OVERSIZE PAGES

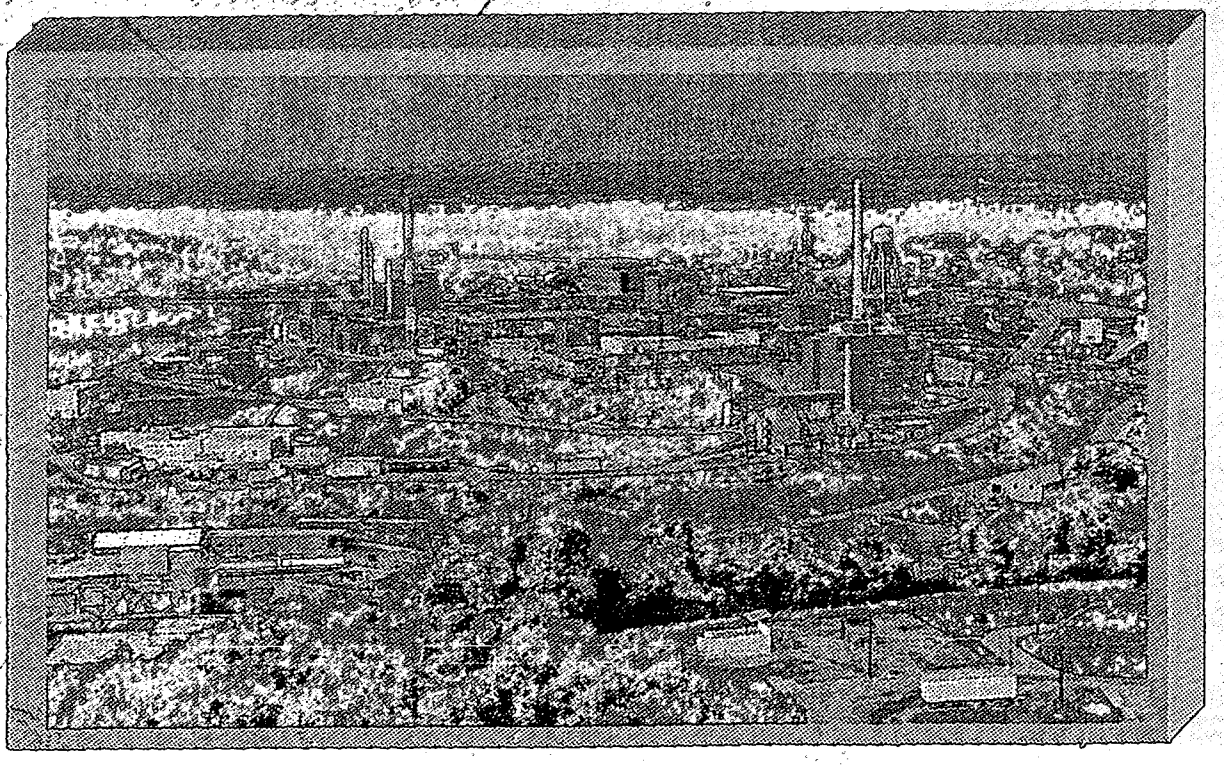
LOCATED AT

END OF

DOCUMENT

MOUND
Environmental Restoration Program

MOUND PLANT
Building Data Package
Building 33
Located within Release Block F



BDP 33

REV	DESCRIPTION	DATE
0	Available for Reading Room and Administrative Record.	Jan. 06, 1998
1		

MOUND PLANT

Building Data Package

BDP Bldg. 33

Release Block F


N
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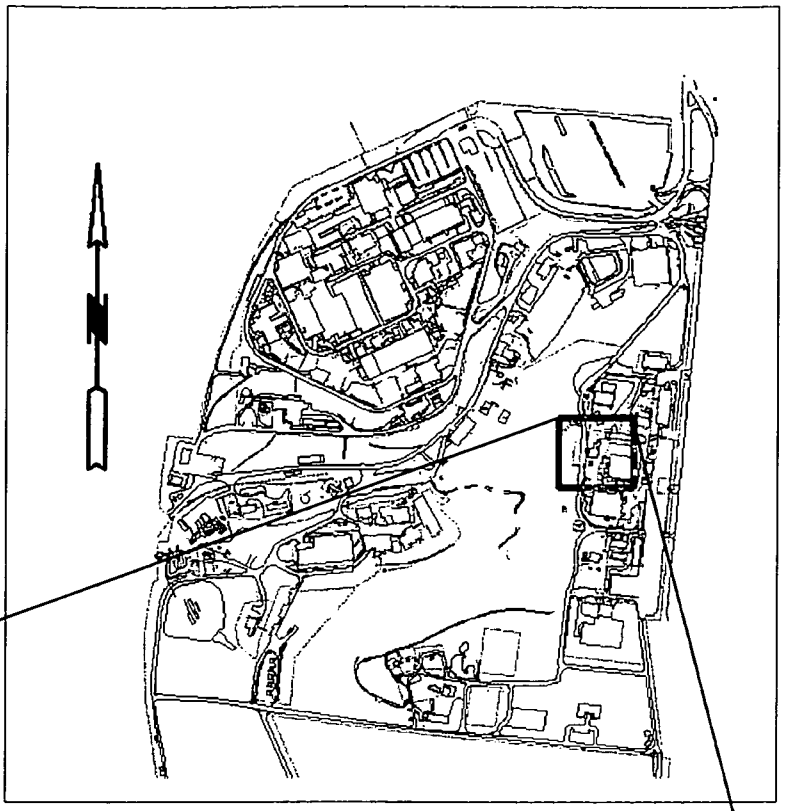
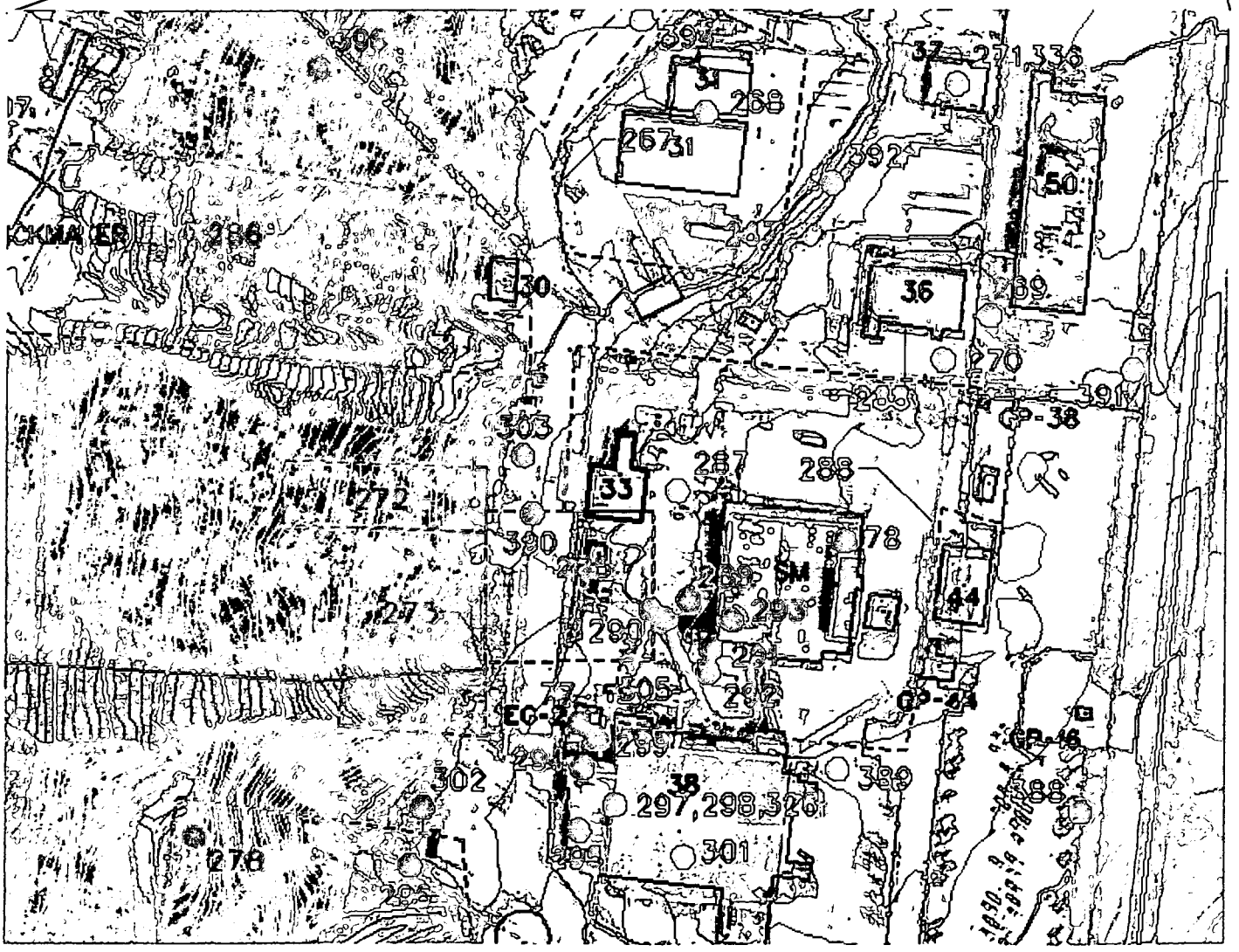
Mound Plant

Building 33
Old SM Area Maintenance Shop
(D&D Storage)

Release Block F

On the map below:
- Building number and location shown in black
- PRS locations and numbers shown in blue
- Surrounding buildings shown in green
- Fencing shown in red
- Elevation contours shown in brown





Mound Plant

Building 33
Old SM Area Maintenance Shop
(D&D Storage)

