroleum from a regulated UST.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	HODNETT	Authorize Date:	07/12/91
Remarks:	0		
Summary:	-0-		
Added Date:	12/18/89	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

1
WNW
1/8-1/4
Lower

DJ CERAMICS
611 S MAIN ST
MIAMISBURG, OH 45342

LUST

S101424591
N/A

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site	Database(s)	EDR ID Number EPA ID Number
------	-------------	--------------------------------

DJ CERAMICS (Continued)

S101424591

LUST:

Facility ID:	-0-	Incident ID:	575048600
Report No:	5750486	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	-0-
Fiscal Track:	FY95	Coordinator:	Central Office Closure
Facility Status:	Reported		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Rspnse:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	04/20/95
Remarks:	-0-		
Summary:	-0-		
Added Date:	04/20/95	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

2
West
1/4-1/2
Lower

CG&R
901 S MAIN ST
MIAMISBURG, OH 45342

LUST

S101565590
N/A

LUST:

Facility ID:	572444	Incident ID:	574126900
Report No:	5741269	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	-0-
Fiscal Track:	FY94	Coordinator:	Central Office Closure
Facility Status:	Reported		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Rspnse:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	07/26/94
Remarks:	-0-		
Summary:	CLOS RPT RECD		
Added Date:	07/26/94	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

A3
NNW
1/4-1/2
Lower

GMC DELCO PRODUCTS DIV
329 EAST FIRST STREET
DAYTON, OH 45402

RCRIS-SQG 1000110283
FINDS OHD000317593

RCRIS:

Owner: NAME NOT REPORTED
(312) 555-1212

Contact: KARENANN BERNER
(513) 258-7621

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D000	.00000 (N)	Notification	D001	.00000 (N)	Notification
D002	.00000 (N)	Notification	D003	.00000 (N)	Notification
F001	.00000 (N)	Notification	F002	.00000 (N)	Notification
F003	.00000 (N)	Notification	F005	.00000 (N)	Notification
F006	.00000 (N)	Notification	F007	.00000 (N)	Notification
F008	.00000 (N)	Notification	F009	.00000 (N)	Notification
F010	.00000 (N)	Notification	F011	.00000 (N)	Notification
F012	.00000 (N)	Notification	P029	.00000 (N)	Notification
P030	.00000 (N)	Notification	P074	.00000 (N)	Notification
P098	.00000 (N)	Notification	P104	.00000 (N)	Notification
P106	.00000 (N)	Notification	P121	.00000 (N)	Notification
U159	.00000 (N)	Notification	U160	.00000 (N)	Notification
U188	.00000 (N)	Notification	U210	.00000 (N)	Notification
U220	.00000 (N)	Notification	U226	.00000 (N)	Notification
U239	.00000 (N)	Notification			

(P) = Pounds, (K) = Kilograms, (M) = Metric Tons, (T) = Tons, (N) = Not Reported

A4
NNW
1/4-1/2
Lower

DAYTON PUBLIC SCHOOLS
348 W FIRST ST
DAYTON, OH 45402

RCRIS-SQG 1000558707
FINDS OHD100060912

RCRIS:

Owner: DAYTON PUBLIC SCHOOLS
(513) 461-3000

Contact: PETER WEIMER
[REDACTED]

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D000	.00000 (N)	Notification	D001	.00000 (N)	Notification
D002	.00000 (N)	Notification	D003	.00000 (N)	Notification
F001	.00000 (N)	Notification	F002	.00000 (N)	Notification
F003	.00000 (N)	Notification	F004	.00000 (N)	Notification
F005	.00000 (N)	Notification			

(P) = Pounds, (K) = Kilograms, (M) = Metric Tons, (T) = Tons, (N) = Not Reported

Other Pertinent Environmental Activity Identified at Site:
facility is involved with pesticide/toxic substances production

B5
NSW
1/2
Lower

CITY OF MIAMISBURG PUMP STATIO
1021 S MAIN ST
MIAMISBURG, OH 45342

UST U000694613
N/A

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

CITY OF MIAMISBURG PUMP STATIO (Continued)

U000694613

UST:

Facility ID:	0-576024	Tank ID:	1
Capacity:	1,000	Tank Status:	Curr
Tank Age:	7	Owner Name:	CITY OF MIAMISBURG
Product:	Diesel	Owner Address:	PO BOX 570
Material:	Fiberglass	City, State, Zip:	MIAMISBURG, OH 45343
Piping Material:	Copper	Facility Contact:	JESSE MULLINS
Piping Type:	Suction -- No Valve	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

B6
WSW
1/4-1/2
Lower

RICHARD CHURCH SR ESTATE

LUST

S101565323
N/A

LUST:

Facility ID:	571192	Incident ID:	570118000
Report No:	5701180	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	Not reported		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	04/21/92
Fiscal Track:	F900	Coordinator:	Central Office Closure
Facility Status:	No Further Action		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Response:	2	Response By:	-0-
Vacant:	1, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	04/17/92
Remarks:	0		
Summary:	CLOS RPT RECD		
Added Date:	05/24/90	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

C7
North
1/4-1/2
Lower

PRESTO ADHESIVE PAPER CO INC
222 MOUND AVE
MIAMISBURG, OH 45342

FINDS 1000389064
RCRIS-LQG OHD004243614

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site	Database(s)	EDR ID Number EPA ID Number
------	-------------	--------------------------------

PRESTO ADHESIVE PAPER CO INC (Continued)

1000389064

RCRIS:

Owner: PITNEY BOWES
(312) 555-1212

Contact: ALAN GORSKI
[REDACTED]

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D001	.00000 (N)	Notification	D003	.00000 (N)	Notification
F005	.00000 (N)	Notification	U002	.00000 (N)	Notification
U112	.00000 (N)	Notification	U140	.00000 (N)	Notification
U159	.00000 (N)	Notification	U220	.00000 (N)	Notification
U239	.00000 (N)	Notification			

(P) = Pounds , (K) = Kilograms , (M) = Metric Tons , (T) = Tons , (N) = Not Reported

Other Pertinent Environmental Activity Identified at Site:
facility has an emission permit under the Clean Air Act

C8
North
1/4-1/2
Lower

TECHNICOTE INC
222 MOUND AVE
MIAMISBURG, OH 45342

RCRIS-SQG 1000243045
UST OHD980896468
LUST

RCRIS:

Owner: TECHNICOTE
(312) 555-1212

Contact: TOM BLOSSER
[REDACTED]

Waste	Quantity	Info Source
D001	.00000 (N)	Notification

(P) = Pounds , (K) = Kilograms , (M) = Metric Tons , (T) = Tons , (N) = Not Reported

There are 1 compliance/violation record(s) reported at this site:

Evaluation	Date	Violations
COMPLIANCE EVALUATION INSPECTION (CEI)	14-JAN-88	YES

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

TECHNICOTE INC (Continued)

1000243045

LUST:

Facility ID:	570319	Incident ID:	573000600
Report No:	5730006	Facility Track:	0
Facility Tel:	-0-	Responsibility:	-0-
Owner:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-0-		
	-0-, OH -0-		
	-0-		
Inspector:	-0-	Revised Date:	-0-
Fiscal Track:	FY93	Coordinator:	Central Office Closure
Facility Status:	Reported		
Classification:	Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.		
Trust Fund:	Closure of an underground storage tank.		
Emerg Response:	2	Response By:	-0-
Vacant:	-, -0-	County Num:	57
Authorized By:	GILL	Authorize Date:	01/11/93
Remarks:	-0-		
Summary:	-0-		
Added Date:	01/11/93	Entry By:	UNGER
Response Srch:	-0-	Priority:	2

UST:

Facility ID:	0-570319	Tank ID:	1
Capacity:	8,000	Tank Status:	Remv
Tank Age:	Unk	Owner Name:	TECHNICOTE, INC.
Product:	HAZ-69742-89-8	Owner Address:	222 MOUND AVE
Material:	Bare Steel	City, State, Zip:	MIAMISBURG, OH 45342
Piping Material:	Bare Steel	Facility Contact:	MILES D. TREECE
Piping Type:	Suction -- Valve	Telephone:	(513) 859-4448
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		
Facility ID:	0-570319	Tank ID:	2
Capacity:	8,000	Tank Status:	Remv
Tank Age:	Unk	Owner Name:	TECHNICOTE, INC.
Product:	Not reported	Owner Address:	222 MOUND AVE
Material:	Bare Steel	City, State, Zip:	MIAMISBURG, OH 45342
Piping Material:	Bare Steel	Facility Contact:	MILES D. TREECE
Piping Type:	Suction -- Valve	Telephone:	(513) 859-4448
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

MAP FINDINGS

Map ID
Direction
Distance
Elevation

EDR ID Number
EPA ID Number

TECHNICOTE INC (Continued)

1000243045

Facility ID:	0-570319	Tank ID:	3
Capacity:	500	Tank Status:	Remv
Tank Age:	Unk	Owner Name:	TECHNICOTE, INC.
Product:	Not reported	Owner Address:	222 MOUND AVE
Material:	Bare Steel	City, State, Zip:	MIAMISBURG, OH 45342
Piping Material:	Bare Steel	Facility Contact:	MILES D. TREECE
Piping Type:	Suction -- Valve	Telephone:	(513) 859-4448
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

9
NNW
1/4-1/2
Lower

PLOCHER ANDREW SONS
418 E FIRST ST
DAYTON, OH 45402

RCRIS-SQG 1000170454
FINDS OHD004243937

RCRIS:

Owner: PLOCHER ANDREW SONS
(312) 555-1212

Contact: CHUCK KRAFT
(513) 228-6128

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D001	.00000 (N)	Notification	F003	.00000 (N)	Notification
F005	.00000 (N)	Notification			

(P) = Pounds , (K) = Kilograms , (M) = Metric Tons , (T) = Tons , (N) = Not Reported

10
SW
1/4-1/2
Lower

SHELL OIL CO. #23420931760
1224 S MAIN ST
DAYTON, OH 45409

UST U000894456
N/A

UST:

Facility ID:	0-570157	Tank ID:	1
Capacity:	8,000	Tank Status:	Curr
Tank Age:	25	Owner Name:	SHELL OIL CO.
Product:	Gasoline	Owner Address:	7777 WASHINGTON VILLAGE DR
Material:	Fiberglass	City, State, Zip:	DAYTON, OH 45459
Piping Material:	Fiberglass	Facility Contact:	MIKE HORVATH
Piping Type:	Pressure	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

Facility ID:	0-570157	Tank ID:	2
Capacity:	10,000	Tank Status:	Curr
Tank Age:	25	Owner Name:	SHELL OIL CO.
Product:	Gasoline	Owner Address:	7777 WASHINGTON VILLAGE DR
Material:	Fiberglass	City, State, Zip:	DAYTON, OH 45459
Piping Material:	Fiberglass	Facility Contact:	MIKE HORVATH
Piping Type:	Pressure	Telephone:	Not reported
Remed. Des. Tanks:	Not reported		
Remed. Des. Piping:	Not reported		

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

SHELL OIL CO. #23420931760 (Continued)

U000894456

Facility ID: 0-570157	Tank ID: 3	
Capacity: 10,000	Tank Status: Curr	
Tank Age: 24	Owner Name: SHELL OIL CO.	
Product: Gasoline	Owner Address: 7777 WASHINGTON VILLAGE DR	
Material: Fiberglass	City, State, Zip: DAYTON, OH 45459	
Piping Material: Fiberglass	Facility Contact: MIKE HORVATH	
Piping Type: Pressure	Telephone: Not reported	
Remed. Des. Tanks: Not reported		
Remed. Des. Piping: Not reported		
Facility ID: 0-570157	Tank ID: 4	
Capacity: 1,000	Tank Status: Curr	
Tank Age: 22	Owner Name: SHELL OIL CO.	
Product: Used Oil	Owner Address: 7777 WASHINGTON VILLAGE DR	
Material: Bare Steel	City, State, Zip: DAYTON, OH 45459	
Piping Material: Bare Steel	Facility Contact: MIKE HORVATH	
Piping Type: Pressure	Telephone: Not reported	
Remed. Des. Tanks: Not reported		
Remed. Des. Piping: Not reported		

11
North
1/2-1
power

POINT STORE
155 S MAIN ST
MIAMISBURG, OH 45342

LUST

S100648047
N/A

LUST:

Facility ID: 570738	Incident ID: 573182400
Report No: 5731824	Facility Track: 0
Facility Tel: -0-	Responsibility: -0-
Owner: -0-	
-0-, OH -0-	
-0-	
Operator: -0-	
-0-	
-0-, OH -0-	
-0-	
Inspector: -0-	Revised Date: -0-
Fiscal Track: FY93	Coordinator: Central Office Closure
Facility Status: Reported	
Classification: Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.	
Trust Fund: Closure of an underground storage tank.	
Emerg Response: 2	Response By: -0-
Vacant: -, -0-	County Num: 57
Authorized By: GILL	Authorize Date: 09/07/93
Remarks: -0-	
Summary: -0-	
Added Date: 09/23/93	Entry By: UNGER
Response Srch: -0-	Priority: 2

012
N
1/2-1
Lower

MIAMISBURG WATER TREATMENT PLT
302 S RIVERVIEW
MIAMISBURG, OH 45342

LUST

S101565457
N/A

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site	Database(s)	EDR ID Number EPA ID Number
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MIAMISBURG WATER TREATMENT PLT (Continued)

S101565457

LUST:

Facility ID: 570747	Incident ID: 572089900
Report No: 5720899	Facility Track: 0
Facility Tel: -0-	Responsibility: -0-
Owner: -0-	
	-0-, OH -0-
	-0-
Operator: -0-	
	-0-, OH -0-
	-0-
Inspector: -0-	Revised Date: 05/14/92
Fiscal Track: FY92	Coordinator: Central Office Closure
Facility Status: No Further Action	
Classification: Known suspected or confirmed source and responsible person is voluntarily, or under an informal enforcement action, proceeding with investigation of corrective actions.	
Trust Fund: Closure of an underground storage tank.	
Emerg Response: 2	Response By: -0-
Vacant: 1, -0-	County Num: 57
Authorized By: GILL	Authorize Date: 05/13/92
Remarks: -0-	
Summary: CLOS RPT RECD	
Added Date: 04/23/92	Entry By: UNGER
Response Srch: -0-	Priority: 2

D13
NW
1/2-1
Lower

MIAMISBURG WELL FIELD / UNK SOURCE
302 S RIVERVIEW AVE
MIAMISBURG, OH 45342

SHWS

S100037719
N/A

SHWS:

Facility ID: 557-1359	EPA ID: NOT ASSIGNED	Prelim. Assessment Date: Not reported
Priority: HIGH	- There is evidence or it is suspected that hazardous waste has been managed and there is evidence of a release of hazardous waste which which may present a substantial threat to public health or safety.	
Problem: GW ORGANICS		

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Add	Zip	Database(s)	Fac
BEAVERCREEK	U001964051	CATES SALES & SERVICE	3310 DAYTON XENIA RD	45432	UST	0-292261
BEAVERCREEK	S101562515	DYES PENNZOIL	3851 DAYTON XENIA RD	45432	LUST	-0-
BEAVERCREEK	S101562533	TOMS QUICK LUBE	3815 DAYTON XENIA RD	45432	LUST	-0-
BEAVERCREEK	S101562553	KNOLLWOOD GARDEN CENTER	3766 DAYTON XENIA RD	45432	LUST	-0-
BEAVERCREEK	U000892037	KNOLLWOOD MARATHON	3844 DAYTON-XENIA RD	45432	UST	0-290099
BEAVERCREEK	U000696152	DYE'S KNOLLWOOD PENNZOIL	3851 DAYTON-XENIA RD	45432	UST	0-294274
DAYTON	U001431511	BOONE WATER SYSTEMS, INC.	1519 S CENTRAL DR	45432	UST, LUST	290587
DAYTON	U000892071	TOM'S SUTO QUICK LUBE SERVIE I	3815 DAYTON XENIA RD	45432	UST	0-293719
DAYTON	U000894584	KNOLLWOOD FLORIST, INC.	3766 DAYTON XENIA RD	45432	UST	0-570895
DAYTON	1000990750	UES INC	4401 DAYTON-XENIA RD	45432	RCRIS-SQG	
DAYTON	1000289261	PHILLIPS SAND & GRAVEL	NORTH FAIRFIELD RD	45432	FINDS, CERC-NFRAP, SHWS	
MIAMISBURG	S100031602	UNKNOWN	ADJ 150 RIVERVIEW AVE	45342	LUST	-0-
MIAMISBURG	U002223400	PENNZOIL	8681 DAYTON CINCINNATI PIKE	45342	UST	0-572210
MIAMISBURG	U000894692	GARY L. JESTICE	██████████	██████	UST	0-577617
MIAMISBURG	U000894676	WYLIE F. FAULKNER	██████████	██████	UST	0-576514
MIAMISBURG	U001964188	C G & R	901 S MAIN ST	45342	UST	0-572444
MIAMISBURG	U001431648	THE POINTE	155 S MAIN ST	45342	UST	0-570738
MIAMISBURG	U001431608	FRALEY FENCE	311 N MAIN ST	45342	UST	0-570049
MIAMISBURG	U000894675	CITY OF MIAMISBURG	600 N MAIN ST	45342	UST	0-576023
MIAMISBURG	S100779275	US DOE MOUND FACILITY*	MOUND RD	45342	SHWS	
MIAMISBURG	U001431691	MONARCH MARKING SYS INC	ST RT 725 AND BYERS RD	45432	UST	0-574851

GEOCHECK VERSION 2.1 ADDENDUM FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (North Quadrant)

BASIC WELL DATA

Site ID:	393819084173900	Distance from TP:	1/2 - 1 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1990	County:	Montgomery
Altitude:	692.17 ft.	State:	Ohio
Well Depth:	44.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	11.50 ft.	Prim. Use of Site:	Observation
Date Measured:	11271990	Prim. Use of Water:	Unused

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary-Pleistocene
Principal Lithology of Unit:	Sand and silt
Further Description:	SILT/SAND BROWN

WATER LEVEL VARIABILITY

Not Reported

**GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION**

Well Closest to Target Property (South Quadrant)

BASIC WELL DATA

Site ID:	393724084172900	Distance from TP:	1/2 - 1 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1964	County:	Montgomery
Altitude:	698.00 ft.	State:	Ohio
Well Depth:	226.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	Not Reported	Prim. Use of Site:	Withdrawal of water
Date Measured:	Not Reported	Prim. Use of Water:	Industrial

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Genozoic-Quaternary-Pleistocene
Principal Lithology of Unit:	Outwash
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Not Reported

**GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION**

Well Closest to Target Property (West Quadrant)

BASIC WELL DATA

Site ID:	393757084173600	Distance from TP:	1/4 - 1/2 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1955	County:	Montgomery
Altitude:	691.00 ft.	State:	Ohio
Well Depth:	95.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	24.13 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	12311975	Prim. Use of Water:	Public supply

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

**GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION**

Water Well Information:

Well Within 1/2 - 1 Mile of Target Property (Northern Quadrant)

PWS ID:	5701212	Population Served:	18,500
Latitude:	0393813	Longitude:	0841744
Owner:	MIAMISBURG,CITY OF		
Source:	Ground		

Well Within >2 Miles of Target Property (Southern Quadrant)

PWS ID:	8301412	Population Served:	7,800
Latitude:	0393505	Longitude:	0841733
Owner:	SPRINGBORO,VLG.OF-CHAUTAUQUA		
Source:	Ground		

**GEOCHECK VERSION 2.1
PUBLIC WATER SUPPLY SYSTEM INFORMATION**

Searched by Nearest Well.