Release Block F

On the map below:
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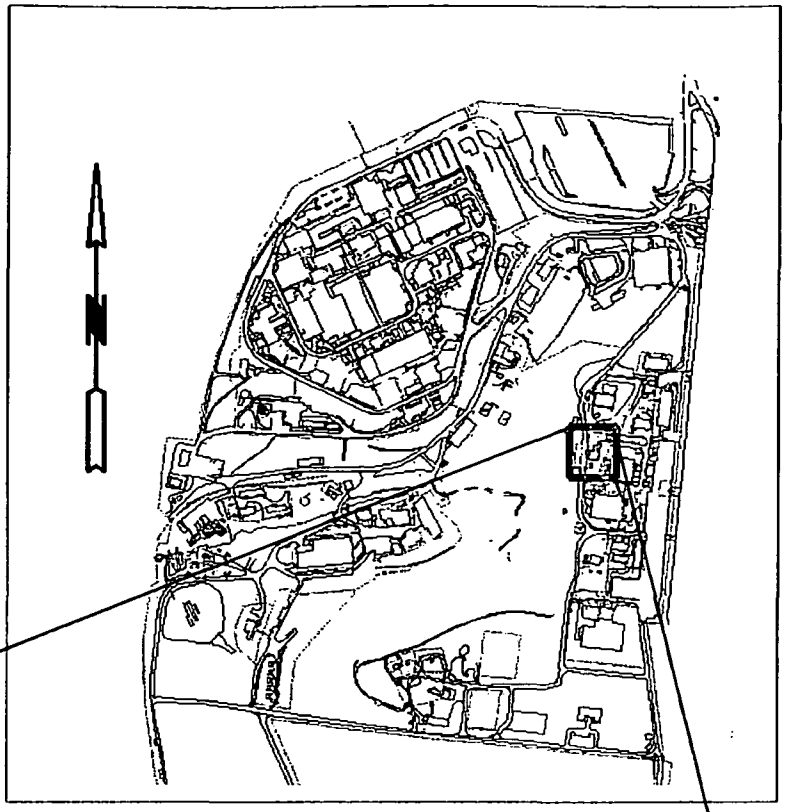
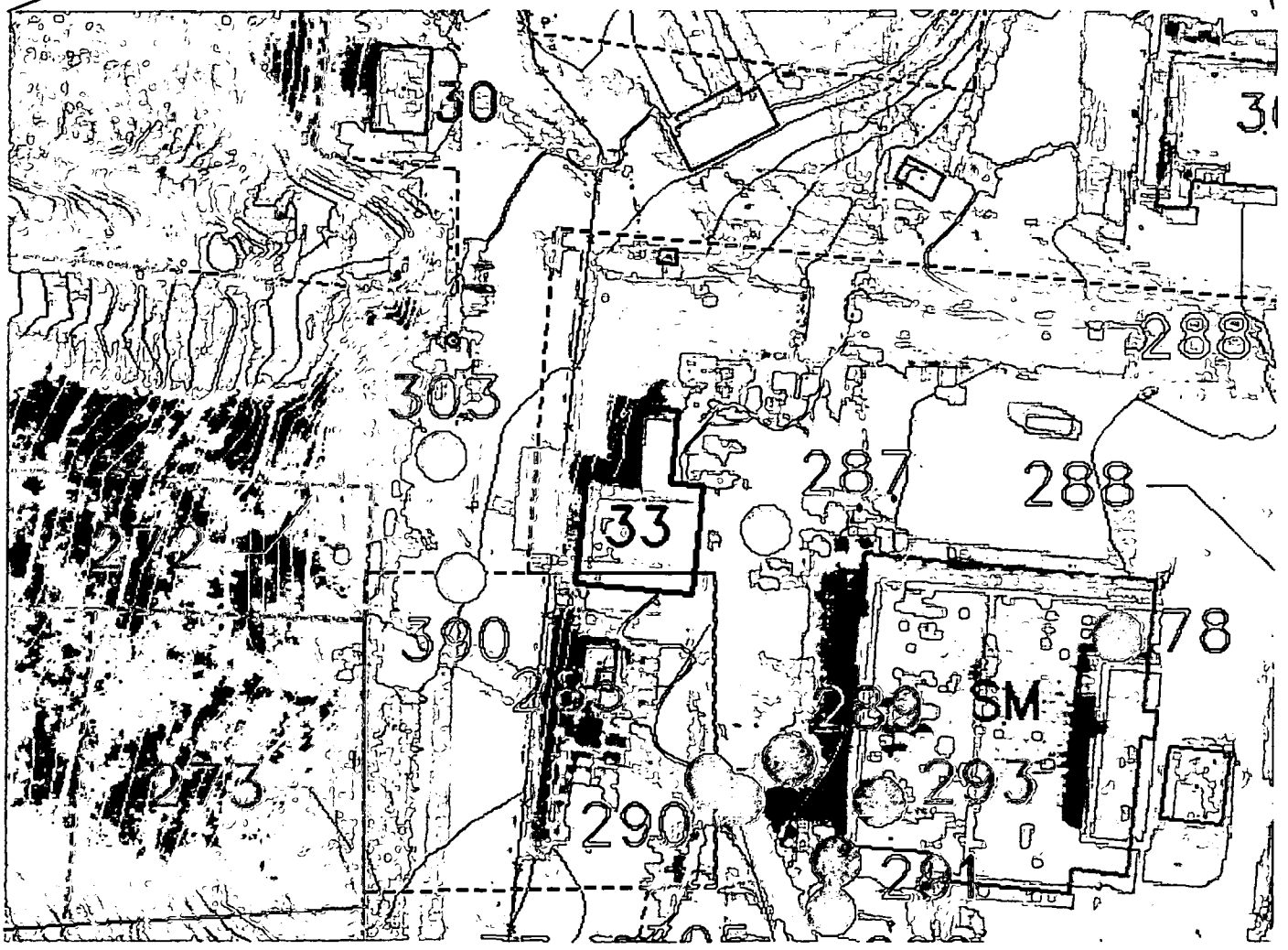




Mound Plant Building 33

BUILDING DATA PACKAGE (BDP)

BUILDING 33

DOE MOUND PLANT

MIAMISBURG, OHIO 45343

TABLE OF CONTENTS

1.0 Summary

This document has been prepared in response to an agreement between the Department of Energy (DOE), the U.S. Environmental Protection Agency, and the Ohio Environmental Protection Agency. It is a Building Data Package of Building 33 located at the DOE Mound Plant in Miamisburg, Ohio. This investigation was performed in cognizance of the procedures laid out in ASTM Standard Practice for Environmental Site Assessments; Phase I Environmental Site Assessment Process (Designation E1527-94). The subject structure is not scheduled for reuse.

The scope of the investigation included the building and a 15-foot wide perimeter border around the building. This perimeter includes roadways, sidewalks, pavement and grass-covered areas. The investigation of Building 33 included the following.

1) A building and perimeter inspection
2) An examination of historical aerial photographs and maps.
3) A review of federal and state regulatory agency records.
4) Personnel interviews.
5) A review of Mound Plant records for:
   A) History of spills and releases
   B) Past sampling data
      - Radiological survey
      - Chemical history
      - Lead paint
      - Asbestos
      - Radon

The building investigation was conducted by EG&G personnel on 11/25/97.

Mound Plant is located in the southern portion of the corporation limits of Miamisburg, Ohio. The entire Mound Plant facility is situated on 305 acres of land and contains approximately 130 buildings. The subject property consists of the Mound Plant Building 33 structure. It is 1344 square feet in size. All areas are *in gross* square feet (external wall to external wall).

Building 33 was constructed in 1965 as a maintenance support facility and the same utilization has continued with no architectural changes. Steam, condensate, and electrical were originally supplied from SM Building, however with the D&D effort associated with SM in the mid-1980s, these utilities were disconnected from SM and supplied from the west stanchion system beside the internal SM/PP roadway.

Structure related environmental concerns include asbestos, lead, HVAC, mercury, and radiological contamination.

2.0 Introduction

2.1 Purpose

The purpose of this Building Data Package is to identify, if possible, any recognized environmental conditions (defined below) that may affect the subject property.

2.2 Special Terms and Conditions

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. This individual is frequently, but not necessarily always, the Building Manager. Mr. Robert A. Ward has been designated as the Building Manager for Building 33.

Recognized Environmental Condition – The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a likely release, a past release, or a material threat of a release of any hazardous substances or petroleum into structures or into the ground, ground water, or surface water near the building. The term is not intended to include *deminimis* conditions that generally do not present a material risk of harm to public health or the environment, and generally would not be the subject of an enforcement action brought to the attention of the appropriate governmental agencies.

2.3 Limitations and Exceptions of Assessment

This Data Package addresses the structure only. Soil contamination in the vicinity is noted in Appendix 6.8.

2.4 Limiting Conditions and Methodology Used

2.4.1 On-Site Methodology

Mound Plant personnel examined the site on November 23, 1997. This examination consisted of a detailed inspection of the site and a survey of the neighboring properties.

2.4.2 Use of Previous Assessments

This report used a variety of previous assessments completed by EG&G Mound and/or its subcontractors. The reports used were as follows.

- OU-9 Site Scoping Report, Volumes 1-12
- Mound Facility Physical Characterization, December 1992
- Active Underground Storage Plan, November 1994.
- MD-22153, Mound Site Radionuclides By Location, July 1995
- Asbestos Surveys
- Environmental Appraisal of the Mound Plant, March 1996 (Appendix 6.5)
- Appropriate PRS Documentation

2.4.3 Historical Information

A complete title search of the Mound Plant was completed on June 3, 1995 for the site to determine the previous owners of the site. A copy of the report is in Appendix 6.3.

2.4.4 Records Review

Environmental Data Resources (EDR), Inc., of Southport, Connecticut, a regulatory database search company, was contracted in 1995 to provide environmental regulatory information concerning the site and surrounding properties, consistent with the requirements of ASTM Standard E1527-94. This information was reviewed by Environmental Restoration personnel for indications of recognized environmental conditions. (See Appendix 6.4.)

3.0 Site Description

3.1 Location and Legal Description

Building 33 is located at the U.S. Department of Energy Facility known as Mound Plant. Mound is situated in the city of Miamisburg, Miami Township, Montgomery County, state of Ohio, and is being a track of land containing 305.116 acres, more or less, situated in part of Section 30 and fractional Sections 35 and 36, Town 2, Range MRS and being all of city lots numbered 2259, 2290, 4777, 4778, and 4779 and part of out lot #6 lying within the city of Miamisburg, Ohio; and being the same premises convened in Warranty Deeds recorded in Volume 1214, pages 10, 12, 15, and 17, Volume 1215, page 347, Volume 1214, page 2105, Volume 1246, page 45, Volume 1258, page 74, Volume 1258, Volume 1256, page 179, and microfiche no. 81-376A01 and microfiche #81-323. Deed records, maps, and site plans are in Appendix 6.2 and 6.3.

3.2 Site and Vicinity Characteristics

The subject site consists of the Mound Plant Building 33 structure. (See Appendix 6.2.)

The Mound facility is situated on 305 acres of land and contains approximately 130 buildings with a total of approximately 1.4 million square feet of floor space (the number of buildings is constantly diminishing as buildings are decommissioned and either sold or demolished). The original 182-acre site, purchased by the Manhattan Engineering District in 1946, consists of two hills and an intervening valley that runs approximately east and west. Building 33 is located on the SM/PP Hill. The 124-acre tract, acquired in 1981, is an undeveloped mixture of fields and woods that undulates and slopes downward to the west, away from the main site. This area was acquired to serve as a buffer and has been used as a staging area and parking area for contractors working on-site.

To the west lies a Conrail Railroad line and the north south trending Miami-Erie Canal. The northern boundaries of the site abuts the historic residential area 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 public golf course (belonging to the City of Miamisburg), the Miamisburg Mound Memorial Park, old agricultural fields, residential lots, and vacant wooded lots border against the facility along Mound Road. Benner Road forms the southern property line of the Mound Plant, with agricultural fields and farms occupying the lands beyond.

3.3 Description of Structures, Roads, Other Improvements on the Site

Building 33 was constructed in 1957 to process explosives and to accommodate final packaging of explosives for shipment. Structure related environmental concerns include asbestos, lead, HVAC, mercury, and radiological contamination. There were no other structures, roads or improvements that would impact the environmental conditions of the building.

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

The title search completed on June 3, 1995 indicated one lien against the property. That resulted from an unpaid Montgomery County incinerator fee. After this was discovered, the fee was paid and the lien was removed from the title.

3.5 Current Uses of Building 33

Building 33 is currently inactive.

3.6 Past Uses of Building 33

Building 33 was used only as a maintenance support facility.

3.7 Current and Past Uses of Adjacent Buildings

Close Proximity to Building	Building Area (Sq. Ft.)	Current Use	Past Use	Direction from Building
SM	Demolished	N/A	Pu238 Production	East

These facilities have had no environmental impact on the Building 33 structure.

4.0 Records Review

4.1 Standard Environmental Record Sources, Federal and State

Environmental Data Resources (EDR), Inc., of Southport, Connecticut provided information regarding sites in the vicinity of the subject site, which appear in regulatory agency summaries and databases. Sites under the jurisdiction of various regulatory offices or programs were included in the EDR search report, provided in Appendix 6.4.

There are fourteen sites within the appropriate radii for an ASTM Phase I Environmental Site Assessment search. The properties are designated in Table 1 as well as in the EDR report. (See EDR document, Appendix 6.4)

All of the identified sites listed in Table 1 are located north or west of the Mound Plant. These other sites are as much as 170 feet lower in elevation than the Mound Plant main hill; thus they are down gradient or down slope in terms of surface water, and probably ground water flow.

The Mound Plant site was identified as a contaminated site on the National Priority List under CERCLA (Superfund) in 1989. The Mound Plant 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 isotopes and compounds, specifically plutonium-238, and uranium, its isotopes and compounds.