PWS SUMMARY:

PWS ID: OH5744912 PWS Status: Active Distance from TP: 1/2 - 1 Mile
Date Initiated: Not Reported Date Deactivated: Not Reported Dir relative to TP: North
PWS Name: MOUND PLANT
MANAGER, MAINTENANCE EG&G
PO BOX 3000
MIAMISBURG, OH 45343

Addressee / Facility Type: Not Reported
Facility Name: Not Reported

Facility Latitude: 39 38 34 Facility Longitude: 084 17 12
City Served: Not Reported
Treatment Class: Treated Population Served: 1,001 - 2,500 Persons

Well currently has or has had major violation(s): No

EPA Waste Codes Addendum

Code	Description
D000	NOT DEFINED
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D003	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F004	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND

EPA Waste Codes Addendum

Code	Description
	NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F006	WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
F007	SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS
F008	PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
F009	SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
F010	QUENCHING BATH RESIDUES FROM OIL BATHS FROM METAL HEAT TREATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
F011	SPENT CYANIDE SOLUTIONS FROM SALT BATH POT CLEANING FROM METAL HEAT TREATING OPERATIONS.
F012	QUENCHING WASTE WATER TREATMENT SLUDGES FROM METAL HEAT TREATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
P029	COPPER CYANIDE
P029	COPPER CYANIDE CU(CN)
P030	CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED
P074	NICKEL CYANIDE
P074	NICKEL CYANIDE NI(CN) ₂
P098	POTASSIUM CYANIDE
P098	POTASSIUM CYANIDE K(CN)
P104	SILVER CYANIDE
P104	SILVER CYANIDE AG(CN)

EPA Waste Codes Addendum

Code	Description
P106	SODIUM CYANIDE
P106	SODIUM CYANIDE NA(CN)
P121	ZINC CYANIDE
P121	ZINC CYANIDE ZN(CN) ₂
U002	ACETONE (I)
U002	2-PROPANONE (I)
U112	ACETIC ACID ETHYL ESTER (I)
U112	ETHYL ACETATE (I)
U140	ISOBUTYL ALCOHOL (I,T)
U140	1-PROPANOL, 2-METHYL- (I,T)
U159	2-BUTANONE (I,T)
U159	METHYL ETHYL KETONE (MEK) (I,T)
U160	2-BUTANONE, PEROXIDE (R,T)
U160	METHYL ETHYL KETONE PEROXIDE (R,T)
U188	PHENOL
U210	ETHENE, TETRACHLORO-
U210	TETRACHLOROETHYLENE
U220	BENZENE, METHYL-
U220	TOLUENE
U226	ETHANE, 1,1,1-TRICHLORO-
U226	METHYL CHLOROFORM
U239	BENZENE, DIMETHYL- (I,T)
U239	XYLENE (I)

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA/NTIS

Telephone: 703-416-0702

CERCLIS: CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/31/95

Date Made Active at EDR: 12/04/95

Date of Data Arrival at EDR: 11/02/95

Elapsed ASTM days: 32

ERNS: Emergency Response Notification System

Source: EPA

Telephone: 202-260-2342

ERNS: Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/94

Date Made Active at EDR: 05/25/95

Date of Data Arrival at EDR: 04/11/95

Elapsed ASTM days: 44

NPL: National Priority List

Source: EPA

Telephone: 703-603-8852

NPL: National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, it is EDR's policy to plot NPL sites greater than approximately 500 acres in size as areas (polygons). Sites smaller in size are point-geocoded at the site's address.

Date of Government Version: 09/01/95

Date Made Active at EDR: 10/25/95

Date of Data Arrival at EDR: 10/17/95

Elapsed ASTM days: 8

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS

Telephone: 703-308-7907

RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 05/31/95

Date Made Active at EDR: 08/22/95

Date of Data Arrival at EDR: 06/28/95

Elapsed ASTM days: 55

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDERAL NON-ASTM RECORDS:

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: Varies

Date of Next Scheduled Update: 09/01/95

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 703-308-7907

CORRACTS: CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 04/10/95

Date of Next Scheduled Update: 12/18/95

FINDS: Facility Index System

Source: EPA/NTIS

Telephone: 800-908-2493

FINDS: Facility Index System. FINDS contains both facility information and "pointers" to other sources that contain more detail. These include: RCRIS, PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]), CERCLIS, DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), FRDS (Federal Reporting Data System), SIA (Surface Impoundments), CICIS (TSCA Chemicals in Commerce Information System), PADS, RCRA-J (medical waste transporters/disposers), TRIS and TSCA.

Date of Government Version: 07/27/94

Date of Next Scheduled Update: 01/08/96

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

HMIRS: Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/94

Date of Next Scheduled Update: 04/30/96

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/01/95

Date of Next Scheduled Update: 01/15/96

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-260-8969

NPL LIENS: Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91

Date of Next Scheduled Update: 02/26/96

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-260-3992

PADS: PCB Activity Database. PADS identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/14/94

Date of Next Scheduled Update: 02/19/96

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RAATS: RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.

Date of Government Version: 04/17/95

Date of Next Scheduled Update: 12/18/95

ROD: Records Of Decision

Source: NTIS

Telephone: 703-416-0703

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/31/95

Date of Next Scheduled Update: 03/04/96

TRIS: Toxic Chemical Release Inventory System

Source: EPA/NTIS

Telephone: 202-260-2320

TRIS: Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/92

Date of Next Scheduled Update: 04/12/96

TSCA: Toxic Substances Control Act

Source: EPA/NTIS

Telephone: 202-260-1444

TSCA: Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site. USEPA has no current plan to update and/or re-issue this database.

Date of Government Version: 01/31/95

Date of Next Scheduled Update: 03/18/96

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF OHIO ASTM RECORDS:

LUST: List of Reported Petroleum Underground Storage Tank Release Incidents

Source: Department of Commerce
Telephone: 614-752-7926

LUST: Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 11/01/95
Date Made Active at EDR: 12/05/95

Date of Data Arrival at EDR: 11/06/95
Elapsed ASTM days: 29

SHWS: Master Sites List

Source: Ohio Environmental Protection Agency
Telephone: 614-644-3143

SHWS: State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/01/95
Date Made Active at EDR: 05/16/95

Date of Data Arrival at EDR: 04/24/95
Elapsed ASTM days: 22

SWF/LS: Licensed Solid Waste Facilities

Source: Ohio Environmental Protection Agency
Telephone: 614-644-2621

SWF/LS: Solid Waste Facilities/Landfill Sites. SWF/LS type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/22/95
Date Made Active at EDR: 07/27/95

Date of Data Arrival at EDR: 06/26/95
Elapsed ASTM days: 31

UST: Facility File

Source: Department of Commerce
Telephone: 614-752-7926

UST: Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 09/01/95
Date Made Active at EDR: 10/10/95

Date of Data Arrival at EDR: 09/18/95
Elapsed ASTM days: 22

STATE OF OHIO NON-ASTM RECORDS:

SPILLS: Included Reported Incidents, Spills or Releases to The Environment

Source: Ohio EPA
Telephone: 614-644-2084

SPILLS: All reported incidents, spills or releases to the environment.

Date of Government Version: 12/31/93

Date of Next Scheduled Update: 12/18/95

Historical and Other Database(s)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

DELISTED NPL: Delisted NPL Sites

Source: EPA

Telephone: 703-603-8769

DELISTED NPL: The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

NFRAP: No Further Remedial Action Planned

Source: EPA/NTIS

Telephone: 703-416-0702

NFRAP: As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

FRDS: Federal Reporting Data System

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

FRDS provides information regarding public water supplies and their compliance with monitoring requirements, maximum contaminant levels (MCL's), and other requirements of the Safe Drinking Water Act of 1986.

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals who, due to their fragile immune systems, are deemed to be especially sensitive to environmental discharges. These typically include the elderly, the sick, and children. While the exact location of these sensitive receptors cannot be determined, EDR indicates those facilities, such as schools, hospitals, day care centers, and nursing homes, where sensitive receptors are likely to be located.

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1994 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Water Dams: National Inventory of Dams

Source: Federal Emergency Management Agency

Telephone: 202-646-2801

WATER DAMS: National computer database of more than 74,000 dams maintained by the Federal Emergency Management Agency.

Ohio Public Water Systems

Source: Ohio EPA, Division of Drinking & Groundwater

EXHIBIT D

**COMPREHENSIVE TABULATION OF
POTENTIAL RELEASE SITES**

Table A.1. Comprehensive Tabulation of Potential Release Sites

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes*	Results	Ref
1	Miami-Erie canal (north pond)	C-5	Historical	Plutonium-238, tritium	1, 8, 5	Plutonium-238	S, SW	10	13	Table B.9	18, 1
2	Miami-Erie canal (south pond)	C-5	Waters of the U.S.						3, 13	Tables B.6, B.7, B.8, B.9, and B.11	15, 19
3	Miami-Erie canal (north canal)	D-4 E-4 F-4 G-4	Waters of the U.S.						2, 3, 4, 5, 6, 13, 16	Tables B.6, B.7, B.8, B.9, and B.10	16
4	Miami-Erie canal (runoff hollow)	G-4	Tributary Drainage			Tritium	19	13	13	Table B.9	18, 1
5	Miami-Erie canal (south canal)	I-4 J-4 K-4 L-4	Waters of the U.S.						2, 3, 4, 5, 6, 13, 16	Tables B.9 and B.10	16
6	Miami-Erie canal (overflow creek)	M-4 N-4	Waters of the U.S.						13	Table B.9	16
7	Plant Sanitary Pipeline	H-5 I-3 I-4	In service	Plutonium-238		Suspected	S	4	16	see item 88	20
8	Site Sanitary Landfill	I-5	Historical	Contaminants listed under Historic Landfill	4, 5, 18	None Suspected			No Data		
9	Area 18, Site Sanitary Landfill Cover	I-5	In service	Plutonium-238 Thorium	1, 18				2, 3, 4, 5, 6, 10, 11, 14, 16	Table B.1 (Table IV.7 in Ref. 6) Tables B.6, B.7, B.8 and B.9	6, 24
10	Historic Landfill	I-4 I-5	Historical	Administrative and laboratory trash Beryllium, Mercury, Nickel carbonyl, Trichloroethene, carbon tetrachloride, Lithium hydride, Benzene, Alcohol, Acetone, Polychlorinated biphenyl oils, Waste antifreeze, Waste oil, Paints, Solvents, Photo-processing solutions, Plating solutions Sediment from plant drainage ditch Bioassay samples Scintillation "cocktails"	1, 4, 5, 18	Suspected VOCs	GW, S	4, 18	14 2, 3, 4, 5, 6 3	Table B.9 (Table IV.7 in Ref. 6) Tables B.6, B.7, B.8 and B.9	6 24

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
11	Area 2, Thorium and Polonium-Contaminated Wastes (AKA Crusted Drums)	I-4 I-5	Historical	Polonium-210, thorium-contaminated drums, Polonium-210 contaminated sand and debris Thorium sludge constituents, Plutonium-238	1, 4, 5, 18	Thorium and daughters	S	1, 4	14 2, 3, 4, 5, 6 10, 11, 14, 16	Table B.1 (Table III.1 in Ref. 6) Tables B.6, B.7, B.8 and B.9	6 24
12	Area B Drum Storage Area	I-5	Historical	Chemical wastes	4	None Suspected			2, 3, 4, 5, 6 10, 11, 14, 16	Tables B.6, B.7, B.8 and B.9	24
13	Trash Incinerator	J-5	Historical	Solid Waste	4	None Suspected			No Data		
14	Area C, Waste Storage Area (AKA Drum Staging Area and Chemical Waste Storage Area)	H-6	Historical	VOCs	4, 5, 7	Suspected, not confirmed	S	7	3, 4, 5, 6 14	Tables B.6, B.7, B.8, and B.9 RSS ^c Location S0518 (Appendix E in Ref. 6)	7 6
15	Area C, Lithium Burn Area (AKA Lithium Carbonate Disposal)	H-5	Historical	Lithium Hydride	4	Possible lithium residues, not confirmed	S	4, 7	2, 3, 4, 5, 6, 7, 8, 9, 10 14	Tables B.6, B.7, B.8, and B.9 RSS ^c Locations S0552 and S0553 (Appendix E in Ref. 6)	7 6
16	Area C, Past Hazardous Waste Storage Area (AKA old Building 72) see related site 345	H-6	Historical	Potential contaminants listed under Hazardous Waste Storage Area	4, 5, 18	Minor, historically remediated	S	18	4	Table B.6	18
17	Oil Burn Structure	H-5	Inactive	Aviation fuel, benzene, toluene, ethyl benzene, xylenes	5, 7, 18	Confirmed EPH, dioxin/furans		7, 18	2, 3, 4, 5, 6, 7, 8, 9, 10	Tables B.6, B.7, B.8, and B.9	7
18	Building 34, Fire Fighting Training Facility Pits	H-5	Inactive	Diesel Fuel	5, 7, 18	Confirmed EPH		7, 18	3, 4, 5, 6, 7, 8, 9, 10 14	Tables B.6, B.7, B.8, and B.9 RSS Location S0556 (Appendix E in Ref. 6)	7 6
19	Building 34, Historical Firefighting Training Pit	H-5	Historical	Diesel Fuel		Suspected Confirmed dioxin/furan	S, SW S	10 7	2, 3, 4, 5, 6, 7, 8, 9	Tables B.6, B.7, B.8, and B.9	7

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes*	Results	Ref
20	Building 34 Aviation Fuel Storage Tank (Tank 219)	H-5	Historical	Aviation fuel	3, 5, 18	Tank removed, VOC residuals		7, 18, 22	3, 4, 5, 6, 8	Tables B.6, B.7, and B.8	7, 22
21	Building 1 Leach Pit (Area I)	G-6	Surplus	Wastewater from explosives processes Organic solvents (primarily acetone)	1, 4, 5, 18	Suspected, not confirmed		7, 18	3, 4, 5, 6 14	Tables B.6, B.7, B.8, and B.9 RSS ^c Location S0504 (Appendix E in Ref. 6)	7 6
22	Building 1 Explosives Wastewater Settling Basin (Tank 200)	G-6	Surplus	Wastewater from explosives processes Organic solvents	3, 4, 5, 18	Suspected		7, 18	No Data		4
23	Building 43 Explosives Wastewater Settling Basin (Tank 201)	G-6	Surplus	Explosives production process wastes	3, 11	Suspected		7, 18	No Data		
24	Building 43 Solvent Storage Tank (Tank 221)	G-6	Never used Removed	None suspected (never used)	3	Suspected		7, 18	No Data		
25	Building 27 Leach Pit (Area I)	H-6	Surplus	Wastewater from explosives processes Organic solvents (primarily acetone)	1, 4, 5, 18	Suspected, not confirmed		7, 18	3, 4, 5, 6, 12	Tables B.6, B.7, and B.8	4, 7
26	Building 27 Concrete Flume (Tank 217)	G-6	Surplus	Wastewater from explosives processes Organic solvents (primarily acetone)	3, 5, 18	Suspected, not confirmed		7, 18	3, 4, 5, 6, 12	Tables B.6, B.7, and B.8	4, 7
27	Building 27 Settling Sump (Tank 218)	G-6	Surplus	Wastewater from explosives processes Organic solvents (primarily acetone)	3, 4, 5, 18	Suspected, not confirmed		7, 18	3, 4, 5, 6, 12	Tables B.6, B.7, and B.8	4, 7
28	Building 27 Solvent/Drum Storage Area	G-6	Surplus	Wastewater from explosives processes Organic solvents (acetone and ethanol)	4, 5, 18	Suspected, not confirmed		7, 18	3, 4, 5, 6, 12	Tables B.6, B.7, and B.8	7
29	Building 27 Filtration System	G-6	Inactive	Wastewater from explosives processes Organic solvents		Not Suspected		7, 18	No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
30	Building 27 Diesel Fuel Storage Tank (Tank 123) (AKA Building 27 Propane Tank)	G-6	Inactive	Tank is actually above ground	3				Not Applicable		
31	Underground Sanitary Sewer Line G5	H-5	In service	Organic solvents	5, 18			7, 18	3, 4, 5, 6, 10, 11, 12, 14, 16	Tables B.6, B.7, and B.8	7
32	Underground Sanitary Sewer Line G12	F-8 G-8		Plating solutions, Laboratory chemicals Nitric acid, Hydrochloric acid Methylene chloride Strong acids and bases		Suspected, not confirmed	S	2, 7	3, 4, 5, 6, 10, 11, 12, 14, 16	Tables B.6, B.7, B.8, and B.9	7
33	Underground Sanitary Sewer Line G14 EAST	H-5 H-6									
34	Underground Sanitary Sewer Line G14 WEST	H-5 H-6									
35	Underground Sanitary Sewer Lines G19 & G14	G-5									
36	Underground Sanitary Sewer Line G15	E-9									
37	Building 51 Waste Solvent Storage Tank (Tank 220)	F-8	Historical	Organic solvents, Paints, Waste oils	3, 4, 5, 18	Tank Removed 1991, VOC residuals	S	4, 23	3, 4, 5, 6, 8	Tables B.6, B.7 and B.8	7, 2
38	Building 51 Waste Incinerator	F-8	Historical	Contaminants listed under Bldg. 51 Waste Solvent Storage Tank (Tank 220)	4, 5		A	4	No Data		
39	Building 51 Waste Incinerator Scrubber	F-8	Historical	Combustion products from Bldg. 51 Waste Incinerator	4, 5	Water released to plant drainage ditch	SW	4	No Data		
40	Building 66 Lot	F-8	Grounds	Plutonium-238 from unknown source	6	Plutonium-238	S	6	13	Table B.1 RSS ^c Location S0323 (Appendix E in Ref. 6)	6

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Re
41	Area 3, Thorium Drum Storage and Redrumming Area	G-5 H-5	Grounds	Thorium-232 and daughters	1, 4, 5, 6, 18	Thorium dust	S	4, 6	14, 16 1	Table B.1 (Table V.2 in Ref. 6) SGS ^b , Table B.5 Locations 5221 and 5222	6 12
42	Area A, Construction Soils from T Building	H-5	Grounds	Construction soil from T Bldg.	1	None Suspected			No Data		
43	Wastewater Treatment plant Building 57 Grit Chamber (Tank 101)	H-5	In service	Sanitary wastewaters	3, 4, 5	None Suspected	S	4	No Data on soils		
44	Building 57 Grit Conveyor										
45	Building 57 Comminuter (Tank 102)										
46	Building 57 Equalization Basin (Tank 103)										
47	Building 57 Equalization Basin (Tank 104)										
48	Building 57 Equalization Basin (Tank 105)										
49	Building 57 Equalization Basin (Tank 106)										
50	Building 57 Aeration Basin (Tank 107)										
51	Building 57 Aeration Basin (Tank 108)										
52	Building 57 Clarifier (Tank 109)										
53	Building 57 Clarifier (Tank 110)			Water softener backwashes discharged to storm sewer Plutonium-238 and other radionuclides		Treated effluent	SW	4	Water analyses submitted monthly to OEPA in accordance with permit		
						released to Great Miami River via closed pipeline					
						NPDES permitted outfall 001					

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
54	Building 57 Sand Filters (2 units)	(Cont.)	(Cont.)	(Cont.)	(Cont.)	(Cont.)	(Cont.)	(Cont.)	(Cont.)		
55	Building 57 Chlorine contact chamber (Tank 111)										
56	Building 57 Chlorine contact chamber (Tank 112)										
57	Sludge Drying Beds	H-5	Historical	Plutonium-238	4, 5, 18	Suspected	S	4	14	Table B.9	6
58	Dredge Spoil Drying Beds	H-5	Surplus	Contaminants listed under Asphalt-Lined Pond	4, 5, 18	Suspected	S	4	No Data		
59	Contaminated Soil Box Storage Area	G-6	Historical	Plutonium-238	4, 5, 18	Suspected			14	Table B.9	6
60	Hazardous Waste Storage Area (Building 72)	G-5	In service	Combustible and flammable liquids, Waste oils, Solvent-containing wastes, Ignitable wastes, Plating wastes, Photo-processing wastes, Polymeric wastes, Toxic wastes	4, 5, 18	None Suspected			1	SGS ^b Table B.5 Locations 5221 and 5222	12
									14	Table B.9 RSS ^c Location C0103 (Appendix E in Ref. 6)	6
61	Building 72 Outdoor Hazardous Waste Storage Area		Inactive	Waste oils	4, 5, 18				1	SGS ^b Table B.5 Locations 5221 and 5222	12
					14	Table B.9 RSS ^c Location S0541 (Appendix E in Ref. 6)	6				
62	Building 72 Empty Drum Storage Area		In service	None suspected	4, 5, 18				1	SGS ^b Table B.5 Locations 5221 and 5222	12

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
63	Building 19 Soils	G-5	Grounds	Cobalt-60	10	Cobalt-60	S	10	1 14, 16	SGS ^b Table B.5 Location 5221 Table B.9 RSS ^c Locations C0099, C0100, S0530, S0532, S0533, S0534, S0535, S0538 (Appendix E in Ref. 6)	1. E
64	Building 19 Historic Gasoline Tank (Tank 238)	G-5	Historical	Gasoline	3	No information on when tanks were removed			No Data		
65	Building 61 Area, Former Heavy Equipment Area	E-10	Historical	Waste oil	1, 5, 7, 18	Suspected	S	7, 10	3, 4, 5, 6, 8 1 14	Tables B.6, B.7, B.8, and B.9 SGS ^b , Table B.3 Locations 2216 and 2217 RSS ^c Locations S0233, S0234, S0235, S0236, S0237, S0240 (Appendix E in Ref. 6)	7 1: 6
66	Area 7, Thorium and Polonium Wastes	E-8 E-9 F-8 F-9	Historical	Plutonium-238, Thorium-232 and -238, Polonium-210, Actinium-227, Radium-226, Cesium-137	1, 4, 5, 18	Suspected	S	4, 12, 18	14, 15, 16 1	Table B.1 (Table III.5 in Ref. 6) SGS ^b Table B.3	6 1:

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Re
67	Plant Drainage Ditch	F-4 F-5 F-6 F-7 F-8 G-4 G-5 G-6 G-7 G-8 H-4 H-5 H-6 H-7	In service, Waters of the U.S.	Plutonium-238, Thorium, Tritium Fuel oil, boiler blowdown water, ethylene glycol, sodium sulfite, sodium phosphate, octadecylamin, cyclohexylamine Effluent from asphalt-lined pond	4, 5, 18	Plutonium-238 Oil Zinc chromate Calcium chloride Ethylene glycol	SW	10	1 14, 15	Table B.9 RSS ^c Locations S0401, S0420, S0442, S0443, S0449, S0505, S0506, S0514, S0554 (Appendix E and Table X.4 in Ref. 6) SGS ^b Table B.3 Locations 4158 and 4159 Table B.1	6 11
68	Asphalt-Lined Pond	E-9	In service, Waters of the U.S.	Wastewater from SM/PP Hill Storm Sewers Plutonium-238 Non-contact cooling water - cooling tower blowdown, regeneration of zeolite water softeners	4, 5, 18	Effluent to Plant Drainage Ditch	SW	4	3 2	Table B.8 Table B.9	18 18
69	Overflow Pond	H-5 I-5	In service, Waters of the U.S.	Site sanitary landfill leachate, plutonium-238 Effluent from plant drainage ditch Stormwater runoff	4, 5, 18	Zinc chromate Calcium chloride Ethylene glycol	SW	10			
70	Retention Basins and Weir Basin	H-5	In service, Waters of the U.S.	Stormwater runoff Effluent from Plant Drainage Ditch Plutonium-238	4, 5, 18		SW				
71	Building 85 Waste Solvent Tank (Tank 136)	I-5	Inactive	None (never used)	3	Never Used			No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
72	Area 13, Polonium-Contaminated Wood from Dayton Unit IV	H-7	Historical	Polonium-210	1, 4, 5	None Suspected	S	6	14	Tables B.1 and B.9	6
73	Evaporator Storage Area (AKA Lower storage area)	H-7	Historical	Actinium-227, Cesium-137, Radium-226	4				14, 15, 16	Table B.9 RSS ^c Locations S0692 and S0697 (Appendix E in Ref. 6)	6
74	Quonset Hut (former)	H-7	Historical	Polonium-210, cobalt-60, bismuth					14	Table B.9 RSS ^c Locations S0684, S0685, and S0689 (Appendix E in Ref. 6)	6
75	Railroad Siding	G-6 G-7	Inactive	Thorium and daughters	4	Suspected thorium	S	4	14	Table B.1	6
76	Warehouse 9	G-7	Historical	Thorium-232	4	Suspected thorium	S	4	No Data		
77	Warehouse 10	G-9	Historical	Polonium-210	4	None suspected			No Data		
78	Warehouse 13	G-9	Historical	Reactor waste including Strontium-90, Cesium-137, and Nickel-63	4	Cesium 137	S	4	No Data		
79	Warehouse 15	E-8	Historical	Radioactive waste Plutonium-238 wastes and sludge Thorium sludge constituents (c)	4	Suspected	S	4	See Area 7 (No. 66)	Table B.9	6
80	Warehouse 15A	F-8	Historical	Plutonium-238, thorium	4						
81	Drilling Mud Drum Storage Areas (3 locations)	H-5 I-4	Historical	Barium	4, 5, 18	None Suspected			No Data		
82	Building 57 Diesel Fuel Storage Tank (Tank 118)	H-5	In service	Diesel fuel	3				No Data		
83	Building 2 Propane Storage Tank (Tank 122)	H-7	Inactive	Propane	3				No Data		
84	Building 56 Diesel Fuel Storage Tank (Tank 223)	F-5	Historical	Diesel fuel	3	Tank Removed			No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
85	Building 29 Solvent Storage Shed	E-8	Inactive	Acetone	4	Suspected	S	4	1 14	SGS ^b Table B.3 Location 2137 Table B.9 RSS Location S0275	12 6
86	Building 29 Septic Tank (Tank 224)	E-9	Historical	Actinium-227, Radon-222, Thorium-228, Radium-226	3, 4, 6	Suspected	S	4, 6	2	Table B.9 (See discussion for Area 7 in Ref. 6)	6
87	Building 49 Solvent Storage Shed	G-7	Inactive	Organic solvents (including trichloroethene, isopropanol, ethanol, freon-TF, hexane)	4, 9	Suspected	S	4	No Data		
88	Tritium in Buried Valley Aquifer	H-4	Historical	Tritium	1, 18	Tritium, historically remediated	GW	18	16	Table B.9	11, 18
89	Test Fire Residual Storage Area	H-7	In service	Unexploded detonation devices	4, 5, 18	None Suspected		5	No Data		
90	Site Survey Project Potential Hot Spot Location S0425	G-8	Grounds	Thorium	6	Unknown			14	Table B.9 (Appendix E in Ref. 6)	6
91	Main Hill Seep 0601	F-5	NA	Tritium, VOCs	5, 18	Tritium, VOCs	SW	13	3, 4, 5, 10, 11, 16	Tables B.6, B.7, B.8, and B.9	18
92	Main Hill Seep 0602	G-7	NA	Tritium, VOCs	5, 18	Tritium, VOCs	SW	13	3, 4, 5, 10, 11, 16	Tables B.6, B.7, B.8, and B.9	18
93	Main Hill Seep 0603	D-8	NA	Tritium, VOCs	5, 18	Tritium, VOCs	SW	13	No Data		
94	Main Hill Seep 0604	D-6	NA	Tritium, VOCs	5, 18	Tritium, VOCs	SW	13	No Data		
95	Main Hill Seep 0605	D-6	NA	Tritium, VOCs	5, 18	Tritium, VOCs	SW	13	3, 4, 5, 10, 11, 16	Tables B.6, B.7, B.8, and B.9	18
96	Main Hill Seep 0606	C-7	NA	Tritium, VOCs	5, 18	Tritium, VOCs	SW	13	No Data		
97	Main Hill Seep 0607	C-7	NA	Tritium, VOCs	5, 18	Tritium, VOCs	SW	13	3, 4, 5, 10, 11, 16	Tables B.6, B.7, B.8, and B.9	18
98	Main Hill Seep 0608	D-6	NA	Tritium, VOCs	5, 18	Tritium, VOCs	SW	13	3, 4, 5, 10, 11, 16	Tables B.6, B.7, B.8, and B.9	18

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
99	Area 6, WD Building Filter-Cleaning Waste	D-8	Historical	Polonium-210, Cobalt-60, Radium-226	1, 4, 5, 6, 18	Suspected	S	4	2, 14	Table B.1 (Table III.4 in Ref. 6)	6
100	Area F, Chromium Trench	D-8	Historical	Chromium plating bath solution treated with sodium bisulfide, cadmium, nickel, silver	1, 4, 5, 18	Suspected	S	4	1	SGS ^b Table B.4 Locations 1109, 1110	12
101	Cooling Tower Basins	E-7 E-8	In service	Sulfuric acid Chromates NALCO 2575 (phosphonate base, tolytriazole, polyacrylate, sodium chromate) NALCO 2532 (bistributyltin) oxide, n-alkyldimethylbenzyl ammonium chloride, potassium hydroxide) NALCO 2590 (calcium hypochlorite) ANCO CSA (phosphonate base, tolytriazole, polyacrylate) MICROBICIDE 77 (5-chloro-2 methyl-4-isothiazolin-3-one, 2-methyl-4-isothiazolin-3-one) ANCO ALGAECIDE No. 1 (2-benzyl-4-chlorophenol, sodium hydroxide) SILTEX (sodium polyacrylate) ANCOCIDE 4020 (glutaraldehyde) ANCOSPERSE 3830 (polyalkylene glycol, n-alkyldimethylbenzylammonium chloride) ANCOOL 3310 (phosphonate, triazole, sodium molybdate, sodium hydroxide)	4, 5, 18	Blowdown water is released to storm sewer and drainage ditch.		4	No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
102	Cooling Tower Drum Storage Area	E-7 E-8	In service	Contaminants listed under Cooling Tower Basins Ethylene glycol	4, 5				No Data		
103	E Building Soils	E-6 E-7 F-7	Grounds			Indicated by Soil Gas Survey	S	12	1	SGS ^b Table B.4 Locations 1046, 1047, 1048, 1066, 1067	12
									14	Table B.9 RSS ^c Locations S0152, S0153, S0164 (Appendix E in Ref. 6)	6
104	Scintillation Vial Storage Area	E-6	In service	Tritium, Trimethylbenzene	4, 5, 18	None suspected (within E Building)			No Data		
105	E Building Solvent Storage Shed	F-6	Historical	Trichloroethene, Ethanol, Methanol	4, 5, 18	Closed before construction of E Building Annex, soil removed	S	4	1	SGS ^b Table B.4 Location 1066	12
106	G Building Soils (AKA Garage Area)	E-7	Grounds	Waste oil, Waste antifreeze, Automotive batteries Asbestos	1, 4, 18	Suspected petroleum products			1	SGS ^b Table B.4 Locations 1019	12
									14	Table B.9 RSS ^c Locations S0137 and S0141 (Appendix E in Ref. 6)	6
107	G Building Gasoline Tank (Tank 202)	E-7	Historical	Gasoline	3, 18	Tanks removed 1986, petroleum contaminated soils removed		3, 18	No Data		
108	G Building Gasoline Tank (Tank 203)	E-7	Historical								

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
109	G Building Gasoline Tank (Tank 204)	E-7	Historical	(Cont.)	(Cont.)	(Cont.)		(Cont.)	(Cont.)		
110	I Building Soils	E-6 F-6	Grounds	Toluene, acetone, Freon	4	Indicated by Soil Gas Survey	S	12	1 14, 16	SGS ^b Table B.4 Locations 1075, 1227, 1228 Table B.9 RSS Locations S0171, S0178, S0181, S0183, S0186, S0187, S0190, S0193, S0195, S0255 (Appendix E in Ref. 6)	12 6
111	Monitor Well 0034	F-7	Surplus	Waste oil	5, 18	Suspected	GW	5	No Data		
112	Paint Shop Area	E-7	In service	Paints, Thinners, Solvents (including toluene and methylene chloride) Lead, Chromates	1, 4, 5, 18	Suspected, confirmed lead	S	5	3, 4, 5, 6, 16	Tables B.6, B.7, B.8, and B.9	7
113	Powerhouse Soils	E-7	Grounds	Calcium chloride, magnesium chloride, zinc chromate, PCBs	4	Indicated by Soil Gas Survey	S	12	1 14, 16	SGS ^b Table B.4 Location 1052 Table B.9 RSS ^c Locations S0155, S0156, S0158, S0253 (Appendix E in Ref. 6)	12 6
114	Powerhouse Fuel Oil Storage Tank (Tank 113)	E-7	In service	Fuel oil	1, 3, 5, 7, 18	Fuel Oil, confirmed EPH	S	10, 7	3, 4, 5, 6, 8	Tables B.6, B.7, and B.8	7
115	Powerhouse Fuel Oil Storage Tank (Tank 114)										
116	Powerhouse Fuel Oil Storage Tank (Tank 115)										
117	Powerhouse Fuel Oil Storage Tank (Tank 116)										

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Re
118	M Building Soils	E-7	Grounds	Copper cyanide, Silver cyanide Machine oils, Solvents	4	Oils, Copper cyanide, Silver cyanide	S	10	1 14	SGS ^b Table B.4 Locations 1050, 1051, 1062 Table B.9 RSS ^c Locations S0162, S0163, S0252 (Appendix E in Ref. 6)	12 6
119	Room M-38 Metal Plating Rinse Water Sump (Tank 225)	E-7	Surplus	Rinse waters from metal plating operations. Possible contaminants include nickel, cadmium, silver, gold, manganese, cyanide, and aluminum. Sodium hydroxide solution Potassium permanganate	3, 4	None Suspected			No Data		
120	Room M-108 Metal Plating Rinse Water Tank (Tank 119)	E-7	In service	Rinse waters from metal plating operations. copper, gold, silver, nickel, aluminum, and uranium	3, 4	Silver cyanide	SW	10	No Data		
121	Vapor Degreasers	E-7	In service	Perclene D (perchloroethylene)	4, 5, 18	None Suspected			No Data		
122	Underground Radioactive Waste Lines (Main Hill)	E-6 F-6	Inactive	Alpha wastes from SW Bldg., R Bldg., and H Bldg. Wastewater from B Building Plutonium-238, Cobalt-60	4, 18	Suspected	S	4, 10	No Data		
123	Area 5, Radioactive Waste Line Break	F-6 F-7	Grounds	Cobalt-60, Cesium-137, Plutonium-238	1, 5, 18	Cobalt-60	S	1, 18	2, 14, 16	Table B.1 (Table III.3 in Ref. 6)	6
124	Building 48 Hillside	F-6	Inactive	Plutonium-238		Plutonium-238	S	6	14	Table B.1	6
125	Underground Sanitary Sewer Line G24	F-6	In service	Organic solvents, Plating Solutions, Laboratory chemicals, Nitric acid, Hydrochloric acid, Methylene chloride, Strong acids and bases		Suspected	S	5, 18	3, 4, 5, 6, 14, 16	Tables B.6, B.7, and B.8	7
126	Building 28 Solvent Storage Area	E-8	Grounds	Organic solvents (including alcohol, methylene chloride, and acetone)	4, 5, 9, 18	Suspected	S	4	1	SGS ^b Table B.4 Location 1054	12