The clean up of the Mound Site was originally to be accomplished under the CERCLA mandated procedures for regulating Superfund Sites using the operable unit (OU) system to define and characterize clean up areas. As the clean up effort went forward, it became apparent that the Mound Site did not fit the profile for a clean up strategy based on the operable units. The Department of Energy (DOE), the United States Environmental Protection Agency (USEPA), and the Ohio Environmental Protection Agency (OEPA) designed a new decision making process for the clean up of Mound. The new process is known formally as a "removal site evaluation process" and informally as the "Mound 2000 process." The Mound 2000 process system divided Mound in 19 Release Blocks containing over 400 Potential Release Sites (PRSs) with approximately 200 concerned with potentially contaminated soils, and the balance with potential contamination in buildings.

In compliance with permit requirements under RCRA, the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), and the Clean Air Act (CAA), Mound Plant has applied for or has received permits for its surface water discharges, air emissions, and hazardous waste program. Mound Plant is

currently operating a hazardous waste treatment and storage facility under a new RCRA Part B permit dated October 18, 1996. Mound Plant also maintains a NPDES surface water discharge permit with Facility I.D. number OH 009857. 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. Mound Plant 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. The 1995 version of this report indicated that no chemicals are stored in Building 33.

4.2 Physical Setting Sources

See Appendix 6.2.

4.3 Historical Use Information

A history of the site was developed to identify past uses that may have an environmental impact. A title search was performed on June 3, 1995 to establish a history of ownership. The history of operations comes from other documents. In the summer of 1942, the United States Army organized the Manhattan Engineering 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 (MCC, now Monsanto Corporation) Central Research department in Dayton, Ohio, accepted the responsibility for chemistry and the metallurgy of radioactive polonium-210, and the Dayton Project was launched. MCC operated five (5) units of the Dayton Project at various locations around the Dayton area. For Dayton Unit V (more formally known as the Dayton Engineer Works under the Dayton Engineer District), a 128-acre site on the outskirts of the town of Miamisburg, Montgomery County, Ohio, was selected in 1946 as the location for a permanent research facility in support of the Manhattan Project. In July 1946, the 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 fourteen (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, which succeeded the wartime Manhattan Engineering District. The Mound Plant was occupied by MRC personnel in May 1948 and operations involving radionuclides began in January 1949.

Table 1. Properties of ASTM Phase 1 Environmental Sites Assessment

Address and Property Name	Proximity	Status
U.S. DOE Mound Plant	Mound Road Miamisburg, OH *(target property)*	NPL, PADS, CERLIS, LUST, & TRIS
D.J. Ceramics	611 S. Main Street Miamisburg, OH (WNW)	LUST
CG&R	901 S. Main Street Miamisburg, OH (W)	LUST
GMC Delco Products Division	329 E. First Street Miamisburg, OH (NNW)	RCRIS-SQG, FINDS
Dayton Public Schools	348 W. First Street Miamisburg, OH (NNW)	RCRIS-SQG, FINDS
City of Miamisburg Pump Station	1021 S. Main Street Miamisburg, OH	UST
Richard Church, Sr. Estate	1009 S. Main Street Miamisburg, OH	LUST
Preston Adhesive Paper Co., Inc.	222 Mound Avenue Miamisburg, OH (N)	RCRIS-LQG, FINDS
Plocher Andrew Sons	4128 E. First Street Miamisburg, OH (N)	RCRIS-SQG, FINDS
Shell Oil Co.	1224 S. Main Street Miamisburg, OH	LUST
Point Store	155 S. Main Street Miamisburg, OH (N)	LUST
Miamisburg Water Treatment Plant	302 S. Riverview Miamisburg, OH (NW)	LUST
Miamisburg Well Field/Unknown Source	302 S. Riverview Miamisburg, OH (NW)	LUST
Technicote, Inc.	222 Mound Avenue Miamisburg, OH (N)	RCRIS-SQG, UST, LUST

Mound Plant is a Government Owned/Contractor Operated (GOCO) 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, upon the dissolution of the AEC, the plant formally came under the Energy Research and Development Administration. In October 1977, the plant was incorporated into the DOE complex and the facility designation was changed from Mound Laboratory to Mound Plant. MRC was the sole operating contractor until October 1988 when EG&G Mound Applied Technologies took over. Babcock & Wilcox of Ohio succeeded EG&G on October 1, 1997.

4.4 Additional Record Sources

4.4.1 History of Past Spills and Releases

There is no history of a spill or release from Building 33.

4.4.2 Associated PRS Overview

Building 33 is bounded by PRS 288. This PRS focuses on elevated levels of Pu 238. See Appendix 6.6.1.

4.4.3 Occurrence Reports

Occurrence Report OH-MB-EGGM-EGGMAT04-1997-0003, titled "Personnel/Boot Contamination, SM West Asphalt Area" is included as Appendix 6.7.

4.5 Reviews of Building Prints

Building prints were reviewed and included in Appendix 6.2.3.

4.6 Aerial Photographs

Aerial photographs from 1994, 1983, 1973, 1968, 1965, 1959, 1949, and 1938 were reviewed and copies are found in Appendix 6.2.5.

The 1938 photograph shows that the Mound Plant site was agricultural fields and undeveloped wooded lots. The historic Miamisburg Indian Mound is visible for a location reference.

The 1949 photograph shows the completed initial phase of construction on the Mound Plant Main Hill. Approximately fourteen (14) buildings are visible. Roadways on both the Main Hill and the eastern hill are present.

The overall Mound Plant facilities, as depicted in the 1968, 1973, 1983, and 1994 photographs continue to show change and expansion.

Building 33 is visible in the 1968 aerial photograph.

4.7 Interviews

Discussions were conducted with the Building Manager during the walkthrough inspection of 11/25/97. Information gained is reflected in Paragraph 5.0.

5.0 Environmental Concern Evaluation (Matrix)

BUILDING #33 STRUCTURE: ENVIRONMENTAL CONCERN EVALUATION

DESCRIPTION	PROBLEM (YES, NO, N/A)	COMMENT	RESOLUTION
Asbestos	NO	On pipe fittings	Will be removed prior to demolition.
Lead	NO	Used at sanitary drain fitting & flashing	Will be segregated out after demolition.
Lead Paint	N/A		
HVAC	NO	Freon in A/C unit	Will be evacuated prior to demolition.
Mercury	NO	In thermostat & light	Will be removed prior to demolition.
Chemicals	NO	Oil used for maintenance equipment	Will be removed prior to demolition.
Radiological	NO	On small direct reading spot	Has been sealed.
Radon	N/A		
Fluorescent Lamps	NO	PCBs in ballasts	Will be removed prior to demolition.
Septic Systems	N/A		
Drains & Sumps	NO	Sanitary drain in building	Will be plugged after demolition.
Waste Water	NO	Storm water	All run-off water collected
Stains & Corrosion	NO	None observed	
Space	N/A		
Storage Tanks	N/A		
PCBs	NO	Fluorescent light ballasts	Will be removed prior to demolition.
Solid Waste Disposal	NO	Building debris	Will be monitored prior to demolition.
Migratory Hazards	NO	Run-off water	See waste water.

YES = Mitigation/Removal does not adequately address structure concerns.
NO = Mitigation/Removal does adequately address structure concerns.
N/A = Not structure related.

5.1 Mitigation/Removal of Environmental Concerns

Mitigation/Removal of environmental concerns are addressed in the Structure Specific Work Plan, included as Appendix 6.9. As applicable, contaminant survey reports are noted in Appendix 6.6.

6.0 Appendices

Appendix 6.1 Acronyms

AEA	Atomic Energy Act of 1954
AEC	Atomic Energy Commission
ACM	Asbestos Containing Materials
AL	Action Level
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 & Liability Act
COD	Chemical Oxygen Demand
CWA	Clean Water Act
COD	Chemical Oxygen Demand
CWA	Clean Water Act
D&D	Decontamination and Decommissioning
DOE	U.S. Department of Energy
DPM/100 cm^2	Disintegration Per Minute per one hundred square
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 Company
MEMP	Mound Environmental Management Project
MMCIC	Miamisburg Mound Community Improvement Corporation
MRC	Monsanto Research Corporation
NPDES	National Pollutant Discharge Elimination System

NUREG	Nuclear Regulatory Guide
OEPA	Ohio Environmental Protection Agency
ORPS	Occurrence Reporting and Processing System
PADS	PCB Activity Database
PCB	Polychlorinated Biphenyls
PRS	Potential Release Site
P/WRE	Property/Waste Release Evaluation
RAPCA	Regional Air Pollution Control Agency
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RI	Remedial Investigation
RSDS	Radiological Survey Data Sheet
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, & Disposal Facility
UST	Underground Storage Tank
VOC	Volatile Organic Compound

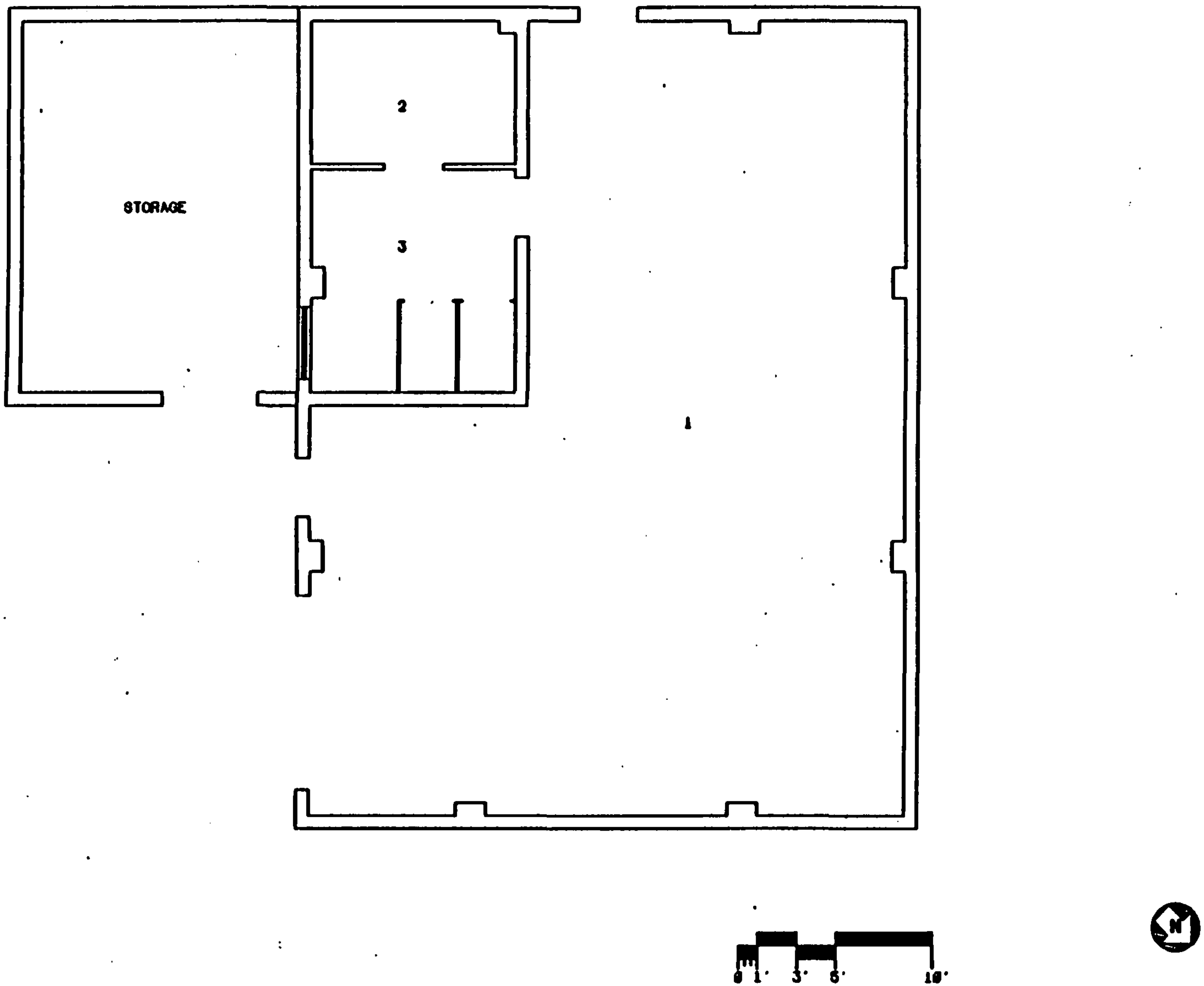
Appendix 6.2 Maps, Figures, and Photographs, and PRS Supplemental Information