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
127	Building 28 Solvent Storage Shed	E-8	In Service	Organic solvents (including alcohol, methylene chloride, and acetone)	4, 5, 18	Suspected	S	4	1	SGS ^b Table B.4 Locations 1190 and 1231	12
128	DS Building Solvent Storage Shed	F-7	In service	Organic solvents (including 1,1,1-trichloroethane, trichlorofluoromethane, ethanol, and trichloroethane)	4, 5, 18	Suspected	S	4	1 14	SGS ^b Table B.4 Location 1194 No Hits Table B.9 RSS ^c Location S0128 (Appendix E in Ref. 6)	12 6
129	B Building Solvent Storage Shed	E-6	Inactive	Organic solvents (including trichloroethene, trichlorofluoromethane, ethanol, methanol, isopropanol, acetone, methylene chloride, toluene) Oils	4, 5, 18	Suspected	S	4	1 14	SGS ^b Table B.4 Locations 1202, 1203 Table B.9 RSS ^c Location S0146 (Appendix E in Ref. 6)	12 6
130	B Building Temporary Drum Storage Area	E-6	Inactive	Waste solvents, waste oil, and trash from E and B Bldgs.	4						
131	SW Building Soils	E-6 F-6	Grounds	Tritium, Radium-226, Actinium-227, Thorium-232	4, 6, 18	Tritium beneath the building	S	1, 18	14, 16	Table B.1 RSS ^c Locations S0154 and S0180 (Appendix E in Ref. 6)	6
132	Area 15, Entombed SW Cave (Room SW 1-B)	F-6	Historical	Radon-222, Radium-226, Actinium-227, Thorium-228	1, 4, 6, 18	Radon-222	A	1, 6	No Data		
133	SW Building Room 1-A	F-6	Historical	High-activity wastewater from radium and actinium processing, reactor waste including Radium-226, Actinium-227, Cesium-137, Plutonium-238, and Uranium-238.	4	Cesium-137 (sealed in concrete in building floor)		4	No Data		
134	SW Building Drum Storage Area	E-6	In service	Hazardous wastes Asbestos, Waste oils, Antifreeze	4, 5, 18				14	Table B.9 RSS ^c Location S0180 (Appendix E in Ref. 6)	6
135	Room SW-8 Beta Wastewater Tank (Tank 20)	F-6	In service	Tritium	3, 4				No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
136	Room SW-125 Beta Wastewater Tank (Tank 21)	F-6	In service	Tritium	3, 4	Suspected historical leaks. Tanks lined			No Data		
137	Room SW-143 Beta Wastewater Tank (Tank 22)	F-6	In service	Tritium	3, 4		No Data				
138	Room SW-137 Alpha Wastewater Sump (Tank 23)	E-6 F-6	Inactive	Alpha wastewater from drains, sinks, and processes in SW Bldg - Uranium-238.	3, 4	Suspected uranium-233			No Data		
139	Room SW-10 Beta Wastewater Sump (Tank 226)	F-6	Inactive	Tritium	3, 4	Suspected historical leaks, tank lined			No Data		
140	Beta Waste Solidification Facility - SW Building	E-6 F-6	In service	Tritium Waste oils including vacuum pump, gear box, and diffusion pump oils.	4				No Data		
141	Tritium Effluent Removal System	E-6	In service	Vacuum pump oils Organic solvents Tritium wastewater		Tritium	A	4, 10	No Data		
142	SW/R Building Solid Radioactive Waste Compactor	E-6 F-6	In service	Tritium	4				No Data		
143	R/SW/T Building Stack Diesel Fuel Storage Tank (Tank 117)	F-6	In service	Diesel fuel	3				1	SGS ^b Table B.5 Location 1021	12
144	R Building Sanitary Waste Collection Tank (Tank 120)	F-6	In service	Sanitary wastes	3, 4				No Data		
145	Room R-128 Alpha Wastewater Tank (Tank 19)	E-6	In service	Alpha wastewater generated in R Bldg. Possible contaminants include Pu-238,-239, Ra-226, and Ac-227	3, 4				No Data		
146	R Building Rooms 121, 144, 146, and 148 entombed drains	F-6	Historical	Radium-226, Actinium-227	4	Sealed in concrete in building floor drains		4	No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
147	HH Building Soils	F-7	Grounds	Polonium-210, cobalt-60, tritium	4, 18	Indicated by Soil Gas Survey	S	12	1	SGS ^b Table B.4 Locations 1114, 1119, 1206, 1207, 1230	12
148	HH Building Solidification Unit	F-7	Historical	Cobalt-60, Polonium-210	4	Unknown			No Data		
149	HH Building Pilot Incinerator	F-7	Historical	Polonium-210	4	Probable air releases in 1951	A		No Data		
150	Room HH-15 Beta Wastewater Sump (Tank 236)	F-7	Inactive	Beta wastewater from restrooms and process area floor drains - tritium	3	Unknown			No Data		
151	Room HH-6 Alpha Wastewater Sump (Tank 237)	F-7	Historical	Alpha wastewater from process area floor drains. Possible contaminants include polonium-210, cobalt-60, and bismuth.	3, 4	Unknown - filled with concrete			No Data		
152	HH Building Beta Wastewater Sump (Tank 24)	F-7	In service	Beta wastewater from process area sinks and floor drains	3, 4	Unknown			No Data		
153	Area 20, Radioactive Waste Line Break	G-7	Grounds	Sodium nitrate, Plutonium-238, Cesium-137, Thorium, Cobalt-60	4, 5, 18	Cobalt-60	S	6, 18	1 2, 14, 16	SGS ^b Table B.4 Locations 1119 and 1120 Table B.1 (Table III.8 in Ref. 6)	12 6
154	Area 23, Thorium Contaminated Soil	F-6 G-6	Grounds	Thorium-230	18	Thorium-230	S	6	1 2	SGS ^b Table B.4 Location 1122 Table B.1 RSS ^c Location S1092 (Appendix E in Ref. 6)	12 6
155	Old Sanitary Disposal (SD) Plant (AKA Old Sanitary Wastewater Treatment Plant)	F-6	Surplus	Chromic acid, Calcium cyanide, Nickel sulfate, Nickel chloride, Black oxide, Copper cyanide	4, 5, 18	Unknown			No Data		
156	Old SD plant Tank (Tank 205)	F-6	Surplus	Polonium-210, Cobalt-60	3, 5						

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Re
157	Old SD plant Tank (Tank 206)	F-6	Surplus	Photo-processing solutions							
158	Old SD plant Tank (Tank 207)	F-6	Surplus	Metal Finishing Rinse Water	3, 5	Unknown			No Data		
159	Area 4A, Sewage Sludge Drying Pits	F-5 F-6 G-5 G-6	Surplus	Sanitary wastewaters Sludge from old sanitary wastewater treatment plant Plutonium-238, Thorium, Cesium-137, Cobalt-60 Calcium cyanide, Nickel Sulfate, Nickel chloride, Black oxide, Copper Cyanide Radioactive wastes, Process effluent, Metal finishing rinse water		SD Plant effluent was released to pit	S	4, 6	1 4, 5, 6 14, 16 3	SGS ^b Table B.4 Locations 1124 and 1127 Table B.5 Location 5225 Tables B.6 and B.7 Table B.1 (Table III.2 in Ref. 6) Table B.8	12 8 6 8
160	Mixed Waste Storage Area (Building 23)	G-6	In service	Tritium, Thorium compounds, Uranium compounds, Plutonium-238 Trimethylbenzene, Octane, Oils, cleaning materials, Polychlorinated biphenyls, Lead Various chemicals (including mercury, acids, solvents)	4, 5, 18	None Suspected			No Data		
161	Glass Melter Furnace	F-6	Inactive	Ion exchange resins Plutonium-238, Cobalt, Strontium, Cesium SD Building sludge Scintillation fluid constituents Acetonitriles Nitrate salt wastes Liquid solvent wastes	4, 5, 18	Test burns only	A	4, 7	No Data		
162	Glass Melter Feed Drum										
163	Off-Gas Treatment System Deluge Tank										

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
164	Off-Gas Treatment System Venturi Scrubber	F-6	Inactive	Contaminants listed under Glass Melter Furnace and Cyclone Incinerator	4, 5, 18	Test burns only	A	4, 7	No Data		
165	Off-Gas Treatment System Cyclone Demister										
166	Off-Gas Treatment System HEPA Filter										
167	Off-Gas Treatment System WD Building Filter Bank										
168	Off-Gas Treatment System Recycle Tank										
169	Off-Gas Treatment System Strainer										
170	Off-Gas Treatment System Leaf Solution Filter	F-6	Historical			Filter removed and replaced			No Data		
171	Off-Gas Treatment System Iodine Absorption Filter	F-6	Historical	None suspected (never used)	4, 5, 18				No Data		
172	WDA Building Basement Wash Sump (Tank 11) (AKA Glass Melter Room Sump)	F-6	In service	Alpha wastewater from floor and sink drains in WD Annex Bldg. Possible contaminants include acrylonitrile, phenol, acetonitrile, kerosene, chlorobenzene, carbon tetrachloride, xylene, acetone, ethanol, and methylene chloride.	3, 4, 5, 18	None Suspected beyond routine operation			3, 4, 5, 6, 8, 16	Tables B.6, B.7, B.8, and B.9	3, 7
173	Cyclone Incinerator	F-6 G-6	Historical	Plutonium-238 Tributyl phosphate Kerosene Vacuum pump oils	4, 5, 18	None Suspected			No Data		
174	WD Building Drum Staging Area	F-6	In service	Solidified plutonium sludge from the Alpha Wastewater Treatment System Low specific activity decontamination and decommissioning wastes	4, 5, 18	Suspected, not confirmed	S	4	3, 4, 5, 6, 13, 16	Tables B.6, B.7, B.8, and B.9	7

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Re
175	Area 4, WD Building Influent Tank Overflow	F-6	Surplus	Plutonium-238	1, 4, 5, 18	Low risk waste overflowed influent tank	S	10	1	SGS ^b Table B.4 Locations 1124 and 1127 Table B.5 Location 5225	12
									4, 5, 6	Tables B.6, B.7, and B.8	8
									14, 16	Table B.1 (Table III.2 in Ref. 6)	6
176	Area 14, Radioactive Waste Line Break	G-5 G-6	Historical	Plutonium-238, nitric acid	1, 4, 5, 18	Plutonium-238	S, SW	6, 10	1	SGS ^b Table B.4 Locations 1125 and 1126 No Hits	12
									4, 5, 6	Tables B.6, B.7, and B.8	8
									14, 15	Table B.1 (Table IV.4 in Ref. 6)	6
177	Building 41 Alpha Wastewater Tank (Tank 208)	G-6	Historical	Alpha wastewater from SM Bldg. and Bldg. 38 Plutonium-238, nitric acid	3, 4	Suspected Plutonium-238, removed 1985	S	10	See data for Area 19		
178	Building 41 Alpha Wastewater Tank (Tank 209)										
179	WD Building Alpha Wastewater Influent Tank (Tank 3)	F-6	In service	Influent alpha wastewater from H Bldg., SW/R Complex, SM Bldg. and Bldg. 38 . Possible contaminants include polonium-210, bismuth, plutonium-238, -239, radium-226, thorium-230,-232,-234, uranium-238, -234, -235, tritium, and actinium-227. Supernatant liquids from polonium processes in the HH Bldg. Possible contaminants include Protactinium-231, Cobalt-60, Radium-226 and aluminum chloride and bismuth chloride. Detergents, Organic solvents, waste chemicals, Lubricating oil	1, 3, 4, 5	Overflow of tanks recorded, see Area 4A			See Area 4A		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Re
(Cont.)	(Cont.)	(Cont.)	(Cont.)	Citric acid, Chelating agents, Sodium nitrate, Sodium Nitrite, Sodium hydroxide, Formic acid, Sodium tartrate, Formaldehyde, Potassium carbonate, Potassium Sulfate, Copper Sulfate, Calcium carbonate, Oxalic acid, Lithium chloride, Zirconium oxide, Sodium carbonate, Potassium bromide, Nickel sulfate, Asbestos fiber, Methylene blue, Mercury, Lead, Beryllium, Cyanides,	(Cont.)	(Cont.)			(Cont.)		
180	WD Building Alpha Wastewater Influent Tank (Tank 4)	F-6	In service								
181	WD Building Alpha Wastewater Influent Tank (Tank 5)										
182	WD Building Alpha Wastewater Influent Tank (Tank 6)										
183	Room WD-1 Basement Sump (Tank 12)	F-6	In service	Alpha wastewater from floor and sink drains in the WD Bldg. Possible contaminants include Plutonium-238,-239, Thorium-230,-232,-234, Radium-226, tritium and Cobalt-60.	3	None Suspected			No Data		
184	Room WD-1 Alpha Wastewater Sump (Tank 17)	F-6	In service		3	None Suspected			No Data		
185	Room WD-1 Sanitary Waste Sump (Tank 134)	G-6	In service	Sanitary wastes	3						
186	Room WD-8 Alpha Wastewater Sump (Tank 18)	F-6	In service	Alpha wastewater from floor drains	3						
187	WD Building Alpha Wastewater Clariflocculators (2 units)	F-6 G-6	In service	Contaminants listed under WD Building Alpha Wastewater Influent Tank (Tank 3)	4, 5, 18						
188	WD Building Alpha Wastewater Mixing Box										

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
189	WD Building Alpha Wastewater Sand Filters (2 units)	(Cont.)	(Cont.)	(Cont.)	(Cont.)	(Cont.)			(Cont.)		
190	WD Building Alpha Wastewater Bone Char Columns (2 units)										
191	WD Building Alpha Wastewater Effluent Tank (Tank 7)	G-6	In service	Treated alpha wastewater prior to discharge	3, 4, 5, 18	Released through closed pipeline to Great Miami river NPDES Outfall 001 effluent less than DOE Effluent release criteria	SW	4	No Data		
192	WD Building Alpha Wastewater Effluent Tank (Tank 8)										
193	WD Building Alpha Wastewater Effluent Tank (Tank 9)										
194	WD Building Alpha Wastewater Effluent Tank (Tank 10)	G-6	In service	Treated alpha wastewater prior to discharge	3, 4, 5, 18	Ibid	SW	4	No Data		
195	WD Building Alpha Wastewater Sludge Pits (2 units)	F-6 G-6	In service	Contaminants listed under WD Building Alpha Wastewater Influent Tank (Tank 3)	4, 5, 18	None Suspected			No Data		
196	WD Building Alpha Wastewater Sludge Solidification/Drumming Unit	F-6 G-6	In service	Contaminants listed under WD Building Alpha Wastewater Influent Tank (Tank 3)	4, 5, 18	None Suspected			No Data		
197	WD Building Solid Radioactive Waste Compactor	F-6 G-6	In service	Solid alpha wastes	4	None Suspected			No Data		
198	WDA Building Basement Sanitary Waste Tank (Tank 135)	F-6	In service	Sanitary wastewater from WD Bldg. Annex Penthouse	3	None Suspected			No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	R
199	WDA Building Beta Wastewater Influent Tank (Tank 13)	F-6	In service	Beta wastewater from T Bldg. equipment decontamination, floor mopping, and sprinkler system including tritium and solvents	3, 4, 5, 18	Historic effluent released to plant drainage ditch, effluent less than AEC release criteria	SW	4	No Data		
200	WDA Building Beta Wastewater Influent Tank (Tank 14)	F-6	In service	Contaminants listed under WD Bldg. Beta Wastewater Influent Tank (Tank 13)	3, 4, 5, 18	None Suspected			No Data		
201	WDA Building Beta Wastewater Metering Station	F-6	In service	Contaminants listed under WD Bldg. Beta Wastewater Influent Tank (Tank 13)	4, 5, 18						
202	WDA Building Beta Wastewater Mixing/Solidification Unit	F-6	In service	Contaminants listed under WD Bldg. Beta Wastewater Influent Tank (Tank 13)	4, 5, 18						
203	WDA Building Alpha Wastewater Influent Tank (Tank 15)	F-6	In service	Influent alpha wastewater. Possible contaminants include Polonium-210, Cobalt-60, Plutonium-238, Radium-226, Actinium-227, Cesium-137, thorium, Uranium-238.	3, 4	None Suspected			No Data		
204	WDA Building Alpha Wastewater Influent Tank (Tank 16)	F-6	In service	Ibid	3,4						
205	WDA Building Alpha Effluent Tank (Tank 214)	F-6	Inactive	Contaminants listed under WD Building Alpha Wastewater Influent Tank (Tank 3)	3, 4	Effluent released to plant drainage ditch, effluent less than AEA Release criteria	S, SW	4	No Data		
206	WDA Building Alpha Effluent Tank (Tank 215)										
207	WDA Building Alpha Effluent Tank (Tank 216)										
208	WDA Building Solidification Unit	F-6	Historical	Plutonium-238	4	None Suspected			No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref	Analytes ^a	Results	Re
209	Building 62 Stack Deluge Tank (Tank 1)	E-6	In service	None suspected (never used)	3	None Suspected			No Data		
210	Room H-131 Laundry Water Tank (Tank 2)	E-6	In service	Alpha wastewater from laundry operations. Possible contaminants include Pu-238, Th-230,-232,-234, tritium, Ra-226,-228, and Ac-227. Ethylene glycol monbutyl ether, Sodium hydroxide, Ammonium bicarbonate, Sodium hexametaphosphate	3, 4	None Suspected			No Data		
211	A Building Decontamination Shower Water Tank (Tank 28)	E-6	In service	Wastewater from medical decontamination shower. Plutonium-238 and -239, Thorium-228, -230, and -232, Radium-226 and -228, and tritium	3	None Suspected			No Data		
212	A Building Decontamination Shower Water Tank (Tank 29)	E-6	In service	Wastewater from medical decontamination shower. Plutonium-238 and -239, Thorium-228, -230, and -232, Radium-226 and -228, and tritium	3	None Suspected			No Data		
213	T Building Solidification Unit	F-7	Historical	Cobalt-60, Polonium-210	4	None Suspected			No Data		
214	T Building Solid Radioactive Waste Compactor	F-7	In service	Low specific activity beta wastes - tritium	4						
215	Room T-1 Cooling Water Sump (Tank 124)	F-7	In service	Single pass non-contact cooling water	3, 4						
216	T Building, Corridor 2 Sanitary Wastewater Sump (Tank 125)	F-7	In service	Sanitary wastewaters from restrooms	3						
217	Room T-11F Sanitary Wastewater Sump (Tank 126)	F-7	In service	Sanitary wastewaters	3						
218	Room T-15 Sanitary Wastewater Sump (Tank 127)	F-7	In service	Sanitary wastewaters from restrooms and non-work area sinks	3						
219	T Building, Stair 3 Cooling Water Sump (Tank 128)	F-7	In service	Single pass cooling water from floor drains in air handling area	3, 4						
220	Room T-78 Steam Condensate Sump (Tank 129)	F-7	In service	Steam condensate from heating system in air handling area	3						

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
221	T Building, Corridor 8 Sanitary Wastewater Sump (Tank 130)	F-7	In service	Sanitary wastewater from restrooms and non-work area sinks - tritium	3	(cont.)			(cont.)		
222	Room T-78A Sanitary Wastewater Sump (Tank 131)	F-7	In service	Sanitary wastewater from restrooms - tritium	3						
223	Room T-90 Cooling System Condensate Sump (Tank 132)	F-7	In service	Condensation from cooling units in air handling area - tritium	3, 4						
224	Room T-99 Sanitary Wastewater Sump (Tank 133)	F-7	In service	Sanitary wastewater from restrooms - tritium	3						
225	Room T-23 Beta Wastewater Sump (Tank 227)	F-7	Historical	Beta wastewaters	3, 4	None suspected, Sump underwent removed 1975			No Data		
226	Room T-3 Floor Drain Sump (Tank 228)	F-7	Historical Filled with concrete 1985	Wastewater from nonradiological work area floor drains	3, 4	None Suspected			No Data		
227	Room T-40 Alpha Wastewater Sump (Tank 229)	F-7	Historical Filled with concrete	Alpha wastewater from process area floor drains	3, 4						
228	Room T-41 Alpha Wastewater Sump (Tank 230)	F-7	Historical Filled with concrete	Alpha wastewater from process area floor drains	3, 4	None Suspected			No Data		
229	Room T-50 Alpha Wastewater Sump (Tank 231)	F-7	Historical Filled with concrete 1975	Process alpha wastewater	3, 4						
230	Room T-50 Alpha Wastewater Sump (Tank 232)	F-7	Historical Filled with concrete 1975	Process alpha wastewater	3, 4						