Appendix 6.2.1 Map of Montgomery County

Appendix 6.2.2 Site Plan and PRS Release Blocks

Appendix 6.2.3 Building Drawings

ISS	DATE	REVISION	BY	APVD
0	12/12/91	ASBUILT ISSUE	DCW	DVD

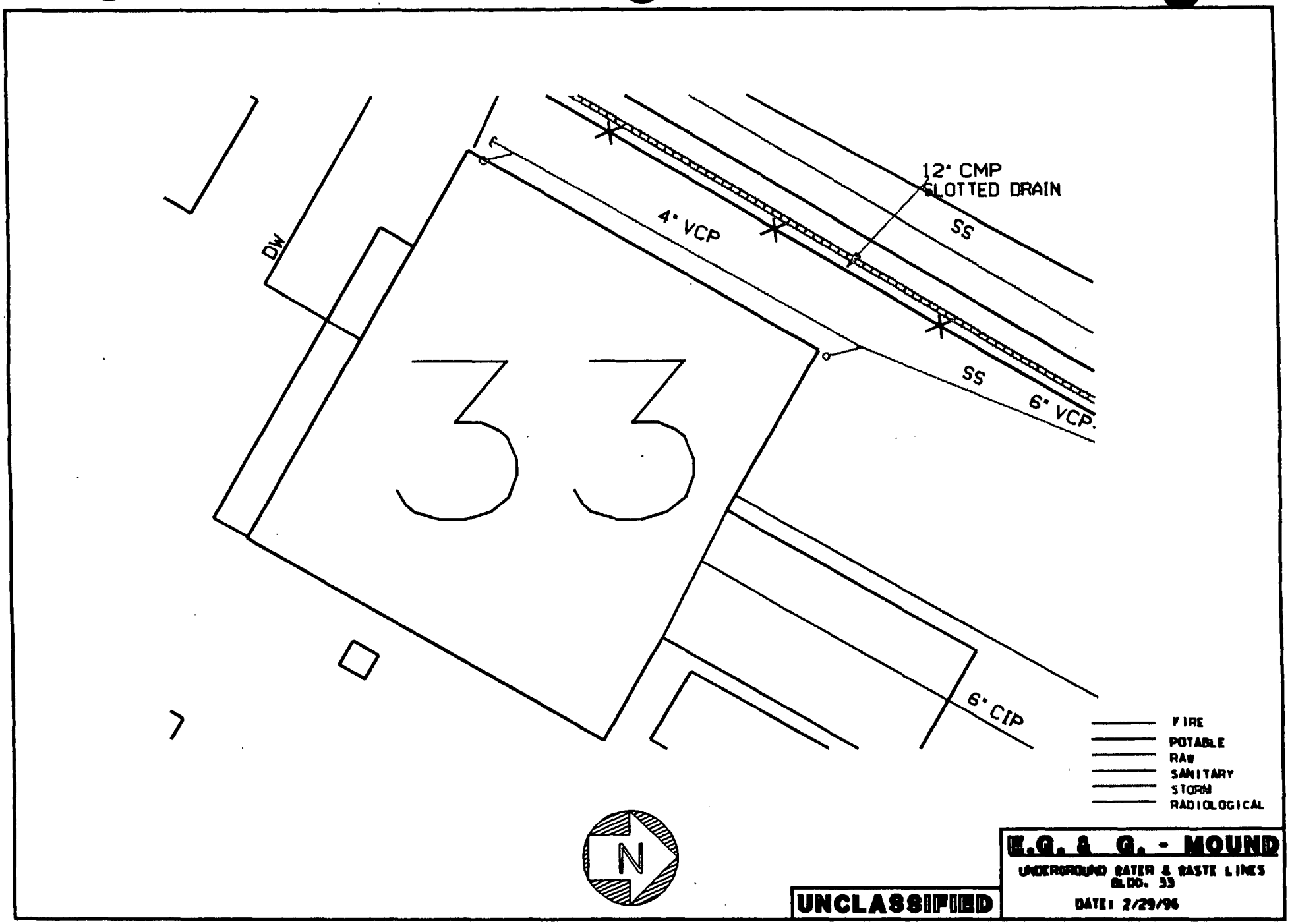


BLDG #33 FIRST FLOOR BLDG CODE:3033

APPROVALS: DATE:

TITLE	BLDG #33 FLOOR PLANS
(U) TITLE CLASSIFICATION	
SHEET	1 2 3 4 5 6
ISSUE	0
DRAWING CLASSIFICATION	UNCLASSIFIED
SIZE	C
DRAWING NUMBER	FSC911244
JOB NUMBER	12333
DWG TYPE	SFP
FROM	BLDG #33
CAGE	14865
SCALE	AS NOTED
SHEET	1 OF 1
STATUS	MD-REL-12/12/91
ORIGIN	MD-BA3-V3.0

9.56-59


12" CMP
SLOTTED DRAIN
4" VCP
SS
SS
6" VCP.
DW
33
6" CIP
FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL
N
UNCLASSIFIED
E.G. & G. - MOUND
UNDERGROUND WATER & WASTE LINES
BLDG. 33
DATE: 2/29/96

9.56-63

Appendix 6.2.4 PRS Supplemental Information

(None)

Appendix 6.2.5 Aerial Photographs

Appendix 6.3 Ownership/Historical Documentation: "Title Search"

FA/MTS-OH
FORM 900
TITLE INSURANCE
COMMITMENT

COMMITMENT FOR TITLE INSURANCE

First American Title Insurance Company

FIRST AMERICAN TITLE INSURANCE COMPANY, A CALIFORNIA CORPORATION, herein called the Company, for valuable consideration, hereby commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest covered hereby in the land described or referred to in Schedule A, upon payment of the premiums and charges therefor; all subject to the provisions of Schedule A and B and to the Conditions and Stipulations hereof.

This Commitment shall be effective only when the identity of the proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A hereof by the Company, either at the time of the issuance of this Commitment or by subsequent indorsement.

This Commitment is preliminary to the issuance of such policy or policies of title insurance and all liability and obligations hereunder shall cease and terminate six (6) months after the effective date hereof or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue such policy or policies is not the fault of the Company. This Commitment shall not be valid or binding until countersigned by an authorized officer or agent.

IN WITNESS WHEREOF, the Company has caused its corporate name and seal to be hereunto affixed.

Issued By:

MIDLAND TITLE SECURITY, INC.

First American Title Insurance Company

BY Parker S. Kennedy PRESIDENT

ATTEST William C. Gaylord SECRETARY

Countersigned:

By _____

Validating Signatory

FIRST AMERICAN TITLE INSURANCE COMPANY

Commitment No: 9-41914

Schedule A

Effective date: June 3, 1995 at 7:59 A.M.

1. **Policy or Policies to be issued:**	**Amount**
a. **Owner's Policy** **Proposed Insured:** The United States of America	$TBD
b. **Loan Policy** **Proposed Insured:** To Be Determined, its successors and/or assigns	$TBD

2. **The estate or interest in the land described or referred to in this Commitment and covered herein is a Fee Simple and title to the estate or interest in said land is at the effective date hereof vested in:**
The United States of America

3. **The land referred to in this Commitment is described as follows:**

The examined property consists of all legal descriptions as shown on source deeds listed on Schedule B, Section II, note regarding vesting of title. A new legal description with appropriate approvals must be obtained prior to title transfer.

FIRST AMERICAN TITLE INSURANCE COMPANY

Commitment No: 9-41914

Schedule B Section I

The following are the requirements to be complied with:

Instrument(s) creating the estate or interest to be insured must be approved, executed, delivered and filed for record.

End of Schedule B - Section I

Schedule B Section II

Schedule B of the policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

1. Defects, liens, encumbrances, adverse claims or other-matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof.

3. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by public records.

4. Any lien, or right to an lien, for services labor or material theretofore or hereafter furnished, imposed by law and not shown by the public records.

5. Rights of parties in actual possession of all or any part of the premises.

6. Special assessments and special taxes, if any, and taxes not yet due and payable.

Note: Title Holder took Title in Deed Book 1256-179, Deed Book 1265-361, Deed Book 1214-12, Deed Book 1214-248, Deed Book 1215-347, Deed Book 1246-45 , Deed Book 1258-56, Deed Book 1258-74, Deed Microfiche 81-376-A01, Deed Microfiche 81-323-A11, Deed Book 1214-10, Deed Book 1214-15 and Deed Book 1214-17

7. Subject to restrictions as shown of record in Deed Book 939, Page 322, Volume 1116-262, Volume 1116-265, Volume 1116-268 and Microfiche 89-560-E08.

8. Easement to The Dayton Power and Light Co. as shown of record in Deed Book 2341-323, Deed Book 1275-9, Deed Book 2341-43 and Deed Book 2437-611.

9. Easement to the City of Miamisburg as shown of record in Deed Book 2260-228.

10. Subject to a Reservation as shown of record in Deed Book 548-218.

11. Subject to an Agreement between The New York Central Railroad Company and the Cleveland, Cincinnati, Chicago and St. Louis Railway Company and The United States of America as shown of record in Deed Book 1282-401.

12. Subject to an Affidavit as shown of record in Deed Microfiche 90-616-D02.

13. Subject to an Agreement between William F. Mobley and Margaret Mobley and William Hamilton and Janet W. Hamilton as shown of record in Deed Book 1214, Page 8.

14. Subject to conditions as shown in Quitclaim Deed Book 1212, Page 87.

NOTE: The Mound Property has all been annexed to City of Miamisburg, which makes some USA deed Descriptions obsolete.

15. 1994 Duplicate for Aud. Parcel Number K46-3-34-14 & 21 (2.390 Acres) lists taxes in the name of The United States of America
First Installment due January 1995 is $ 0.00.
Second Installment due July 1995 is $ 0.00.
Land: 7,530.00 Building: 0.00 Total: 7,530.00.

Aud. Parcel Number K46-5-3-13 (88.320 Acres, Lot 2290)
First Installment due January 1995 is $ 0 .00.
Second Installment due July 1995 is $ 0.00.
Land: 618,240.00 Building: 0.00 Total: 618,240.00.

Aud. Parcel Number K46-11-9-1 (21.170 Acres, Lot 4777)
First Installment due January 1995 is $ 0.00.
Second Installment due July 1995 is $ 0.00.
Land: 29,650.00 Building: 0.00 Total: 29,650.00.

Aud. Parcel Number K46-11-9-2 (42.877 Acres, Lot 4778)
First Installment due January 1995 is $ 0.00.

FIRST AMERICAN TITLE INSURANCE COMPANY

Commitment No: 9-41914

Continuation of Schedule B - Section II :

Second Installment due July 1995 is $ 0.00.
Land: 60,030.00 Building: 0.00 Total: 60,030.00.

Aud. Parcel Number K46-11-9-3 (1.6 Acres, Lot 4779)
First Installment due January 1995 is $ 0.00.
Second Installment due July 1995 is $ 0.00.
Land: 2,240.00 Building: 0.00 Total: 2,240.00.

Aud. Parcel Number K46-5-1-2 & 9 (86.198 Acres, Lot 2259)
First Installment due January 1995 is $ 36.91, which includes a Delinquent Incinerator Assessment of $ 34.46, plus a $ 2.45 penalty.
(First Installment is not paid.)
Second Installment due July 1995 is $ 0.00.
Land: 814,380.00 Building: 0.00 Total: 814,380.00.

Aud. Parcel Number K46-15-7-1 (35.500 Acres, Lot 6127)
First Installment due January 1995 is $ 0.00.
Second Installment due July 1995 is $ 0.00.
Land: 49,700.00 Building: 0.00 Total: 49,700.00.

Aud. Parcel Number K46-15-7-2 (24.197 Acres, Lot 6128)
First Installment due January 1995 is $ 0.00.
Second Installment due July 1995 is $ 0.00.
Land: 33,530.00 Building: 0.00 Total: 33,530.00.

End of Schedule B - Section II

Appendix 6.4 Regulatory Documentation: "EDR Document"

The EDR-Radius Map
with GeoCheck™

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

Inquiry Number: 100553.1s

December 13, 1995

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

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

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.

Equal/Higher Elevation	Page	Lower Elevation	Page
US DOE MOUND PLANT	***8***	***US DOE MOUND PLANT***	***8***

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already by 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.

Equal/Higher Elevation	Page	Lower Elevation	Page
		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, persuant 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.

Equal/Higher Elevation	Page	Lower Elevation	Page
US DOE MOUND PLANT	***8***	***US DOE MOUND PLANT***	***8***

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.

Equal/Higher Elevation	Page
US DOE MOUND PLANT	*8*

Lower Elevation	Page
US DOE MOUND PLANT	*8*
DJ CERAMICS	10
CG&R	11
RICHARD CHURCH SR ESTATE	13
TECHNICOTE INC	*14*
POINT STORE	17
MIAMISBURG WATER TREATMENT PLT	17

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.

Equal/Higher Elevation	Page

Lower Elevation	Page
CITY OF MIAMISBURG PUMP STATIO	12
TECHNICOTE INC	*14*
SHELL OIL CO. #23420931760	16

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.

Equal/Higher Elevation	Page

Lower Elevation	Page
GMC DELCO PRODUCTS DIV	*12*
DAYTON PUBLIC SCHOOLS	*12*
TECHNICOTE INC	*14*
PLOCHER ANDREW SONS	*16*

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.

Equal/Higher Elevation	Page	Lower Elevation	Page
		PRESTO ADHESIVE PAPER CO INC	*13*

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.

Equal/Higher Elevation	Page	Lower Elevation	Page
US DOE MOUND PLANT	*8*	*US DOE MOUND PLANT*	*8*

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.

Equal/Higher Elevation	Page	Lower Elevation	Page
US DOE MOUND PLANT	*8*	*US DOE MOUND PLANT*	*8*
		GMC DELCO PRODUCTS DIV	*12*
		DAYTON PUBLIC SCHOOLS	*12*

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.

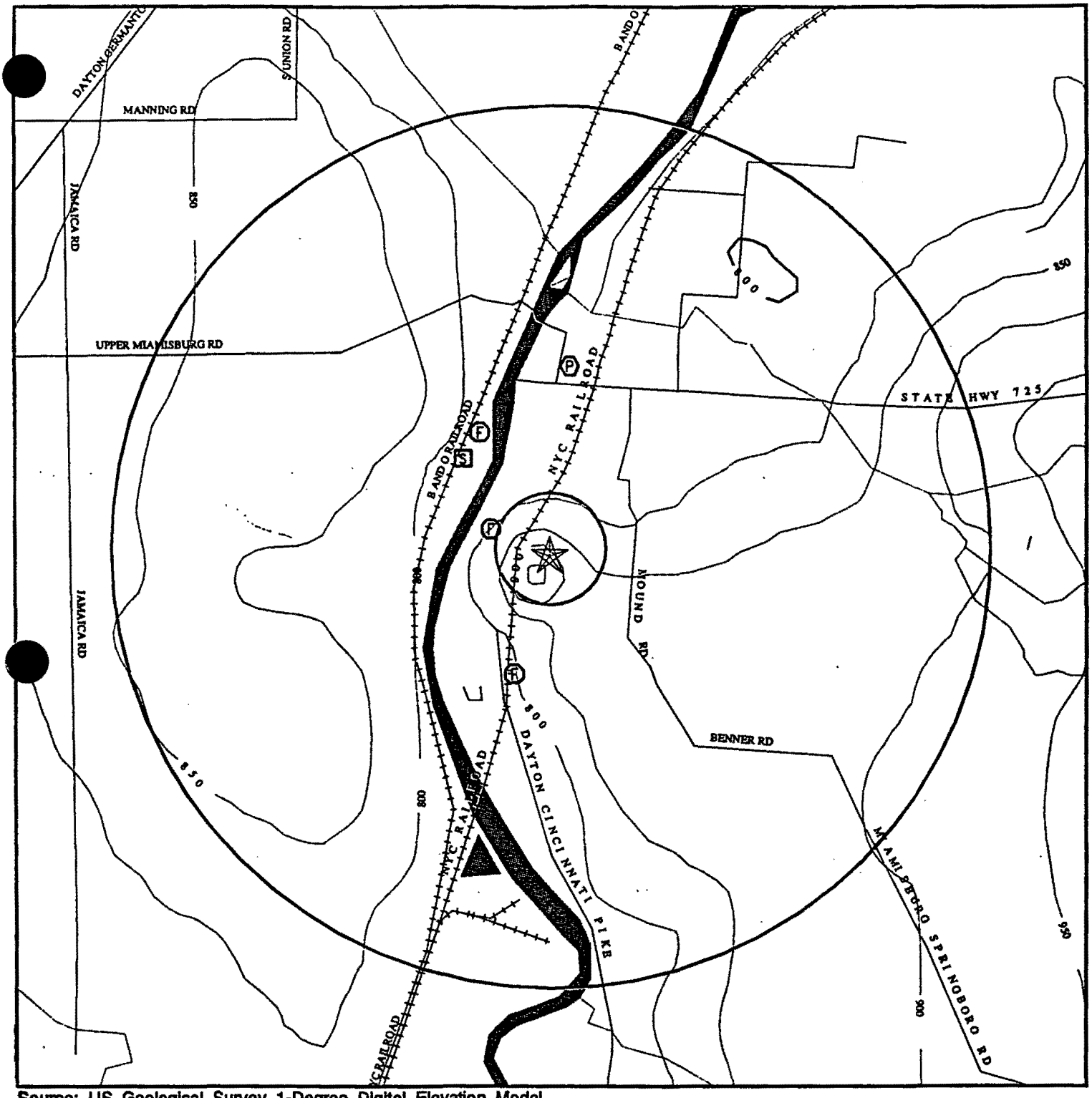
A review of the TRIS list, as provided by EDR, and dated 12/31/1992 has revealed that there is 1 TRIS site within approximately 0.33 Miles of the subject property.

Equal/Higher Elevation	Page	Lower Elevation	Page
US DOE MOUND PLANT	*8*	*US DOE MOUND PLANT*	*8*

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

Site Name	Database(s)
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 SERVIE 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

0 1/4 1/2 1 2
Miles

- 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 Department of Energy	CUSTOMER:	HOK/K Industrial
ADDRESS:	Off Mound Rd.	CONTACT:	Shelby R. Politte
CITY/STATE/ZIP:	Miamisburg OH 45432	INQUIRY #:	100553.1s
LAT/LONG:	39.6312 / 84.2884	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

WELL QUADRANT	DISTANCE FROM TP	LITHOLOGY	DEPTH TO WATER TABLE
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

WELL QUADRANT	DISTANCE FROM TP
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

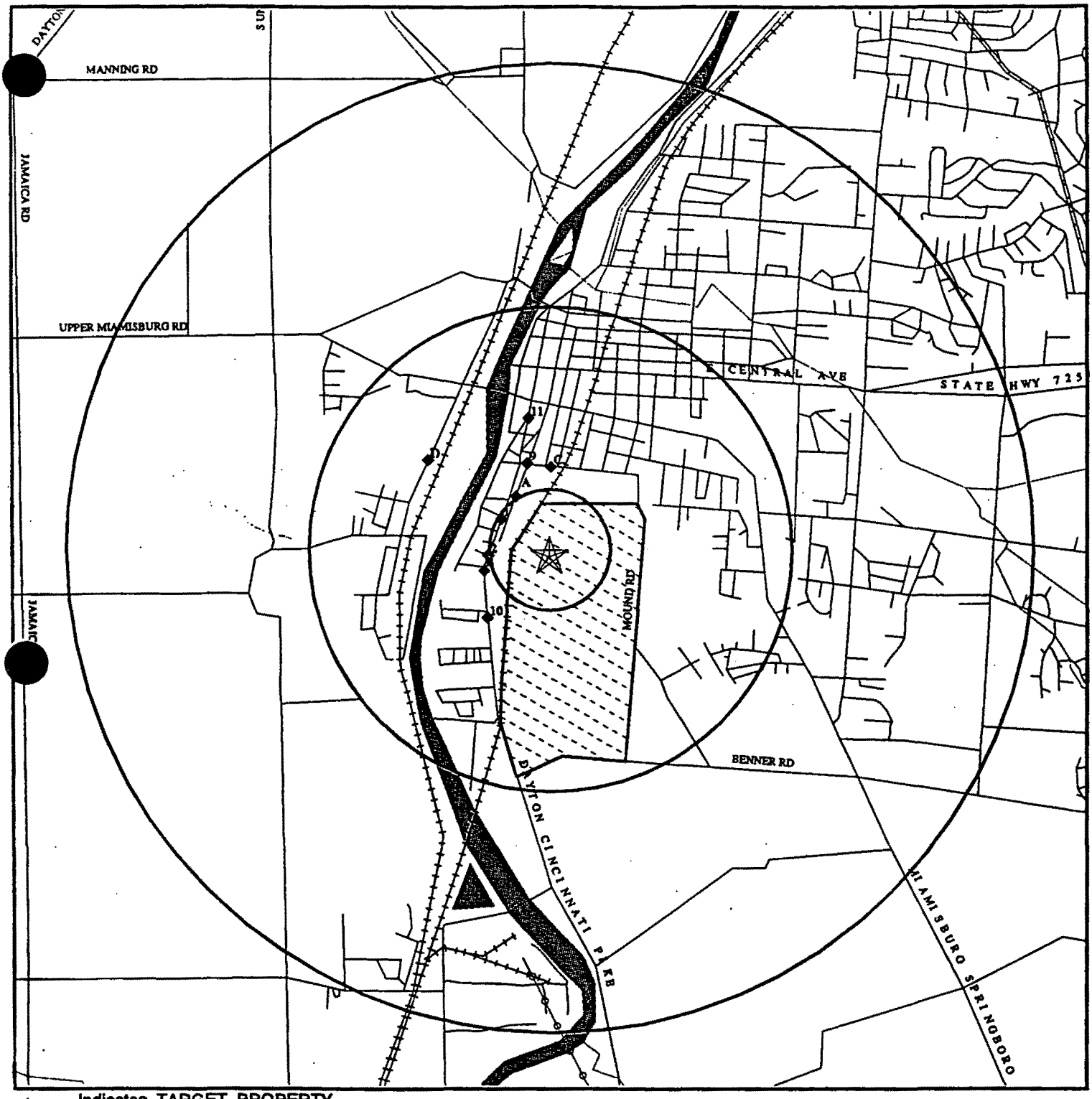
Number of sites tested: 35

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
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. 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 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)