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
231	T Building, Corridor 8 Alpha Wastewater Sump (Tank 233)	F-7	Historical Filled with concrete 1982	Alpha wastewater from process area floor drains	3, 4	Unknown - filled with concrete			No Data		
232	T Building, Corridor 7 Alpha Wastewater Sump (Tank 234)	F-7	Historical Filled with concrete 1982	Alpha wastewater from process area floor drains	3, 4	Unknown - filled with concrete			No Data		
233	Room T-63 Alpha Wastewater Sump (Tank 235)	F-7	Historical Filled with concrete 1982	Alpha wastewater from process area floor drains	3, 4	Unknown - filled with concrete			No Data		
234	Building 58 Diesel Fuel Storage Tank (Tank 222)	E-6	Historical	Diesel fuel	3	Tank Removed			No Data		
235	Area of Possible Elevated Thorium Activity	E-8	Grounds	Thorium	6	Possible fugitive dust	S	4, 6	1	SGS ^b Table B.3 Locations 2021, 2148, and 2149	12
									14, 15	Table B.1	6
236	Site Survey Project Potential Hot Spot Location S0166	F-6	Grounds	Plutonium-238	6	Isolated activity from unknown sources			13	Table B.9 (Appendix E in Ref. 6)	6
237	Site Survey Project Potential Hot Spot Location S0175	E-5 E-6	Grounds	Cobalt-60, Cesium-137	6				14, 15	Table B.9 (Appendix E in Ref. 6)	6
238	Site Survey Project Potential Hot Spot Location S1092	G-7	Grounds	Thorium	6				14	Table B.9 (Appendix E in Ref. 6)	6
239	Site Survey Project Potential Hot Spot Location S0208	F-5	Grounds	Plutonium-238	6				13	Table B.9 (Appendix E in Ref. 6)	6
240	Site Survey Project Potential Hot Spot Location S0472	G-6	Grounds	Thorium	6				14	Table B.9 (Appendix E in Ref. 6)	6

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
241	Northwest Parking Lots	D-7	Grounds	Toluene, Freon-113, Trichloroethene	12	Indicated by Soil Gas Survey	S	12	1	SGS ^b Table B.4 Locations 1002, 1007, 1008, 1009, 1010, 1014, 1101, 1102, 1106, 1109, 1110	12
242	VOC Potential Hot Spot Location 1016	D-7	Grounds	Toluene, Trichloroethene	12				1	SGS ^b Table B.4	12
243	VOC Potential Hot Spot Location 1064	E-7	Grounds	Toluene	12						
244	VOC Potential Hot Spot Locations 1076, 1077, 1079, and 1080	E-6	Grounds	Toluene, Freon-113, 1,1,1-Trichloroethane	12						
245	VOC Potential Hot Spot Location 1085	F-6	Grounds	Freon-113, Trichloroethene, 1,1,1- Trichloroethane	12						
246	VOC Potential Hot Spot Locations 1117 and 1118	G-7	Grounds	Tetrachloroethene	12						
247	VOC Potential Hot Spot Location 1129	F-8	Grounds	Freon-113, Trichloroethene, 1,1,1- Trichloroethane, Tetrachloroethene	12	Indicated by soil gas survey	S	12	1	SGS ^b Table B.4	12
248	HH Building Stack	F-7	In service	Polonium-210, Tritium	4, 18	None suspected beyond routine emissions	A	4, 18	Emissions reported in Annual Environmental Monitoring Reports		18
249	SW Building Stack (NCPDF)	E-6	In service	Tritium	4, 18						
250	SW Building Stack (SW1C)	E-6	In service	Uranium-238	4, 18						
251	SW Building Stack (HEFS)	E-6	In service	Tritium	4, 18						
252	B Building Stack	E-6	Inactive	Polonium-210, Tritium	4, 18						
253	T Building WEST Stack	F-6	In service	Tritium, Plutonium-238 -239, Uranium-238	4, 18						
254	T Building EAST Stack	E-7	In service	Tritium, Plutonium-238, Uranium-238	4, 18						
255	WD Building Stack (ALR)	F-6	In service	Plutonium-238	4, 18						

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
256	WD Building Stack (AHR)	F-6	In service	Plutonium-238	4, 18	(Cont.)	(Cont.)	(Cont.)	(Cont.)	(Cont.)	(Cont.)
257	WD Building Stack (SS)	F-6	In service	Plutonium-238	4, 18						
258	Area H Open Burn Unit (AKA Pyrotechnic Waste Disposal Area)	I-7	In service	Wastewater from explosives processes Organic solvents (primarily acetone)	1, 4, 5, 18	Suspected, not confirmed	S	7, 18	3, 4, 5, 6, 10, 11, 12 14	Tables B.6, B.7, and B.8 Table B.9 RSS ^c Location S0783 (Appendix E in Ref. 6)	7 6
259	Pyrotechnic Waste Shed	I-7	In service	Pyrotechnic powders Pyrotechnic-contaminated wastes Mineral oil	4, 5, 18	Suspected, not confirmed	S	7, 18	3, 4, 5, 6, 12 14	Tables B.6, B.7, and B.8 Table B.9 RSS ^c Location S0780 (Appendix E in Ref. 6)	7 6
260	Thermal Treatment Unit	I-7	Inactive	Antifreeze Explosives Program waste Mild detonating cords and fuses Pyrotechnic powders Solid primary explosives	4, 5, 18	Suspected, not confirmed	S	7, 18	3, 4, 5, 6, 12 14	Tables B.6, B.7, and B.8 Table B.9 RSS ^c Location S0783 (Appendix E in Ref. 6)	7 6
261	Trash Burner Area	I-7	Historical	Mild detonating fuses Pyrotechnic material Thermite Freon Acetone	4, 5, 18	Suspected, not confirmed	S	7, 18	3, 4, 5, 6, 12, 13	Tables B.6, B.7, and B.8	7
262	Retort	I-7	In service	Explosives Programs constituents Metals, Asbestos Diallyl-phthalates-based plastic components	4, 5, 18	Gaseous and particulate emissions released to atmosphere	A	4	No Data		
263	Building 90 Blockhouse										

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes*	Results	Re
264	Explosive Waste Storage Bunker (Magazine 53)	I-7	In service	Classified, non-explosive wastes Explosion residuals (primarily aluminum residuals) Contaminants listed under Explosive Waste Storage Bunker (Magazine 53) Detonators, Detonating cord, Thermite, Pyrotechnic powders, Primary explosives High explosive powder, PETN, PBX, RDX, HMX, HNS, CP HNS (hexanitrostilbene)	4, 5, 18	None Suspected			No Data		
265	Biodegradation Unit	I-7	Inactive	Soapy wastewater containing explosives constituents	4, 5, 18	Suspected	S	7, 18	See Pyrotechnic Waste Shed		4
266	Area 8, Thorium-Contaminated Soils from Areas 1 and 9	F-9	Grounds	Thorium-232, Plutonium-238	1, 4, 5, 18	Thorium	S	4, 6	14, 15, 16	Table B.1 (Table V.3 in Ref. 6)	6
267	Area 9, Thorium Storage and Redrumming Area	F-9 G-9	Grounds	Plutonium-238, Thorium Thorium sludge constituents (c)	1, 4, 5, 18	Thorium	S	4, 6	14	Table B.1 (Table V.4 in Ref. 6)	6
268	Building 31, Contaminated Material Storage Building	F-9	In service	Plutonium-238 Thorium Tritium	4 3	None Suspected			See Area 9	Table B.9	6
269	Building 36 Historic Gasoline Tanks (Tanks 239 and 240)	G-10	Historical	Gasoline	3	No information on when tanks were removed			No Data		
270	Underground Sanitary Sewer Lines G6 & G7	G-10	In Service	Organic solvents, plating solutions, laboratory chemicals, nitric acid, hydrochloric acid, methylene chloride, strong acids and bases	4	Suspected VOCs	S	4	3, 4, 5, 6, 9, 10, 11, 12, 13, 16	Tables B.6, B.7, B.8, and B.9	7
271	Building 37 Sanitary Waste Tank (Tank 100)	F-10	In service	Sanitary wastes	3, 4	None Suspected			No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Re
272	Area 10, Concrete Debris	G-8 G-9	Grounds	Polonium-210, Cobalt-60, Plutonium-238 (from runoff)	1, 4, 5, 18	Suspected	S	4, 6	14	Table B.1 (Table III.6 in Ref. 6)	6
273	Area 12, Thorium-Contaminated Soil from Area 1	G-9	Grounds	Thorium, Plutonium-238 (from runoff)	1, 4, 5, 18	Suspected thorium	S	4, 6	14, 15	Table B.1 (Table V.5 in Ref. 6)	6
274	Area 21, Old Bunker	H-9	Grounds	Cesium-137, Strontium-90, Actinium-227, Radium-226	4, 5, 18	Suspected thorium	S	4, 6	14, 15, 16	Table B.1 (Table VII.2 in Ref. 6)	6
275	Area 21, Detonator Shack	H-8	Grounds	Cesium-137, Strontium-90, Actinium-227, Radium-226	4, 5, 18	Suspected thorium	S	4, 6	14, 15, 16	Table B.1 (Table VII.2 in Ref. 6)	6
276	Area 22, Orphan Soil from other Areas	I-8	Inactive	Polonium-210, Radium-226, Cobalt-60, Plutonium-238, Cesium-237	4, 5, 18	Suspected	S	6	14, 15, 16	Table B.1 (Table X.1 in Ref. 6)	6
277	Area J, Hillside Disposal Area (AKA Dredged Material Disposal Area 11a)	H-8 H-9	Historical	Construction/building debris, Paints, Thinners, Chemical contaminants, Asbestos, Thorium, Plutonium-238	1, 4, 18	Suspected VOCs	S	4	1 14, 15, 16	SGS ^b Table B.2 Table B.1 (Table X.2 in Ref. 6)	12 6
278	Area J, Hillside catch basin	H-8	In service	Plutonium-238 (from runoff)	1, 4, 18	Suspected	SW	18	No Data		
279	Old Firing Range Drum Storage Area	H-9	Historical	Liquid chemical wastes	5, 18	Confirmed VOCs	S	4	1 2, 3, 4, 5, 6 14, 15	SGS ^b Table B.2 Locations 3152, 3153, and 3187 Tables B.6, B.7, B.8, and B.9 RSS ^c Locations S0162, S0163, and S0647 (Appendix E in Ref. 6)	12 7 6

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Ref.
280	Waste Oil Drum Field Area	I-8	Historical	Waste oil Plating Operations waste Explosive/solvent waste Herbicides Waste chemicals Photo-processing waste Batteries Kitchen grease Epoxy resins Ethylene glycol Scintillation vials	4, 5, 18	Confirmed VOCs	S	4	3, 4, 5, 6, 8, 12	Tables B.6, B.7, and B.8 RSS ^c Locations S0263, S0164, S0265, and S0266 (Appendix E in Ref. 6) Table B.9	
281	Area E, Waste Oil Spill	J-8	Historical	Waste oil	1	Minor oil	S	1	No Data		
282	Spoils Disposal Area/Construction Spoils Area	J-5 K-5	In service	Plutonium-238, Thorium Gasoline contaminated soils from G Building	4, 5, 18	Plutonium-238 < 25 pci/gm Thorium < 5 pci/gm	S	6	14, 15, 16	Table B.1 (Table X.3 in Ref. 6)	
283	Area 1, Bulk Transfer of Thorium Drums (AKA, Plutonium Recoverable Waste Storage)	I to L 6 to 8	Grounds	Thorium sludge constituents, Plutonium-238	1, 4, 5, 18	Thorium dust, Plutonium-238	S	6	3, 4 14, 15, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.2 in Ref. 6)	
284	Building 21, Thorium Sludge Storage Facility	J-7 J-8	Surplus	Thorium sludge constituents	4	Thorium dust	S	4, 6	See Area 1		
285	Area 11, Contamination from SM Building Operations	G-9	Surplus	Plutonium-238	1, 4, 5, 18	Plutonium-238	S	6	3, 4, 5, 6 14, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.3 in Ref. 6)	
286	Area 16, SM Building Sanitary Sewage Septic Tank Leach Field	F-9 G-9	Surplus	Plutonium-238, Thorium Sanitary wastes from SM Building	1, 4, 5, 18	Plutonium-238	S	6	3, 4, 6 14, 15, 16	Tables B.6, B.7, and B.8 Table B.1 (Table IV.5 in Ref. 6)	

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref.	Releases	Media	Ref.	Analytes ^a	Results	Re
287	SM Building Historic Septic Tank (Tank 241)	G-9	Historical	Plutonium-238	3, 4	Plutonium-238			No Data		
288	Area 17, SM Building Soils	G-9 G-10	Surplus	Plutonium-238, Thorium	1, 5, 18	Plutonium-238	S	6	4, 6 14, 15	Table B.6, B.7, and B.8 Table B.1 (Table IV.6 in Ref. 6)	E E
289	SM Building Alpha Wastewater Tank (Tank 210)	G-9	Historical	Alpha wastewater from plutonium processing	3, 4	Tanks removed 1986-1988			See Area 17		
290	SM Building Alpha Wastewater Tank (Tank 211)										
291	SM Building Alpha Wastewater Tank (Tank 212)										
292	SM Building Alpha Wastewater Tank (Tank 213)										
293	SM Building Solidification Unit (Room SM-1)	G-9	Historical	Plutonium-238	4	None Suspected, equipment removed 1970		4	No Data		
294	WS Building Solidification Unit	G-9	Historical	Plutonium-238	4	None Suspected D&D 1983			No Data		
295	Building 38 Solid Radioactive Waste Compactors (2 units)	G-9 H-9	Inactive	Plutonium-238	4	None Suspected D&D 1986			No Data		
296	Building 38 West Dock Sump (Tank 25)	H-9	In service	Precipitation and potentially spilled waste material from a radiological waste drum storage pad - Pu-238	3	None Suspected			No Data		
297	Building 38 Alpha Wastewater Sump (Tank 26)	G-9	In service	Wastewater from floor drains and decontamination showers	3, 4	None Suspected			No Data		
298	Building 38 Alpha Wastewater Sump (Tank 27)	G-9	In service	Wastewater from floor drains and decontamination showers	3, 4	None Suspected			No Data		
299	Building 38 Diesel Fuel Storage Tank (Tank 121)	G-9	In service	Diesel fuel	3	None Suspected			No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
300	Area 19, Underground Waste Transfer Line	G-6 G-7 G-8 G-9	Historical	Plutonium-238, Nitric acid	1, 4, 5, 18	Plutonium-238	S	1, 6, 18	14	Tables B.1, B.6, B.7, and B.8	6, 8
301	Building 38 In-Line Incinerator	G-9	Historical	Plutonium-238	2, 4	None Suspected D&D 1986			No Data - pending verification		
302	Area D, Acid Leach Field	H-8 H-9 G-8 G-9	Historical	Plutonium-238, Thorium	1, 4, 5, 18	Plutonium-238	S	6	4, 6 14	Tables B.6, B.7, and B.8 Table B.1 (Table IV.10 in Ref. 6)	8 6
303	Warehouse 14 (AKA Pad 14)	G-9	Grounds	Thorium sludge constituents Plutonium-238	4	None Suspected			14	Table B.9 RSS ^c Locations C0127 and C0128 (Appendix E in Ref. 6)	6
304	Excavated Materials Disposal Area (AKA Rader's Hill)	I-8	Grounds	Thorium	4	Thorium < 2 pci/gm	S	6	14	Table B.1	6
305	SM Stack	G-9	In service	Plutonium-238	4	None suspected beyond routine emissions	A	4, 18	No Data		
306	SM/PP Hill Seep 0609	L-9	NA	None suspected	5, 18	None suspected			No Data		
307	Site Survey Project Potential Hot Spot Location C0007	E-9	Grounds	Thorium	6	Isolated activity from unknown source			14	Table B.9 (Appendix E in Ref. 6)	6
308	Site Survey Project Potential Hot Spot Location C0028	F-10	Grounds	Thorium	6						
309	Site Survey Project Potential Hot Spot Location S0307	F-9	Grounds	Thorium	6						
310	Site Survey Project Potential Hot Spot Location S0647	H-9	Grounds	Cesium-137	6						
									15	Table B.9 (Appendix E in Ref. 6)	6

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
311	Site Survey Project Potential Hot Spot Location S0706	I-6	Grounds	Plutonium-238	6	(Cont.)			13	Table B.9 (Appendix E in Ref. 6)	6
312	Site Survey Project Potential Hot Spot Location S0971	J-9	Grounds	Thorium	6				14	Table B.9 (Appendix E in Ref. 6)	6
313	Site Survey Project Potential Hot Spot Location S0982	I-8	Grounds	Thorium	6						
314	Farm Trash Area	M-5	Historical	Waste oil	5, 18	Suspected, not confirmed			3, 4, 5, 6 14	Tables B.6, B.7, and B.8 Table B.9 RSS ^c Location S0237 (Appendix E in Ref. 6)	7 6
315	Waste Transport Vehicles	SITE-WIDE	In service	Explosives Programs wastes Mixed wastes Laboratory chemicals Low activity wastewater from SM/PP Complex to WD Building	4, 5, 18	None Suspected			No Data		
316	Trash Dumpsters	SITE-WIDE	In service	Solid wastes	4, 5, 18	None Suspected			No Data		
317	Ventilation Hoods	SITE-WIDE	In service	Paint fumes, Acidic and caustic gases Asbestos, Acetone, Trichloroethylene, Benzene, Chloroform, Toluene	4, 5, 18	None Suspected			No Data		
318	Transformers	SITE-WIDE	In service	Polychlorinated biphenyls	4	All PCB oils replaced			No Data		
319	Epoxy Resin Disposal	G-7 H-7	In service	Epoxy resins	5, 18	None Suspected			No Data	Table B.9	6
320	Dayton Unit I	Dayton	Historical	Radioisotopes (including plutonium-239) Spent acids (including hydrochloric acid)	1, 4	None Suspected			No Data		

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes*	Results	Ref
321	Dayton Unit II	Dayton	Historical	Explosives (including ammonium picrate and ammonium nitrate) Rocket propellant	1, 4	None Suspected			No Data		
322	Dayton Unit III	Dayton	Historical	Polonium-210, Tellurium, Bismuth, Cobalt, Nickel, Beryllium, Thorium	1, 4	Suspected Cobalt-60	S	4	No Data		
323	Dayton Unit IV	Dayton	Historical	Contaminants listed under Dayton Unit III	1, 4	Suspected Cobalt-60	S	4	No Data		
324	Dayton Warehouse	Dayton	Historical	Polonium-210	4	None Suspected			No Data		
325	Scioto Facility (Marion)	Scioto	Historical	Facility never used	4	None Suspected			No Data		
326	Building 38 Sanitary Sump (Tank 254)	G-9	In Service	Sanitary wastewater	25	None Suspected			No Data		
327	R-111 Calorimetry Bath (Tank 255)	E-6	Inactive	Deionized water with potential alpha contamination	25	None Suspected			No Data		
328	R-111 Calorimetry Bath (Tank 266)										
329	Building 62 Hot Waste Sump (Tank 258)	E-6	In Service	Sanitary wastewater with potential alpha contamination	25	None Suspected Tank removed			No Data		
330	Building 2 Fuel Oil Tank (Tank 260)	H-7	Historical	Fuel oil	25	Unknown			No Data		
331	Building 2 Tank (Tank 261)	H-7	Historical	Sanitary Wastes	25	Unknown Closed in place			No Data		
332	Building G Waste Oil Tank (Tank 262)	E-7	Inactive	Waste oils	25	Unknown			No Data		
333	Building 87 Explosive Surge Tank (Tank 263)	H-7	In Service	Exhaust air from explosives testing	25	None Suspected			No Data		
334	Building 87 Explosive Surge Tank (Tank 264)										
335	Building 87 Explosive Surge Tank (Tank 265)										