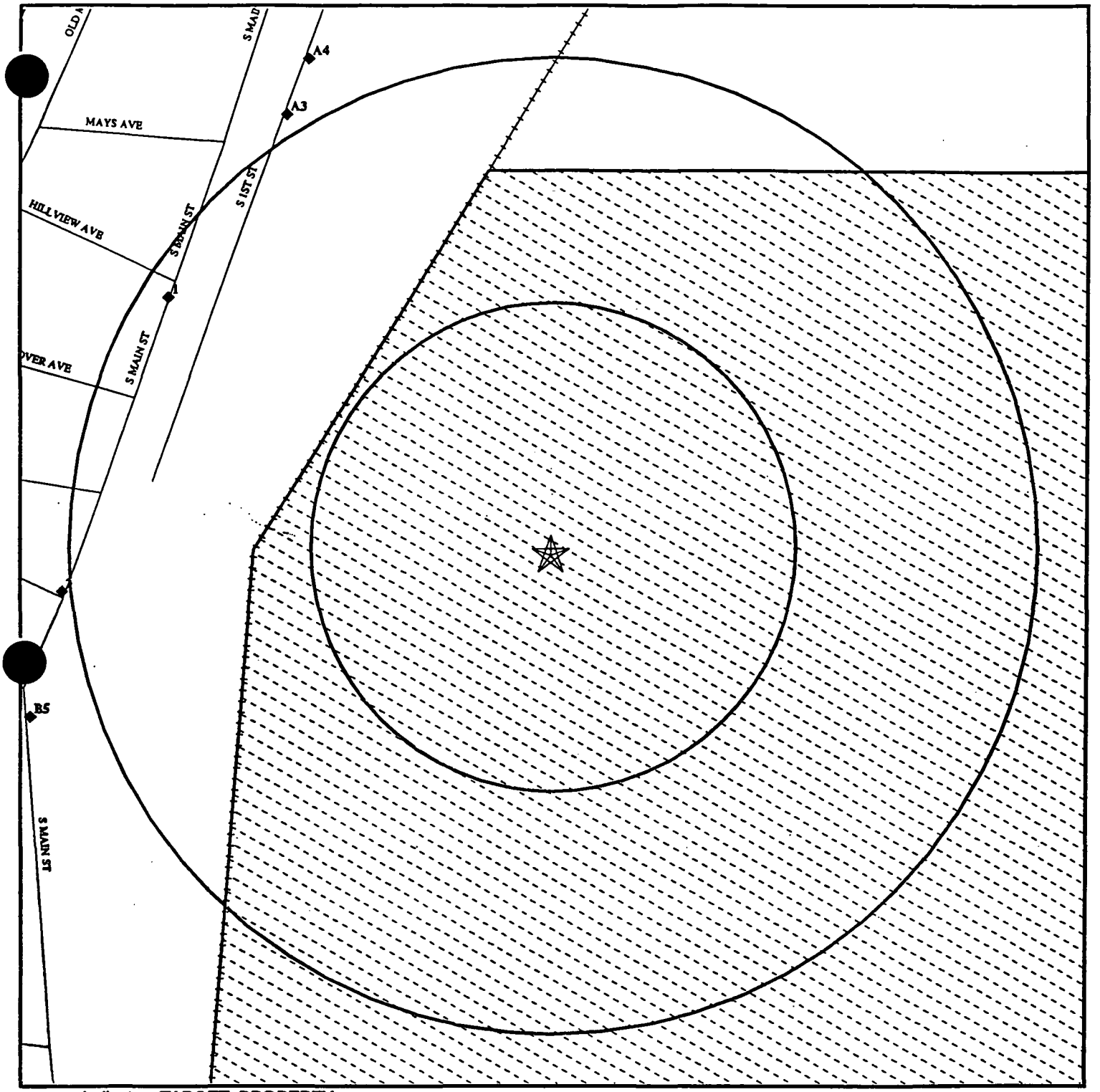
- National Priority List Sites

- Power transmission lines (USGS DLG, 1993)

- Oil & Gas pipelines (USGS DLG, 1993)

TARGET PROPERTY:	US Department of Energy	CUSTOMER:	HOK/K Industrial
ADDRESS:	Off Mound Rd.	CONTACT:	Shelby R. Pollitte
CITY/STATE/ZIP:	Miamisburg OH 45432	INQUIRY #:	100553.1s
LAT/LONG:	39.6312 / 84.2884	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

0 1/8 1/4

Miles

- Power transmission lines (USGS DLG, 1993)

- Oil & Gas pipelines (USGS DLG, 1993)

TARGET PROPERTY:	US Department of Energy	CUSTOMER:	HOK/K Industrial
ADDRESS:	Off Mound Rd.	CONTACT:	Shelby R. Politte
CITY/STATE/ZIP:	Miamisburg OH 45432	INQUIRY #:	100553.1s
LAT/LONG:	39.6312 / 84.2884	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

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	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 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 1000190772
CERCLIS OH6890008984
FINDS
NPL
TRIS
LUST

CERCLIS Classification Data:

Site Incident Category:	Not reported	Federal Facility:	YES
Ownership Status:	FEDERALLY OWNED	NPL Status:	CURRENTLY ON THE FINAL NPL
EPA Notes:	Not reported		

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)

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 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 Respnse:	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 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 Respnse:	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

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
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 Respnse:	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 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 FINDS	1000110283 OHD000817593

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

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Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A4 NNW 1/4-1/2 Lower	DAYTON PUBLIC SCHOOLS 348 W FIRST ST DAYTON, OH 45402	RCRIS-SQG FINDS	1000558707 OHD100060912

RCRIS:
Owner: DAYTON PUBLIC SCHOOLS
(513) 461-3000

Contact: PETER WEIMER
(513) 439-0863

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

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Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B5 WSW 1/4-1/2 Lower	CITY OF MIAMISBURG PUMP STATIO 1021 S MAIN ST MIAMISBURG, OH 45342	UST	U000694613 N/A

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	RICHARD CHURCH SR ESTATE	LUST	S101565323
WSW	1009 S MAIN ST		N/A
1/4-1/2	MIAMISBURG, OH 45342		
Lower			

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 Respnse:	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	PRESTO ADHESIVE PAPER CO INC	FINDS	1000389064
North	222 MOUND AVE	RCRIS-LQG	OHD004243614
1/4-1/2	MIAMISBURG, OH 45342		
Lower			

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
(513) 865-2600

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, UST, LUST — 1000243045, OHD980896468

RCRIS:
Owner: TECHNICOTE
(312) 555-1212

Contact: TOM BLOSSER
(513) 859-4448

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

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 Respnse:	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 ID / Direction / Distance / Elevation	Site	Database(s)	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		

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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

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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		

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
Lower

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-		
	-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 Respnse:	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

D12
NW
1/2-1
Lower

MIAMISBURG WATER TREATMENT PLT
302 S RIVERVIEW
MIAMISBURG, OH 45342

LUST S101565457
N/A

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number

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-		
	-0-, OH -0-		
	-0-		
Operator:	-0-		
	-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 Respnse:	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 MIAMISBURG WELL FIELD / UNK SOURCE SHWS S100037719
NW 302 S RIVERVIEW AVE N/A
1/2-1 MIAMISBURG, OH 45342
Lower

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 Address	Zip	Database(s)	Facility ID
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	72 N MAIN ST	45342	UST	0-577617
MIAMISBURG	U000894676	WYLIE F. FAULKNER	110 N MAIN ST	45342	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):	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 (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 PENSKY-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

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 CYNAIDE 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 of Data Arrival at EDR: 11/02/95
Date Made Active at EDR: 12/04/95 — 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 of Data Arrival at EDR: 04/11/95
Date Made Active at EDR: 05/25/95 — 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 of Data Arrival at EDR: 10/17/95
Date Made Active at EDR: 10/25/95 — 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 of Data Arrival at EDR: 06/28/95
Date Made Active at EDR: 08/22/95 — Elapsed ASTM days: 55

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 of Data Arrival at EDR: 11/06/95
Date Made Active at EDR: 12/05/95 — 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 of Data Arrival at EDR: 04/24/95
Date Made Active at EDR: 05/16/95 — 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 of Data Arrival at EDR: 06/26/95
Date Made Active at EDR: 07/27/95 — 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 of Data Arrival at EDR: 09/18/95
Date Made Active at EDR: 10/10/95 — Elapsed ASTM days: 22

STATE OF OHIO NON-ASTM RECORDS:

SPILLS: Inclused 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. 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.

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 & Groundwater

Appendix 6.5 Environmental Appraisal Report of the Mound Plant (Extract)

9.56 BUILDING 33

9.56.1 Scope of Building 33 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 33 on the morning of February 26, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is included as Attachment 1 (Section 9.56.6.1). The appraisers were accompanied by the decontamination and decommissioning (D&D) process manager. A subsequent meeting with the heavy equipment maintenance process manager was held on the afternoon of February 28, 1996. The appraisal team revisited the building on the morning of March 5, 1996. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.56.6.2).

9.56.2 Description of Building

Building 33 is a one-story, 1,344-square-foot concrete block, slab-on-grade structure. The roof is constructed of asphalt built-up membrane. The location is shown in Attachment 3 (Section 9.56.6.3). The building is bordered on three sides by an unpaved dirt apron. The hillside with natural vegetation slopes down to the roadway. Adjacent buildings are Building SM on the east and Building 38 to the south.

Floor plans are presented as Attachment 4 (Section 9.56.6.4). The building contains an "L"-shaped equipment maintenance area, lavatory, spare parts storeroom, and storage room which contains protective clothing lockers for D&D personnel and repair parts, equipment, and materials. The Heating, ventilating, and air conditioning equipment is located above Rooms 2 and 3 and is open to the equipment maintenance area. The building is serviced by central steam for heat and chilled water, potable water, a fire sprinkler system, and electrical service of 480V (*Mound Facility Physical Characterization*, 12-1-93).

Building 33 is assigned to the D&D group for the storage of materials, protective clothing, and parts, and for the maintenance of heavy and light equipment used in the D&D process. Also done in the building is the repair of specific equipment removed from D&D which will be used elsewhere at Mound, transferred to other DOE activities or sold.

Building 33 was constructed in 1965 (MD-10391, *Asbestos Program Manual*, 9-6-95). The building has been used for the equipment maintenance and storage since construction.

9.56.3 Summary of Findings

Building 33 contained parts of heavy equipment and smaller items of equipment undergoing maintenance and repair. The heavy equipment maintenance person in the building indicated that equipment delivered for repair is tested for low level waste or energetic materials contamination and cleaned by D&D personnel prior to being received in Building 33. Records of equipment decontamination were not available to the mechanic. The building is not well-maintained. Construction drawings were available which describe an ongoing contract to replace the exterior fire sprinkler mains, which has been completed, the potable water lines, and electrical service drops. There were several issues of environmental concern identified during the walk-through and during the review of reference materials.

9.56.4 Observations

9.56.4.1 Air Emissions

There are no fumehoods. There are no fuel-burning units in the building. There is no evidence of fugitive dust; however, as was evident at the time of the walk-through, equipment parts are spray painted with hand-held cans of paint. The maintenance room does not contain a spray paint booth or other approved vent hood. The mechanic indicated that painting was not done regularly. Residual spray paint was noted on the concrete floor up to, and on, the floor drain grate. No air emissions permit applications have been submitted to the Ohio Environmental Protection Agency for activities in the building.

9.56.4.2 Wastewater Emissions

The Mound Facility has three wastewater collection systems: a sanitary wastewater system; a storm water system; and a radioactively contaminated process wastewater system. Sanitary wastewater is treated at an onsite tertiary treatment plant and subsequently discharged by hard pipe to the Great Miami River. Storm water and any non-process wastewater, single pass cooling water, and softener backwash may be discharged directly to the Great Miami River, via the Miami-Erie Canal, or may be diverted to a 3.1-million-gallon holding pond for settling prior to discharge. Radioactively contaminated wastewater is treated in Building WD by physical-chemical treatment. If appropriate, wastewater may be discharged by hard pipe to the Great Miami River. If concentrations of radioactive contaminants cannot be reduced to acceptable levels, wastewater is solidified and shipped to the Nevada Test Site or Envirocare for disposal. All outfalls are permitted under an active NPDES permit. Routine monitoring activities are in place. Based on NPDES monitoring report data reviewed, it appears that the facility is in compliance with qualitative and quantitative conditions of the permit.