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes*	Results	Ref
336	Building 37 Waste Tank (AKA Low Risk Waste Tank) (Tank 267)	F-10	Inactive	Wastewater	25	None Suspected Never used for low-risk wastewaters			No Data		
337	Building H Condensate Sump (Tank 268)	E-6	In Service	Condensate wastewater	25	None Suspected			No Data		
338	Building 29 Septic Tank (Tank 270)	E-9	Inactive	Sanitary wastewater	25	None Suspected (Abandoned in place?)			No Data		
339	T-44 Wastewater Sump (Tank 250)	F-7	Historical	Wastewater	25	Unknown - filled with concrete			No Data		
340	T-16b Wastewater Sump (Tank 251)	F-7	Historical	Wastewater	25	Unknown - filled with concrete			No Data		
341	T-90 Condensate Sump (Tank 269)	F-7	In Service	Condensate wastewater	25	None Suspected			No Data		
342	T-1 Hot Side Fire Water Tank (Tank 271)	F-7	In Service	Wastewater/Radioactive wastewater	25	None Suspected			No Data		
343	T-20 Fire Water Sump (Tank 272)	F-7	In Service	Wastewater/Radioactive wastewater	25	None Suspected			No Data		
344	T-37 Fire Water Sump (Tank 273)	F-7	In Service	Wastewater/Radioactive wastewater	25	None Suspected			No Data		
345	Former Equipment Storage Area see related site 16	H-6	Historical	Potential contaminants listed under Hazardous Waste Storage Area	4, 5, 18	Historically related to site 16	S	7, 18	No Analytical Data		7

*Analyte List Codes

^bSGS, Soil Gas Survey

^cRSS, Radiological Site Survey

- 1 - Soil Gas Survey - Freon 11, Freon 113, Trans-1,2-Dichloroethylene, Cis-1,2-Dichloroethylene, 1,1,1-Trichloroethane, Perchloroethylene, Trichloroethylene, Toluene
- 2 - Gamma Spectroscopy - Thorium-228, -230, Cobalt-60, Cesium-137, Radium-224, -226, -228, Americium-241, Actinium-227, Bismuth-207, Bismuth-210m, Potassium-40
- 3 - Target Analyte List
- 4 - Target Compound List (VOC)
- 5 - Target Compound List (SVOC)
- 6 - Target Compound List (Pesticides/Polychlorinated Biphenyl)
- 7 - Dioxins/Furans
- 8 - Extractable Petroleum Hydrocarbons (EPH)/Total Petroleum Hydrocarbons (TPH)
- 9 - Lithium
- 10 - Nitrate/Nitrite
- 11 - Chloride
- 12 - Explosives
- 13 - Plutonium-238
- 14 - Plutonium-238, Thorium-232
- 15 - Cobalt-60, Cesium-137, Radium-226, Americium-241
- 16 - Tritium

Reference List

1. DOE 1986
2. DOE 1992a
3. DOE 1992c
4. DOE 1993a
5. EPA 1988a
6. DOE 1993d
7. DOE 1993c
8. DOE 1992d
9. Fentiman 1990
10. DOE 1992f
11. Styron and Meyer 1981
12. DOE 1993b
13. DOE 1993d
14. DOE 1991b
15. Halford 1990
16. DOE 1993e
17. DOE 1990
18. DOE 1992a
19. Rogers 1975
20. DOE 1992h
21. Dames and Moore 1976a, b
22. DOE 1992i
23. DOE 1992j
24. DOE 1994
25. EG&G 1994

EXHIBIT E

BUILDING 87 WASTE MANAGEMENT INFORMATION:

- **OLD SANITARY SEWAGE DISPOSAL SYSTEM SLUDGE**
- **CHEMICAL WASTE STORAGE AREA**
- **PAST HAZARDOUS WASTE STORAGE AREA**

collected by the perforated pipe and added back into the wastewater influent stream upstream of the equalization basins (Raker 1991). The sludge and grit placed in these beds was dried naturally and then removed from the beds and placed, with an absorbent, in large plywood boxes for shipment to an approved off-plant disposal facility. The dried sludge contained plutonium and other radionuclides but did not constitute a RCRA hazardous waste, nor did it have hazardous waste characteristics (EPA 1988).

Originally, there were four sludge drying beds. In late 1989 or early 1990, two of the beds were removed and replaced with a filter press for the removal of water from the sludge. The remaining two beds were scheduled to be dismantled in June and July 1991 (Raker 1991). The beds became operational in 1975 and were taken out of service when the filter press was installed.

4.20. OLD SEWAGE DISPOSAL FACILITY - SD BUILDING (HISTORICAL)

The old sanitary sewage disposal facility in the SD Building is just west of the WD Building and was first used in 1948 (Figure 4.1). It was taken out of service in 1975 when it became too small and was replaced by a new sanitary sewage disposal plant. The plant consisted of a pump room, primary settling tank, aeration tank, digester, chlorinator, and effluent baffle chamber. The system treated sanitary wastewater and some process effluent from the facility. Sources of wastewater included restrooms, showers, laundry facilities, lab sinks, and rinse water from a metal-finishing operation. All treatment units were open-topped, in-ground structures. The sidewalls and bottoms were in-ground structures constructed of 12-inch-thick reinforced concrete. The entire plant was approximately 44 ft long by 47 ft wide. Treated effluent was discharged to the Great Miami River through NPDES Outfall 001. The sludge from the treatment plant was routinely spread around various open field areas of Mound. The sludge was spread over the ground in the area around Building 87 and was dumped in piles in the area around Building 34, as well as over many grassy areas at the plant. In the 1960s, it was found that the sludge was slightly radioactive and open disposal was stopped. The sludge was then packaged for shipment to an approved off-plant disposal facility (Thomas 1991).

The area surrounding the old sewage disposal facility was contaminated with polonium and perhaps cobalt when a waste line broke near Building 48 in December 1970. The radioactive waste that leaked from the line cross-contaminated the sewage treatment process, causing the destruction of the bacterial population. To accommodate the process flow that resulted from the interruption of the SD Plant, water and sludge were pumped into a pit dug to the west of the SD drying beds (DOE 1991c). Other debris, old pipes, etc., may have been added to the pit. Plutonium contamination is also present in this area from the 1969 rupture of the WTS pipeline from SM/PP to WD Buildings.

concurrently (Vaughters 1991). The chemical waste staging activities in Area B were moved to the chemical waste storage area in 1976 to allow the construction of the overflow pond and site sanitary landfill.

5.3.11. Chemical Waste Storage Area (Historical)

The chemical waste storage area was in the central part of Mound along the southern margin of the lower reach of the plant drainage ditch (Figure 5.1). This area was used to stage hazardous chemical wastes before they were shipped off-plant for disposal. The area replaced the Area B drum storage area in 1976 and was itself replaced by the construction of the past hazardous waste storage area structure (old Building 72) in 1982. The old Building 72 was constructed adjacent to the chemical waste storage area.

The area appears from photographs to have been located along the access road and was probably about 50 ft wide by 200 ft long. The location and extent of this storage area are graphically displayed in the Site Scoping Report: Volume 6 - Photo History (DOE 1992c).

It is unknown whether the drums stored in the area were stored on the ground or were elevated. The drainage in the area probably did not allow water to pond as it had in the old firing range drum storage area, so the drums may have been placed directly on the ground. In all probability, the types and quantities of wastes were similar to those stored at the past hazardous waste storage area and the waste oil drum field.

5.3.12. Waste Oil Drum Field Area (Historical)

The waste oil drum field area is an inactive unit located approximately 250 yards southeast of the open burn area and due west of Building 100, in the southern portion of Mound (Figure 5.1). It was used for temporary drum storage between the decommissioning of the past hazardous waste storage area in 1986 and start-up of the hazardous waste storage area (Building 72). It was closed during the last quarter of 1986. Approximately 200 drums were observed in an open field east of the burn area in August 1986. Half the drums were marked as containing waste oil, and the remainder were identified as plating shop waste, explosive/solvent waste, herbicides, mixed laboratory chemicals, photographic waste, batteries, kitchen grease, epoxy resins, ethylene glycol, scintillation vials (less than 50 $\mu\text{Ci/L}$), and other chemical wastes (EPA 1988). The drums were removed from this area shortly after August 1986. The area was approximately 50 ft by 100 ft (DOE 1992g), and the 55-gallon drums were stored on skids above the soil. During an August 1986 inspection, it was found that the soil at the south end of the drum area showed evidence of leakage from waste oil drums, and dark stains could be seen on

the ground throughout this area. Storm water runoff from the area probably flows westward toward the overflow pond.

5.3.13. Past Hazardous Waste Storage Area (Historical)

The past hazardous waste storage area is the former location of Building 72 and is immediately west of Building 87, in the test fire area of Mound (Figure 5.1). The building began operation in 1982, and the Ohio EPA approved the closure plan August 8, 1985. The building was used for storage, prior to off-plant shipment, of combustible and flammable liquids and waste oils, solvent-containing wastes, ignitable wastes, plating wastes, photoprocessing wastes, polymeric wastes, and toxic wastes generated at the facility. Wastes were stored in sealed 55-gallon drums. The storage structure was a 60-ft by 40-ft covered structure (Building 72) with a concrete floor that was divided into four drum storage bays to segregate incompatible wastes. Three of the bays were 13 ft by 40 ft. The fourth bay measured 24 ft by 9 ft and was used to hold defective containers and to prepare waste containers for off-plant shipment. The bays had sloped floors and 6- to 15-inch dikes. The expansion of Building 87 required removal of the structure. During closure, the concrete floor was broken up and disposed of and soil samples were collected and analyzed for contamination by halogenated volatile chemicals (DOE 1992g). Contaminated soils were identified, excavated, and shipped off-plant for disposal. Additional soil samples were collected from newly exposed soil, but no contamination was found. The building was dismantled and moved to its present location in early 1986. During the time it took to move the building, the contents were staged at the waste oil drum field.

5.3.14. Building E Solvent Storage Shed (Historical)

The Building E solvent storage shed was on the south side of Building E, on the Main Hill, in the north-central portion of Mound (Figure 5.1). The start-up date is unknown. It was taken out of service in April 1988 when the new addition to E Building was completed. The shed was used for the temporary storage of waste solvents (most likely ethanol, methanol, and trichloroethene) generated in Building E. Waste solvent was pumped from Building E directly into 55-gallon drums inside the shed. Filled drums were transferred weekly to the hazardous waste storage area in Building 72, near the western edge of the Mound boundary (MRC 1983). The shed was a metal-roofed and walled structure with a concrete floor and a surface area of approximately 144 ft². The concrete floor was sloped to a drain that routed spilled materials to storm sewers and to the plant drainage ditch. During operation, the unit had no curbing or other structures to contain spills. The building and pad were removed to allow construction of the E Building addition. During dismantling operations, soil contaminated with trichloroethene was discovered around the floor drain. The soil was excavated to a depth of approximately 10 ft, drummed, and shipped off-plant for disposal (DOE 1992g). Analysis for Freon,

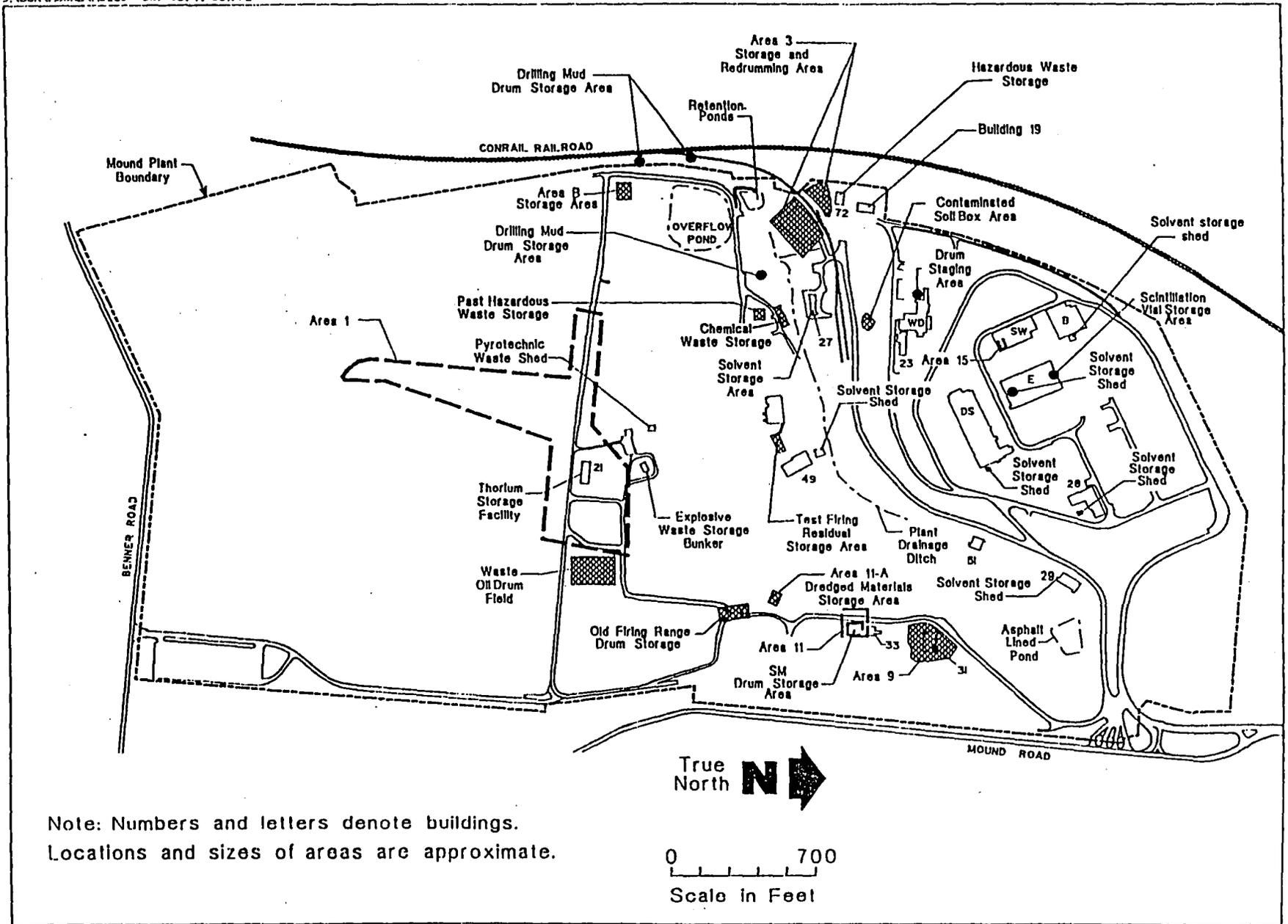
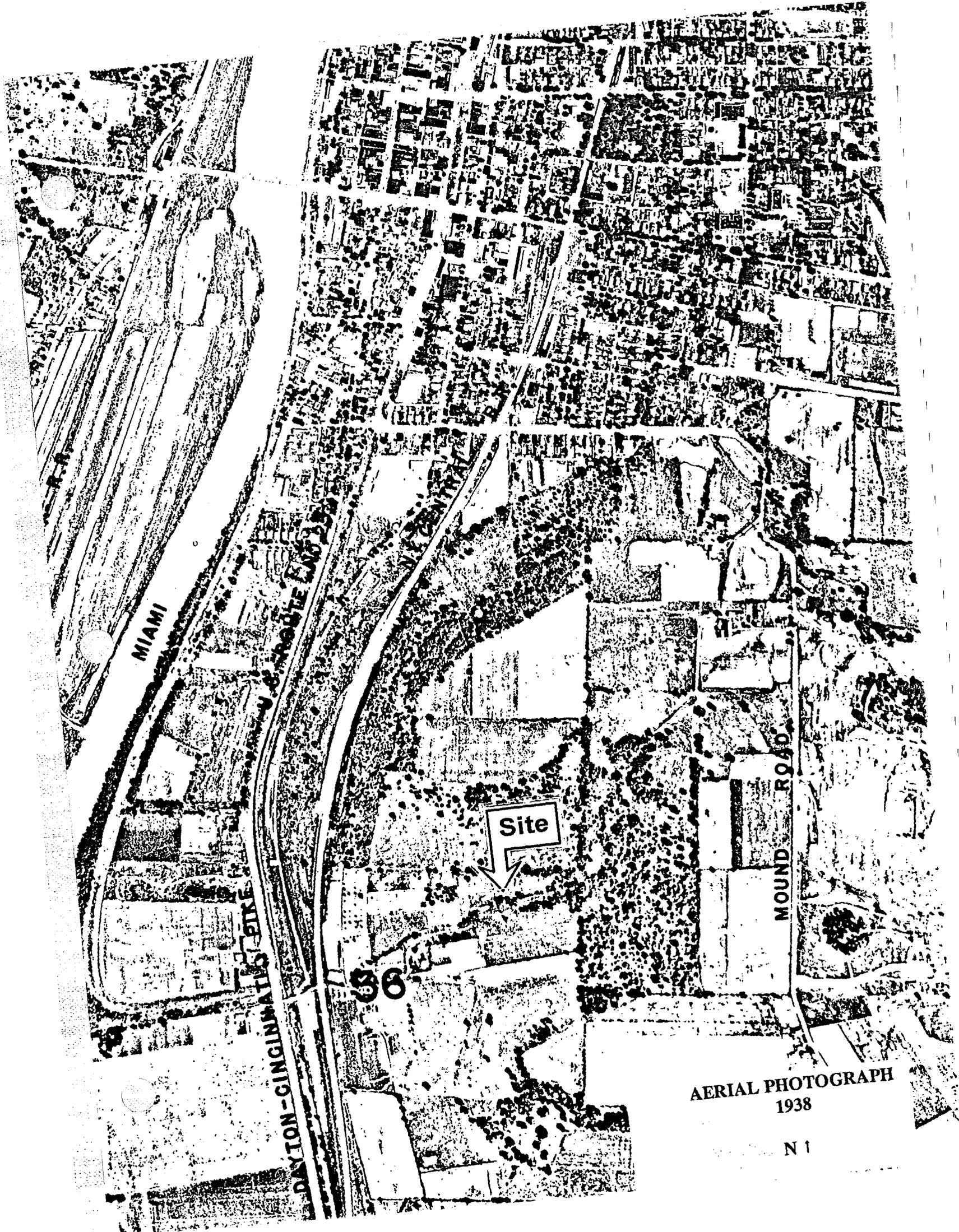


Figure 5.1 Waste storage areas.

EXHIBIT F

AERIAL PHOTOGRAPHS



MIAMI

DAYTON-GINGINMATH'S PIKE

U.S. ROUTE 1

68

W. CENTRAL

Site

MOUND ROAD

AERIAL PHOTOGRAPH
1938

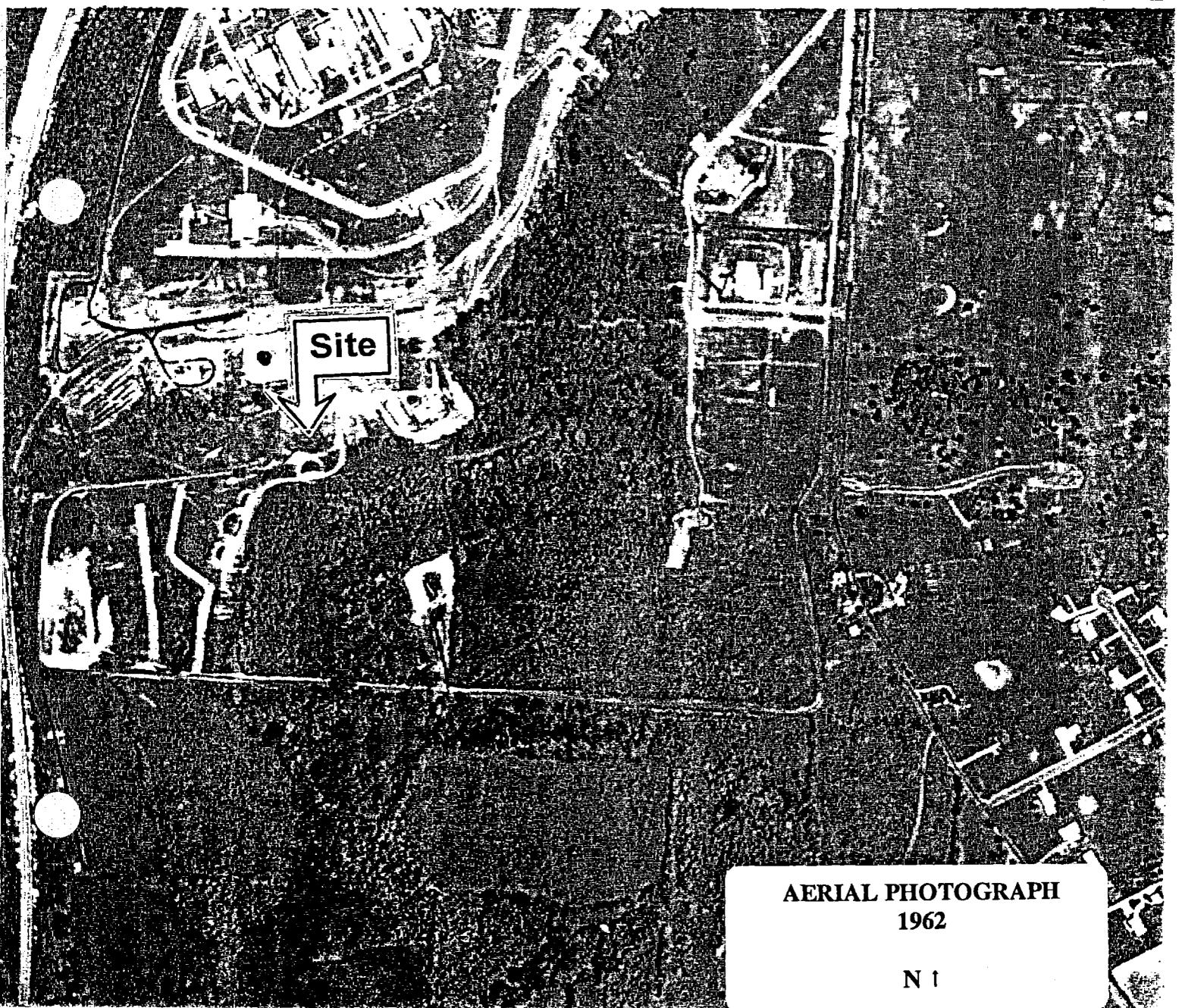
N 1



Site

AERIAL PHOTOGRAPH
1949

N 1



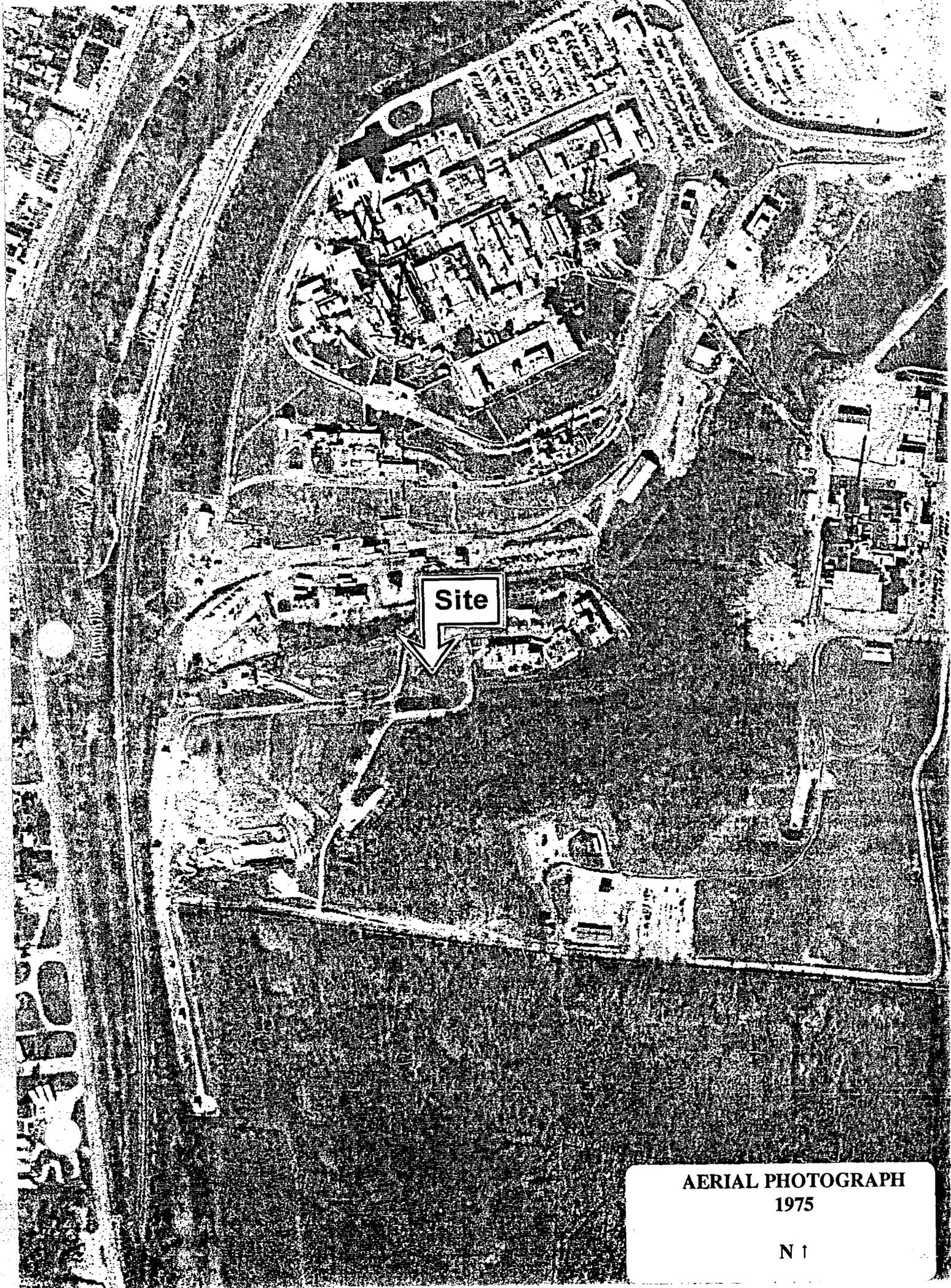
AERIAL PHOTOGRAPH
1962

N 1



**AERIAL PHOTOGRAPH
1968**

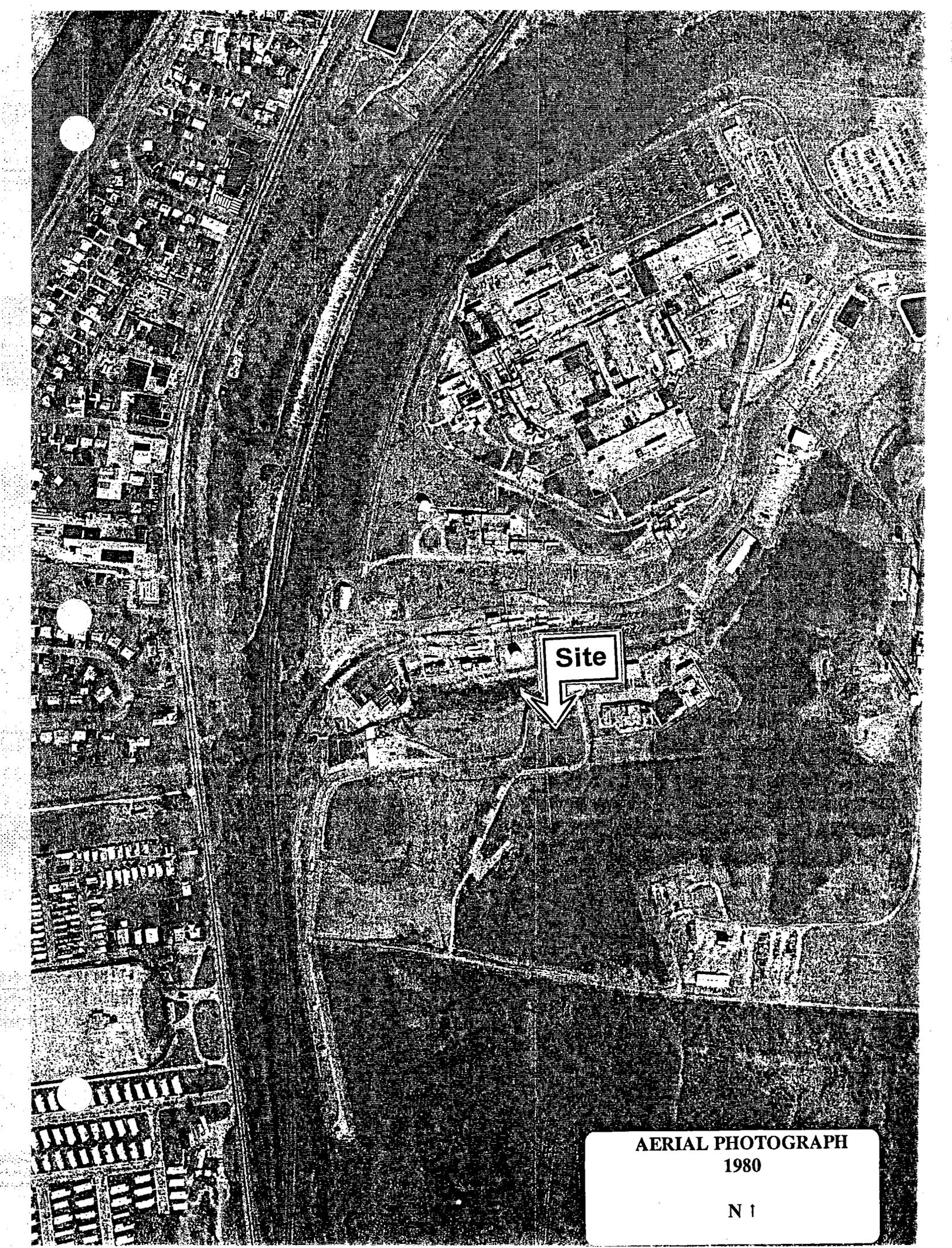
N 1



Site

AERIAL PHOTOGRAPH
1975

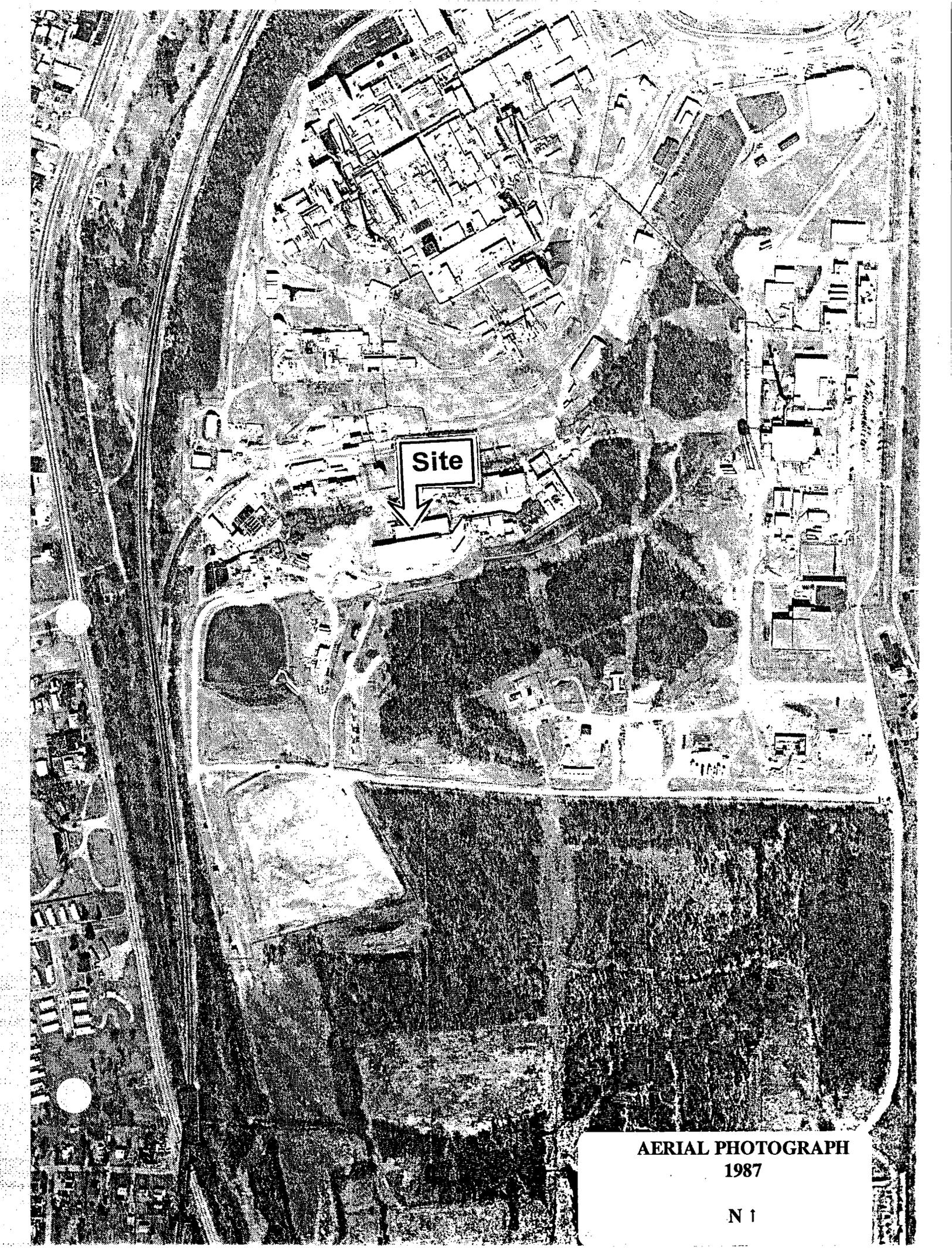
N 1



Site

AERIAL PHOTOGRAPH
1980

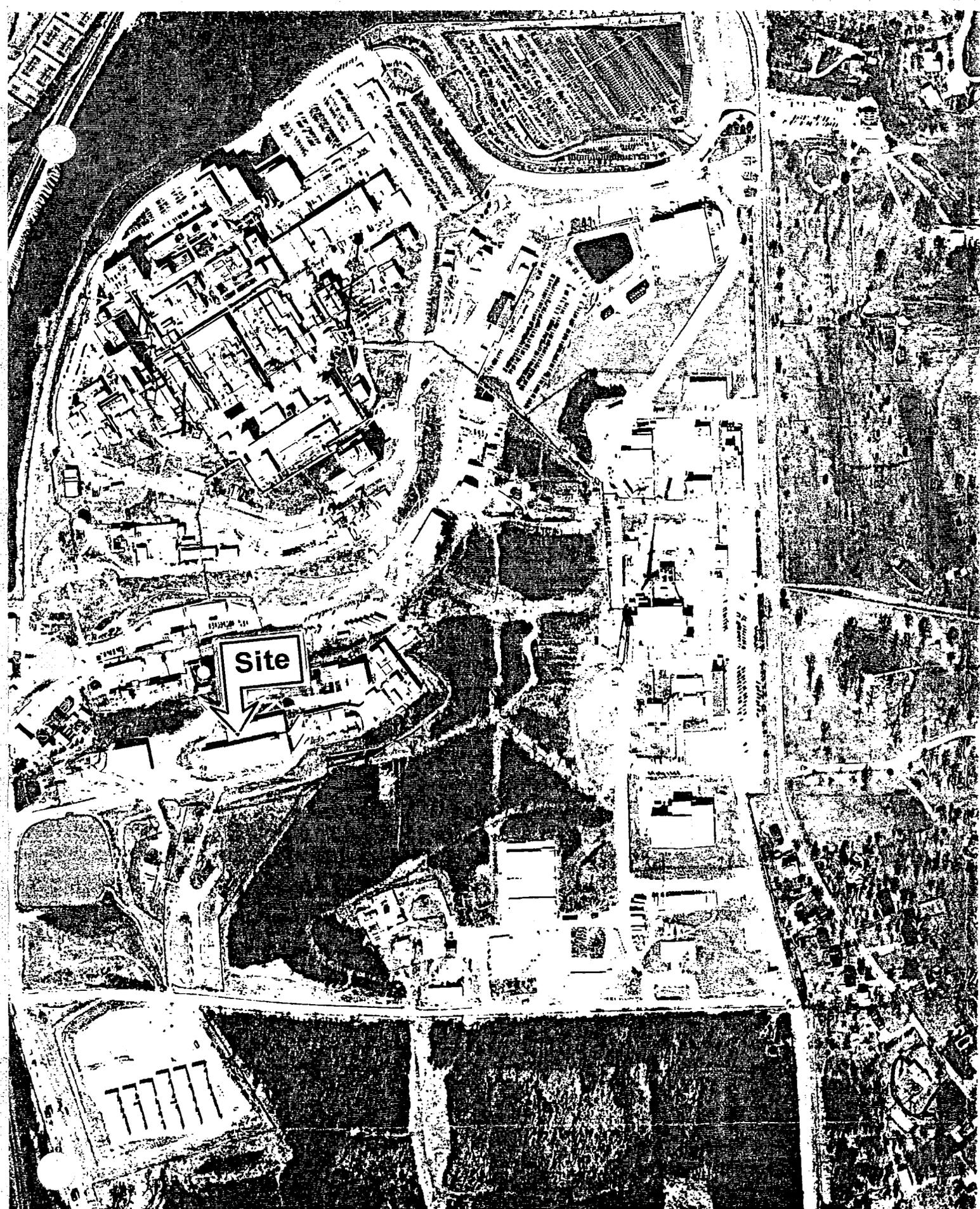
N 1



Site

AERIAL PHOTOGRAPH
1987

N 1



AERIAL PHOTOGRAPH
1995

N 1

EXHIBIT G

SANBORN MAP REQUEST RESPONSE

02/06/96

Environmental Data Resources, Inc.
3530 Boston Post Road
Southport, CT 06490

Phone: (203) 255-6606
Fax : (203) 255-1976

Sanborn Map Search

Customer Information

ORDER# 100553-2

Order Date : 12/12/95

Shelby R. Politte
HOK/K Industrial
2490 Technical Drive
Box 3004
Miamisburg, OH 45343
Phone#:513-866-4211
Fax #:513-866-7473

SP... FOR SANBORN MAP SEARCH:

Site Name & Address:

US Department of Energy
Off Mound Rd.