9.56.4.2.1 Sanitary Wastewater

The building has sanitary services. According to a diagram of underground lines, presented as Attachment 5 (Section 9.56.6.5), the building is serviced by a sanitary line. Floor drains in Rooms 1 and 3 and the discharge from the heating, and air conditioning unit appear to discharge

into the sanitary line according to the utility construction drawings in the building. Confirmation of drainage of sanitary waste into sanitary conveyance lines was not within the scope of this effort; therefore, neither dye tests nor smoke tests were conducted.

Sanitary effluent is conveyed to the on-site tertiary wastewater treatment facility, and subsequently discharged after treatment to the Great Miami River. There is no monitoring of building effluent. Based upon visual inspection, the effluent from Building 33 may have deviated from that expected by the sanitary treatment plant manager. Stains on the concrete floor in Room 1 indicate that it is likely that chemicals may have entered the sanitary system.

9.56.4.2.2 Storm Wastewater

The exterior of the building is not directly connected to storm drains, according to Attachment 5 (Section 9.56.6.5). Exterior grates and drains were not tested to confirm that they connect to the storm drainage system. Inspection outside showed no sign of odors, colored discharges, or scarring which would indicate that any materials other than storm water has entered the storm drainage system. The potential exists for spilled hydrocarbon products, mixed hydrocarbon products, antifreeze, and/or water-antifreeze mixtures from 55-gallon drums located on the concrete apron outside the storage room to be washed into the storm drainage systems, given certain weather conditions.

9.56.4.2.3 Process Wastewater

Radioactive wastewater is not produced by process in Building 33. However, there were no records available to indicate any procedures for handling and disposing of radioactive wastewater which may have been generated during its cleaning of D&D equipment prior to maintenance or repair inside the building.

9.56.4.2.4 Chemicals

Chemicals are stored in Room 2 and the storage room. The list included the BMQ, in Attachment 2 (Section 9.56.6.2), is outdated. The information was gathered as part of the chemical inventory which is conducted annually. The inventory information dates to 1994. Confirmation of the 1994 inventory by the appraisal team was not attempted, as the 1995 data were being compiled at the time of the appraisal.

It was noted fewer chemicals are currently stored and the quantities are less. There were no priority pollutant chemicals listed under the Clean Water Act (CWA) found in Building 33. Appropriate chemical storage, which includes vehicle batteries and paint, and handling procedures are not in place. Stains on the concrete floor in Room 1 indicate that it is likely that chemicals, including possibly herbicides, have entered the sanitary collection system in the past though there have been no reported spills from Building 33.

9.56.4.3 Potable and Service Water

Potable water is supplied to the building. A backflow prevention device is installed on the deep sink located in Room 3. There is no backflow prevention device installed on the hose bibb valve connected to the incoming potable water line in Room 1. A garden hose was connected to that valve. Access to the mechanical area above Rooms 2 and 3 was not available to visibly inspect points of potential cross connection in the mechanical area. Bottled drinking water is provided. Service water in the building is distributed only in the fire sprinkler system.

9.56.4.4 Chemical Storage and Hazardous Materials

Chemicals are stored in the building in accordance with applicable standards found in 29 CFR 1910. Among the items noted were paint, paint thinner, and soiled rags—in a plastic bag— were stored next to each other against a tool cabinet. Material Safety Data Sheets (MSDS's) were not available in the building. There was no flammable storage cabinet which meets standard National Fire Protection Association (NFPA) requirements. The soiled rags were promptly removed and taken to Building G where they were added to others. Rags are removed and cleaned by a vendor. An air-tight container is now located in Building 33 for soiled rags.

The building is equipped with an eyewash, a safety shower, and appropriate fire extinguishers, which were charged. Each extinguisher was bar-coded. The inspection date database is maintained in the Fire Station, Building 98. There is an Emergency Evacuation Plan, and signs were posted within Room 1.

There are no aboveground storage tanks in or around the building. There are no sumps, separators, or catch basins, in or around the building nor are there any underground storage tanks associated with this building.

The building has been tested and contains asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). Pipe lagging was appropriately labeled. There is no evidence of friable asbestos.

There are no capacitors or transformers containing polychlorinated biphenyls (PCBs) located in the building. There is no record of past presence (1995 PCB Annual Document Log).

No research, development, or production activities using radioactive or energetic materials have occurred in the building (*Mound Facility Physical Characterization*, 12-1-93).

9.56.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes generated are primarily paper. There is paper and aluminum can recycling to minimize solid waste. Solid wastes are removed by janitorial personnel to a site collection point, then shipped offsite to a local landfill by a contractor. The disposal permit is maintained by Waste Management. According to the mechanic, when the waste oil and vehicle coolant/water drums are full, Waste Management is notified and they are removed for appropriate disposition.

Records confirming their removal were not available. There is no evidence that hazardous materials or wastes are mixed with solid waste streams. Records were not available to confirm that D&D program equipment maintained and repaired in Building 33, was not contaminated by low specific activity (LSA) waste or hazardous materials.

9.56.4.6 Waste Minimization and Pollution Prevention

At Mound there is an active program to minimize waste streams in accordance with state and federal requirements and Executive Order 12856.

Programs for waste minimization are in place including aluminum can recycling. A self-contained parts cleaner (SXL-48) contains petroleum naphtha 1255 which is reused. Waste Management periodically replaces the chemical. There does not appear to be additional opportunities for waste minimization activities within Building 33.

9.56.5 Findings and Recommendations

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.56.6.6).

The environmental appraisal of Building 33 indicates that the following action items, in recommended priority, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

33-1 Records were not available to determine if waste generated in Building 33 was characterized in accordance with 40 CFR 265 or OAC 3745-52. Documentation must reside with the generator for three years to establish waste documentation. Directives OAC 3745-52-40(c) and Mound Procedure MD 70523 apply.

33-2 Approved secondary containment for drums containing hydrocarbon products, mixed hydrocarbon products, antifreeze, and water-antifreeze mixtures should be provided in the exterior storage area. (29 CFR 1910.106).

33-3 Chemicals and storage batteries should not be stored among spare parts and materials. An approved flammable storage cabinet should be provided for aerosol spray cans and enamel paint contained in one gallon cans (29 CFR 1910.106).

33-4 A backflow preventer on the hose bibb tap on the potable water line in Room 1 is required in accordance with the OAC 3745-95-04.

33-5 Consideration should be given to plugging the floor drain in Room 1. As an alternative drip pans should be used under equipment under repair. It was noted that a herbicide trailer containing up to 200 gallons of herbicide (not leaking) without a drip pan was positioned directly above the floor drain at the time of the walk-through.

33-6 Consideration should be given to finding a more appropriate location, such as a paint spray booth, for spray painting equipment parts.

33-7 A review of general housekeeping procedures, including cleaning of the concrete floor in Room 1, should be conducted.

33-8 MSDS's should be prominently displayed, clearly labeled, and readily available. A visitor to the area should be able to walk into the equipment maintenance room and find them immediately.

33-9 Rags soiled from wiping and cleaning should be stored in an approved container with an air tight lid. There were no procedures for turning the rags into Building G for subsequent cleaning by a vendor.

Appendix 6.6 Radiological and Other Survey Reports

Appendix 6.6.1 Radiological

Radiological Characterization Summary Building 33

Type	RSDS	Location	Amount (dpm/10cm2)	5400.5 Guidlines for Groups 1,3,4 (fixed +loose) (dpm/100 cm2)	NUREG 1500 Guidlines (loose) (dpm/100 cm2)	MD-10019 Limit (dpm/100 cm2)	Comments
Highest Alpha Smearable Activity	97-33-5061-SC	Floor	19	20	211	20	Confirmation survey results 0.00
Highest Alpha Fixed Activity	97-33-5063-SC	Floor	1833	100	Note 1	100	Controlled FCA
Highest Beta Smearable Activity	97-33-5061-SC	Door Handle	6	1,000	9940	1,000	No Action Necessary
Highest Beta Fixed Activity	97-33-5063-SC	Floor	<5000	5,000	Note 1	5,000	No Action Necessary
Highest Tritium Smearable Activity	97-33-5062-SC	Floor	15	1,000	Note 1	1,000	No Action Necessary

Note 1 **NUREG-1500 gives guidlines for loose beta and alpha only.**
Note 2 **MD-10019, Radiological Control Manual. Table 2-2, Summary of Contamination Values.**

F-1
F-53

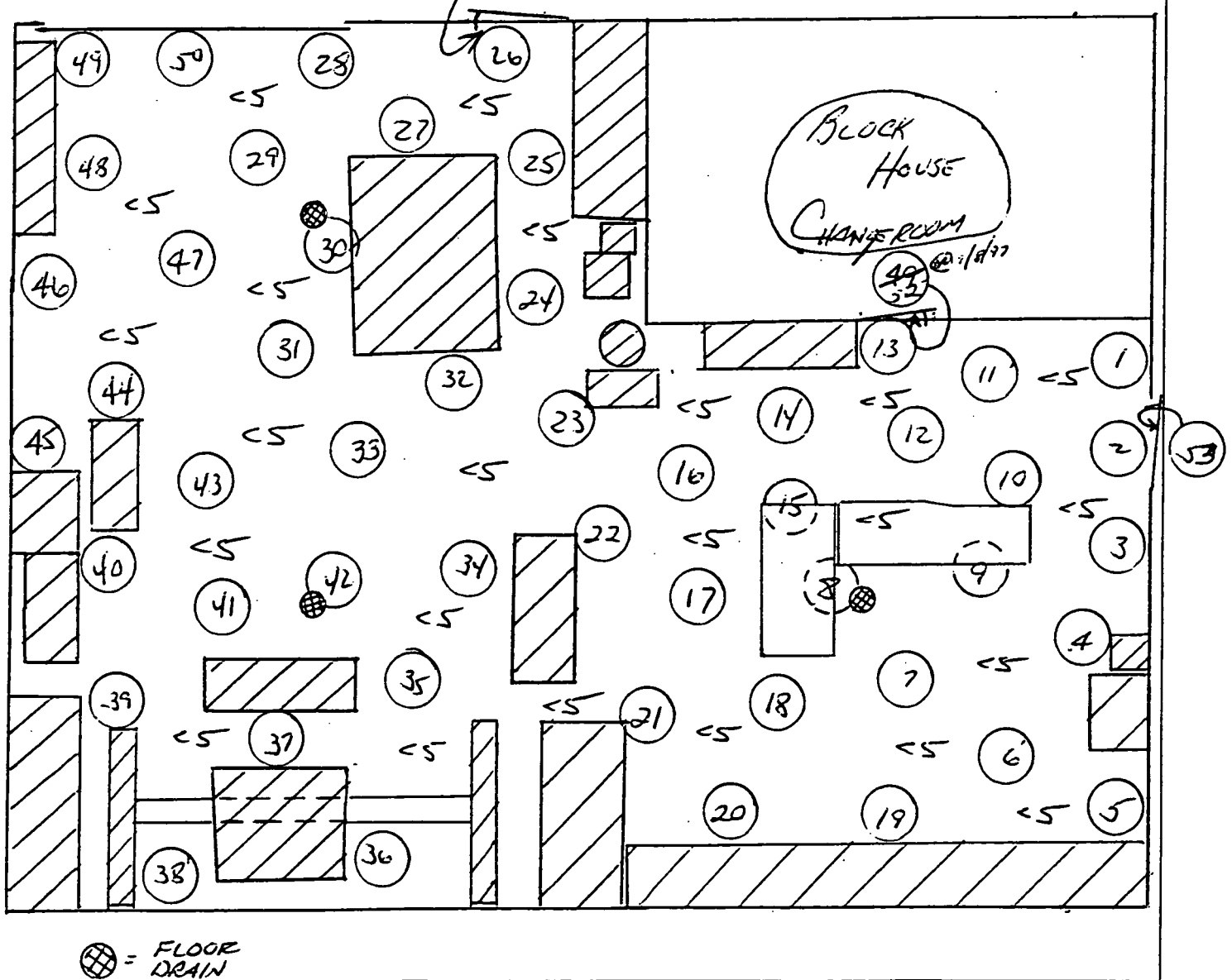
COPY

P-3

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) BLDG 33 "MAIN"	SURVEY NO. 97-33-5061-SC
PURPOSE: SITE CHARACTERIZATION	RWP NO. NA
	DATE: 7/8/97
ENTIRE ROOM POSTED: RMMA	TIME: 1600