Miamisburg, OH 45432

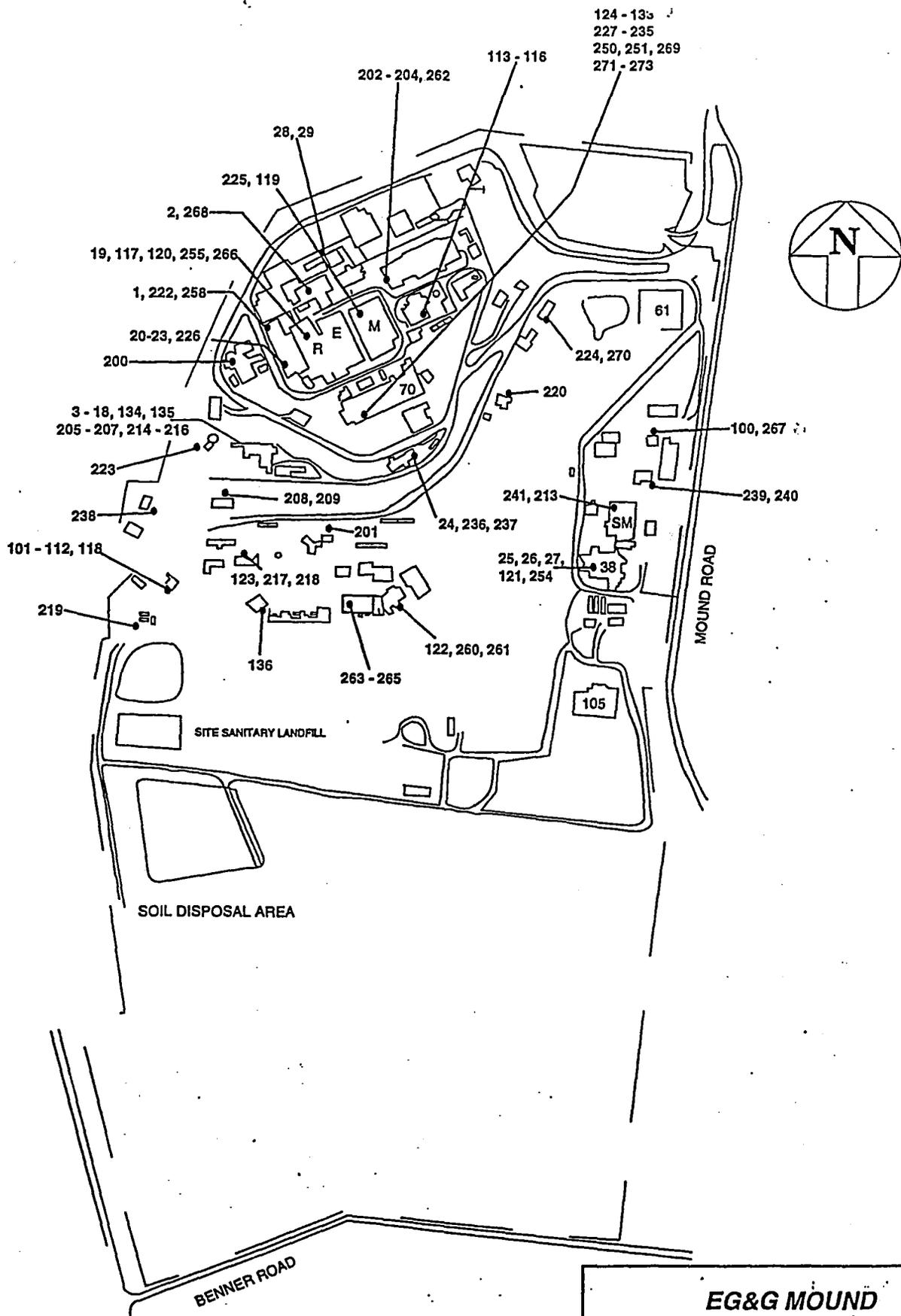
Account # : 1018424
Account Exec : PCD

Cross Street :
Intersection :
County : montgomery

No Sanborn maps were found for the site searched.

EXHIBIT H

BUILDING 87 TANK INFORMATION



0 200 400 600 800

EG&G MOUND

Approximate AUST Locations

DATE:10/28/94	JOB NO: 10804-794	FIGURE
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DAMES & MOORE
 ONE BLUE HILL PLAZA, SUITE 530
 PEARL RIVER, NEW YORK 10965

Tank No	Proposed Program	Bldg	Location	Status	Date Installed	Estimated Total Capacity (gallons)	Purpose	FFA OU	Primary Regulatory Jurisdict	Spill Jurisdict
213	D&D	SM		removed	1959	1,000	alpha wastewater collect tank	OU6	AEA	AEA
214	D&D	WD	Annex	inactive	1968	3,750	alpha effluent storage	OU6	AEA	AEA
215	D&D	WD	Annex	inactive	1968	3,750	alpha effluent storage	OU6	AEA	AEA
216	D&D	WD	Annex	inactive	1968	3,750	alpha effluent storage	OU5	AEA	AEA
217	ER	27		inactive	1966	100	waste flume sump	OU5	FFA	FFA
218	ER	27		inactive	1966	500	explosives settling sump	OU5	FFA	FFA
219	ER	34		removed	1965	5,000	aviation fuel storage	OU5	FFA	FFA
220	ER	51		removed	1972	1,000	waste storage tank	OU5	FFA	FFA
222	ER	58		removed	1973	3,000	diesel fuel storage	OU2	FFA	FFA
223	ER	56		removed	1972	825	diesel fuel storage	OU2	FFA	FFA
224	ER	29	East side	closed in place	1947	1,500	historic septic tank	OU5	FFA	FFA
225	ER	M	M-38	inactive	1969	350	metal plating rinse sump	OU2	FFA	FFA
226	D&D	SW	SW-10	inactive	1967	100	beta wastewater sump	Not assigned	AEA	AEA
227	D&D	T	T-23	closed in place	1947	350	beta wastewater sump	Not assigned	AEA	AEA
228	D&D	T	T-3	closed in place	1947	350	floor drain sump	Not assigned	AEA	AEA
229	D&D	T	T-40	closed in place	1947	350	alpha wastewater sump	Not assigned	AEA	AEA
230	D&D	T	T-41	closed in place	1947	350	alpha wastewater sump	Not assigned	AEA	AEA
231	D&D	T	T-50	closed in place	1947	60	alpha wastewater sump	Not assigned	AEA	AEA
232	D&D	T	T-50	closed in place	1947	350	alpha wastewater sump	Not assigned	AEA	AEA
233	D&D	T	Corridor 8	closed in place	1947	350	alpha wastewater sump	Not assigned	AEA	AEA
234	D&D	T	Corridor 7	closed in place	1947	350	alpha wastewater sump	Not assigned	AEA	AEA
235	D&D	T	T-63	closed in place	1947	350	alpha wastewater sump	Not assigned	AEA	AEA
236	D&D	HH	HH-15	inactive	1967	100	beta wastewater sump	Not assigned	AEA	AEA
237	D&D	HH	HH-6	closed in place	1947	100	alpha wastewater sump	Not assigned	AEA	AEA
238	ER	19		removed	1947	Unknown	historic gasoline storage tank	OU5	FFA	FFA
239	ER	36		removed	1948	Unknown	historic gasoline storage tanks	OU5	FFA	FFA
240	ER	36		removed	1948	Unknown	historic gasoline storage tanks	OU5	FFA	FFA
241	D&D-Proposed	SM		removed	1959	3,000	historic septic tank	OU6	AEA	AEA
250	D&D-Proposed	T	T-44	closed in place	1947	350	wastewater sump	Not assigned	AEA	AEA
251	D&D-Proposed	T	T-16B	closed in place	1947	350	wastewater sump	Not assigned	AEA	AEA
254	AUSTP	38	Room 4	in service	1965	350	sanitary sump	N/A	CWA	AEA
255	D&D-Proposed	R	R-111	inactive	1967	55	calorimeter bath	Not assigned	AEA	AEA
258	AUSTP	62		in service	1973	350	hot waste sump	N/A	AEA	AEA
260	ER-Proposed	2		removed	1956	1,000	fuel oil storage	OU5	FFA	FFA
261	ER-Proposed	2		closed in place	1956	450	septic tank	Not assigned	AEA	AEA
262	ER-Proposed	G		inactive	1947	550	waste oil storage	Not assigned	AEA	AEA
263	AUSTP	87		in service	1984	51,700	explosive surge tank	N/A	CAA	RCRA/AEA
264	AUSTP	87		in service	1984	51,700	explosive surge tank	N/A	CAA	RCRA/AEA
265	AUSTP	87		in service	1984	51,700	explosive surge tank	N/A	CAA	RCRA/AEA
266	D&D-Proposed	R	R-111	inactive	1967	55	calorimeter bath	Not assigned	AEA	AEA
267	D&D-Proposed	37		inactive	1966	500	low risk waste tank	Not assigned	AEA	AEA
268	AUSTP	H		in service	1947	350	condensate sump	N/A	CWA	AEA
269	AUSTP	T	T-90	in service	1947	350	condensate sump	N/A	CWA	AEA
270	ER-Proposed	29	East Side	inactive	1965	1,000	historic septic tank	Not assigned	AEA	AEA
271	AUSTP	T	T-1	in service	1947	10,000	hot side fire water tanks	N/A	AEA	AEA
272	AUSTP	T	T-20	in service	1947	200	fire water sump	N/A	AEA	AEA
273	AUSTP	T	T-37	in service	1947	200	fire water sump	N/A	AEA	AEA

Within each category (in service, inactive, closed in place and removed), there are USTs which are subject to CWA and AEA jurisdiction. Since UST operating, monitoring, and closure requirements are not specifically defined in either the CWA or AEA, RMPs have been developed to reduce the potential for an uncontrolled release from tanks under these jurisdictions.

Based on the information reviewed, AUSTs are being operated, maintained or closed consistent with current regulatory requirements. Section 6.0 of the AUSTP describes several RMPs which need to be carried out to ensure future compliance.

4.1 In Service AUSTs

The In Service USTs have been assigned to the AUST program. In Service AUSTs are those currently in use or available for use in routine Mound facility operations. A field survey of each operating AUST system was conducted in February, 1994.

Physical features such as tank and piping construction, installation date, contents, operational use, and release prevention and detection systems were identified and evaluated. Copies of field survey sheets are provided in Appendix C.

Based on the field surveys, and a review of available engineering drawings and maintenance records, a regulatory compliance assessment was performed for each In Service tank system. The CWA and AEA do not specifically define operating, upgrading, or closure requirements for USTs. Therefore, the general operating and release detection requirements for USTs under RCRA (40 CFR Part 280 Subparts C and D) and BUSTR (OAC 1301:7-9-07 and 1301:7-9-08) were used as a guide in evaluating systems performance under these jurisdictions. However, compliance with these regulations is not required.

Building managers are responsible for assuring that systems in their buildings are run and maintained in accordance with SOPs. Table 4-2 summarizes evaluation results for In Service AUSTs and identifies actions for those systems to be modified.

TABLE 4-2			
EVALUATION OF IN SERVICE AUSTs			
AUST NO.	DESCRIPTION	STATUS	ACTION
1 and 258	Collection of used fire water from HEPA filter banks (emergency use only).	AEA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
3 through 18	Used in processing of radioactive wastewater in WD building.	AEA or CWA tanks. Operated and maintained in accordance with current SOPs.	See Section 6 for discussion of RMP modifications.
19 through 22 and 24	Collection of radioactive wastewater.	AEA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
25 through 27	Sumps used in collection and transfer of radioactive wastewater.	AEA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
28 and 29	Collection of decon water from medical showers.	AEA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
100, 120 and 254	Used for temporary holding of sanitary wastewater.	CWA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
101 through 112	Chambers and basins used in sanitary wastewater processing.	CWA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
113 through 116	Fuel oil storage tanks.	Operated and maintained in accordance with current requirements.	Scheduled for removal in May, 1995.

TABLE 4-2 EVALUATION OF IN SERVICE AUSTs			
AUST NO.	DESCRIPTION	STATUS	ACTION
117, 118 and 121	Diesel fuel storage.	BUSTR tanks. Operated and maintained in accordance with current requirements.	See Section 6 for planned actions to comply December, 1998 BUSTR leak detection requirements.
119	Metal plating rinse tank.	CWA tank. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
124 through 135	Sumps used for collection of sanitary wastewater and cooling water.	CWA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
263 through 265	Tanks used as noise dampeners from explosives testing.	RCRA tanks. Included as part of Mound Part B application.	No modifications planned or necessary.
268 and 269	Condensate sumps from heating systems in T and H buildings.	CWA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.
271 through 273	Collection of water from fire sprinkler system.	AEA tanks. Operated and maintained in accordance with current SOPs.	No modifications planned or necessary.

4.2 Inactive Tanks

Inactive tanks are surplus systems which are still present on the site but are no longer in use and are not likely to be used. A field survey and drawing/records review was also conducted for these USTs with a copy of survey results provided in Appendix C. Table 4-3 provides a summary of the evaluation and identifies the program responsible for the removal or closure of these systems.

EXHIBIT I

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

HOK/K

STAFF PERSONNEL QUALIFICATIONS RESUME

CYNTHIA C. VANDERHORST

PROJECT GEOLOGIST

Education

Bachelor of Science, University of Dayton ()

Qualifications

Ms. Vanderhorst is a Geologist with specific experience in performing Phase I Environmental Site Assessments, Phase II Site Investigations, building surveys for asbestos and lead hazards, monitoring asbestos abatement, and monitoring UST removals and contaminated soil remediation.

Relevant Experience

Site Assessments and Investigations

Ms. Vanderhorst has performed numerous Phase I Environmental Site Assessments and Phase II Site Investigations. Investigations have included industrial, commercial and undeveloped property.

Asbestos

Ms. Vanderhorst has conducted numerous building inspections according to AHERA regulations for industrial, commercial and public sector (school) properties. She is familiar with survey and assessment protocol including bulk material sampling, drawing preparation, hazard assessments and preparation of inspection reports. She has also conducted compliance monitoring during abatement activities, on site inspections and air monitoring and air sample analysis (PCM).

Environmental

She has considerable experience in building surveys for radon, lead paint surveys, soil index testing, monitoring underground storage tank removals and contaminated soil remediation, monitoring geotech borings, well installation, well development and water sampling. She has also served as the Health & Safety Officer at hazardous waste sites.

**Professional Credentials
and Affiliations**

Asbestos Hazard Evaluation Specialist, State of Ohio (since 1988)
"Sampling and Evaluating Airborne Asbestos Dust", NIOSH (#582)
Building Inspection/Management Planning Training Course, the Environmental
Institute
OSHA 40-Hour Hazardous Waste Site Worker Training
OSHA 8-Hour Site Supervisor Training
National Groundwater Association
"Lead Abatement Training for Supervisors and Contractors" (1993)
"Lead Inspector Training" (1995)
"Lead Exposure Risk Assessment Course" (1995)
Certified Lead Risk Assessor (since 1995, Ohio)

Employment History

1990 - Present	HOK/K INDUSTRIAL Miamisburg, Ohio Project Geologist
1988 - 1990	ATEC ASSOCIATES, INC. Dayton, Ohio Geologist/Industrial Hygienist
1986 - 1988	BOWSER-MORNER, INC. Dayton, Ohio Soils Lab Supervisor

HOK/K

STAFF PERSONNEL QUALIFICATIONS RESUME

JENNIFER C. VICAREL

ENVIRONMENTAL SCIENTIST

Education

Bachelor of Arts, Geology and Spanish, Trinity University (████); cum laude, Phi Beta Kappa, Who's Who Among American Colleges and Universities.

Junior Academic Year Abroad, Institute of European Studies, Madrid, Spain (████).

Master of Science, Geology, Ohio State University (████) Thesis field area: Navidad, Chile.

Continuing Education: Aquatic Toxicology, Tulane University (████); Hydrogeology, University of New Orleans (████); Analysis and Design of Aquifer Pumping Tests, National Ground Water Association (████); Risk Assessment for Soil Contamination, University of Milwaukee-Wisconsin (████).

Certifications

OSHA 40-hour Hazardous Waste Site Worker Certification; 8-hour Refresher Certification current through 1994

OSHA 8-hour Hazardous Waste Site Supervisor Certification

Qualifications

Ms. Vicarel's qualifications include ten year's experience as an environmental geologist in the environmental industry. Most recently she has performed hydrogeologic and remedial investigations, baseline risk assessments, and environmental impact statements for Fortune 50 industrial clients. Ms. Vicarel has completed numerous environmental site assessments for real estate transactions. She has also participated in environmental investigations of a Mexican border (maquiladora) facility for a Fortune 50 property, for which she also served as translator and liaison with the Spanish-speaking staff.

Qualifications (cont'd)

Ms. Vicarel's duties have included preparation of project proposals, budgets, and schedules; organization and execution of field investigations for data collection and analysis; evaluation of data and assessment of exposure and toxicological effects for baseline risk assessments; performance of hydrogeologic evaluations of state-regulated hazardous waste sites targeted for remediation; supervision of peers and field staff; participation in preliminary design and implementation of remediation systems; and authorship of technical reports and regulatory file review reports.

Ms. Vicarel has also served as an Health & Safety Representative of her company. Responsibilities include preparation and approval of health and safety plans, implementation of medical monitoring program, maintenance of OSHA training requirements, compliance with OSHA recordkeeping requirements, and purchasing of personal protective and monitoring equipment.

Relevant Experience

Risk Assessments

Ms. Vicarel has performed risk assessments for both RCRA- and state Superfund-regulated sites in New York and Ohio. Contaminants of concern at these facilities have included a suite of chlorinated solvents, pesticides, and fuels.

Hydrogeologic and Remedial Investigations

Working on sites regulated by state-Superfund (CERCLA) and RCRA programs in Massachusetts, New York and Ohio, Ms. Vicarel has investigated industrial facilities including a shipyard, several large aeronautics manufacturing facilities, a vacuum products manufacturing plant, corporate headquarter facilities of two large photographic equipment producers, an automotive assembly plant, a nursery, and an electric and gas utility. Chemicals released to soil and/or groundwater at these sites include fuels (gasoline, diesel, fuel oil), PCBs, chlorinated solvents, pesticides, and semivolatile compounds (PAHs, creosote compounds).

Environmental Site Assessments

Ms. Vicarel has performed numerous environmental site assessments in Massachusetts (under Chapter 21E Law), New York, and Ohio prior to real estate transactions. The objective of these assessments is to establish innocent landowner defense under CERCLA. Clients for these projects have included developers, banks, lawyers, manufacturing facilities, and industrial companies.