MAP/DRAWING



= FLOOR DRAIN

LEGEND:
= ~~mrem/hr~~ MICROREM/HR (γ) whole body @ 7/8/97
E = mrem/hr (β+η+γ) extremity on contact
= INACCESSIBLE FLOOR AREA
= mrem/hr neutron
= air sample number
(#) = swipe number; (#) = SWIPE NUMBER UNDER OBJECT
(#/α) or /β = direct cont. measurement in dpm/100cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
NE ELECTRA	5356/5357	7/13/97
BICRON MICRO-REM	3864	12/12/97
	N A	

[redacted] Date: 7/8/97

5662 Date: 7-9-97

[redacted] Signature/HP#) 8778 Date: 7-11-97

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Charge Authorization No. _____

☑ Removable Contamination ☐ Airborne Activity (check one)

Swipes (dpm/100cm^2) or Airborne (µCi/cc)

Sample #	β/γ	Alpha	Tritium	Comments
1	↑			FLOOR
2				☆
3				☆
4				☆
5				☆
6				☆
7				☆
8				☆
9				☆
10				☆
11				☆
12				☆
13				☆
14				☆
15	SEE	ATTACHED		☆
16				☆
17				☆
18				☆
19				☆
20				☆
21				☆
22				☆
23				☆
24				☆
25				☆
26				☆
27				☆
28				☆
29				☆
30			↓	☆

☑ Removable Contamination ☐ Airborne Activity (check one)

Swipes (dpm/100cm^2) or Airborne (µCi/cc)

Sample #	β/γ	Alpha	Tritium	Comments
31	↑			☆
32				☆
33				☆
34				☆
35				☆
36				☆
37				☆
38				☆
39				☆
40	SEE	ATTACHED		☆
41				☆
42				☆
43				☆
44				☆
45				☆
46				☆
47				☆
48				(5) ~~DOOR HANDLE~~ 7/8/97 ☆
49				(6) ~~DOOR HANDLE~~ 7/8/97 ☆
50			↓	(4) ~~DOOR HANDLE~~ 7/8/97 ☆
51	SEE	ATTACHED		DOOR HANDLE
52	SEE	ATTACHED		DOOR HANDLE
53	SEE	ATTACHED		DOOR HANDLE
		N A		
N	A			

COMMENTS: A = FLOOR FLOOR AREAS SURVEYED "DIRECT" USING ELECTRA, RESULTS: <5000 DPM/100 CM^2 β/γ <100 DPM/100 CM^2 α. GAMMA DOSE RATE SURVEY PERFORMED USING BICRON

Max. Activity on Large Area Wipe (dpm)	Tritium Airborne Activity (µCi/m^3)

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

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR007
Batch Ended: 7/9/97 9:50

Alpha activity action level (DPM): 20
Beta activity action level (DPM): 200

Certainty level for MDA and flags: 95%

Crosstalk correction performed.

Recalibration Date: 8/7/97
Serial Number: 26966-1

Batch ID: T 97-33-5061-SC [53] ROGERS/WHITE 7-9-97 RLH

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A1	1	1.73	2.18	<AL	5.25	3.21	<AL
A2	2	2.09	2.16	<AL	0.93	2.19	<MDA
A3	3	2.14	2.19	<AL	0.00	2.04	<MDA
A4	4	3.21	2.71	<AL	0.00	1.51	<MDA
B1	5	0.00	2.07	<MDA	0.00	1.35	<MDA
B2	6	3.69	2.66	<AL	0.20	2.11	<MDA
B3	7	0.00	2.04	<MDA	0.00	1.91	<MDA
B4	8	0.00	1.94	<MDA	3.81	2.91	<AL
C1	9	0.00	2.24	<MDA	0.00	1.99	<MDA
C2	10	0.00	1.94	<MDA	4.17	2.84	<AL
C3	11	1.50	2.24	<MDA	2.03	2.32	<MDA
C4	12	0.00	2.01	<MDA	4.42	2.88	<AL
D1	13	2.03	2.08	<AL	0.00	1.92	<MDA
D2	14	0.00	1.93	<MDA	0.73	2.24	<MDA
D3	15	0.00	2.04	<MDA	0.00	1.39	<MDA
D4	16	0.00	1.90	<MDA	5.16	2.86	<AL
A1	17	3.85	3.02	<AL	1.20	2.27	<MDA
A2	18	2.09	2.16	<AL	0.93	2.19	<MDA
A3	19	2.13	2.21	<AL	1.55	2.76	<MDA
A4	20	1.32	1.96	<MDA	0.00	2.27	<MDA
B1	21	0.00	2.08	<MDA	1.22	1.85	<MDA
B2	22	1.84	1.92	<AL	1.51	2.41	<MDA
B3	23	0.00	2.03	<MDA	0.00	1.44	<MDA
B4	24	0.00	1.90	<MDA	0.37	2.12	<MDA
C1	25	0.00	2.25	<MDA	1.00	2.38	<MDA
C2	26	0.00	1.90	<MDA	0.00	1.38	<MDA
C3	27	0.00	2.22	<MDA	0.89	1.92	<MDA
C4	28	0.00	2.00	<MDA	3.16	2.59	<AL
D1	29	0.00	2.08	<MDA	0.00	1.92	<MDA
D2	30	0.00	1.90	<MDA	0.00	1.43	<MDA
D3	31	1.70	2.04	<AL	0.00	1.39	<MDA
D4	32	1.53	1.89	<AL	3.87	2.62	<AL
A1	33	3.84	3.03	<AL	3.81	2.93	<AL

7/10/97

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Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR007
Batch Ended: 7/9/97 9:50

Alpha activity action level (DPM): 20
Beta activity action level (DPM): 200

Certainty level for MDA and flags: 95%

Crosstalk correction performed.

Recalibration Date: 8/7/97
Serial Number: 26966-1

Batch ID: T 97-33-5061-SC [53] ROGERS/WHITE 7-9-97 RLH

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A2	34	0.00	2.17	<MDA	2.29	2.50	<MDA
A3	35	0.00	2.20	<MDA	0.39	2.42	<MDA
A4	36	3.20	2.73	<AL	0.08	2.57	<MDA
B1	37	3.76	2.91	<AL	0.91	1.85	<MDA
B2	38	3.69	2.66	<AL	0.20	2.11	<MDA
B3	39	0.00	2.05	<MDA	1.15	2.28	<MDA
B4	40	0.00	1.90	<MDA	0.37	2.12	<MDA
C1	41	4.05	3.15	<AL	0.70	2.38	<MDA
C2	42	0.00	1.90	<MDA	0.00	1.38	<MDA
C3	43	0.00	2.21	<MDA	0.00	1.42	<MDA
C4	44	0.00	1.99	<MDA	1.91	2.26	<MDA
D1	45	2.03	2.08	<AL	0.00	1.92	<MDA
D2	46	1.86	1.94	<AL	1.79	2.55	<MDA
D3	47	0.00	2.04	<MDA	0.00	1.39	<MDA
D4	48	0.00	1.85	<MDA	0.59	1.70	<MDA
A1	49	18.64	6.41	At AL	1.54	2.62	<MDA
A2	50	0.00	2.17	<MDA	2.29	2.50	<MDA
A3	51	2.14	2.18	<AL	0.00	1.56	<MDA
A4	52	0.00	1.97	<MDA	0.34	2.57	<MDA
B1	53	0.00	2.13	<MDA	6.25	3.13	<AL

Protocol #: 3 Name:Pw HI #401393 09-Jul-97 11:57

Region A: LL-UL= 0.3-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 2.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL=20.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 2.00 QIP = tSIE/AEC ES Terminator = Count
T 97-33-3061-ROSER/WHITE [F1-F53] 07-09-97 TAS
Conventional DPM
Nuclide 1 = S00
Luminescence Correction On

S#	TIME	LUM	FLAG	CPMA	CPMB	CPMC	tSIE	DPM1	2Sigma
-1	10.00	9	B	7.40	7.30	13.00	653.		0.00
0	2.00	1		512.60	482.20	0.00	643.	1015.37	99.78
1	2.00	36		0.00	0.00	0.00	623.	0.00	0.00
2	2.00	23		2.10	2.70	0.00	640.	4.17	11.25
3	2.00	4		4.60	3.20	0.00	667.	8.90	10.47
4	2.00	22		0.00	0.00	0.00	603.	0.00	0.00
5	2.00	43		0.00	0.00	0.50	582.	0.00	0.00
6	2.00	5		2.10	0.70	0.00	602.	4.26	9.93
7	2.00	17		0.00	0.00	0.00	627.	0.00	0.00
8	2.00	16		0.00	0.00	2.00	521.	0.00	0.00
9	2.00	0		2.60	1.70	3.00	634.	5.13	7.54
10	2.00	23		0.10	1.20	0.00	693.	0.19	9.70
11	2.00	6		1.10	0.70	0.00	646.	2.17	9.36
12	2.00	29		0.00	0.00	0.00	678.	0.00	0.00
13	2.00	27		0.00	0.00	1.00	630.	0.00	0.00
14	2.00	12		0.60	0.70	0.00	671.	1.20	9.57
15	2.00	29		0.00	0.00	0.00	637.	0.00	0.00
16	2.00	21		1.10	0.70	0.00	627.	2.20	10.59
17	2.00	17		0.60	0.20	0.00	633.	1.20	9.97
18	2.00	30		0.00	0.20	1.00	585.	0.00	0.00
19	2.00	6		1.10	1.20	0.00	639.	2.19	9.32
20	2.00	15		1.60	2.20	0.50	639.	3.18	10.32
21	2.00	42		0.00	0.00	0.00	645.	0.00	0.00
22	2.00	18		2.60	2.20	0.00	630.	5.20	11.15
23	2.00	28		1.10	2.20	0.00	640.	2.18	11.23
24	2.00	26		0.60	1.70	0.50	641.	1.19	10.68
25	2.00	36		0.00	0.00	0.00	630.	0.00	0.00
26	2.00	23		3.10	3.20	3.50	626.	6.21	12.35
27	2.00	13		3.60	3.70	0.50	640.	7.15	11.06
28	2.00	16		1.60	1.20	0.00	624.	3.21	10.41
29	2.00	23		0.00	0.00	1.00	619.	0.00	0.00
30	2.00	27		0.00	0.00	0.00	656.	0.00	0.00
31	2.00	16		0.60	1.20	0.50	475.	1.36	11.36
32	2.00	8		0.00	0.00	0.00	449.	0.00	0.00
33	2.00	16		0.00	0.00	2.00	561.	0.00	0.00
34	2.00	45		0.00	0.00	4.00	343.	0.00	0.00
35	2.00	10		0.00	0.00	0.00	489.	0.00	0.00
36	2.00	6		1.10	0.20	0.00	444.	2.64	11.32
37	2.00	14		0.00	0.00	2.00	579.	0.00	0.00
38	2.00	8		0.00	0.00	0.00	567.	0.00	0.00
39	2.00	22		0.00	0.00	0.50	398.	0.00	0.00
40	2.00	5		2.60	2.70	3.00	429.	5.83	11.21
41	2.00	10		0.00	0.00	0.50	422.	0.00	0.00
42	2.00	11		0.00	0.00	0.00	444.	0.00	0.00
43	2.00	0		4.10	3.20	0.00	455.	9.64	12.00
44	2.00	11		1.10	0.20	0.00	449.	2.63	11.69

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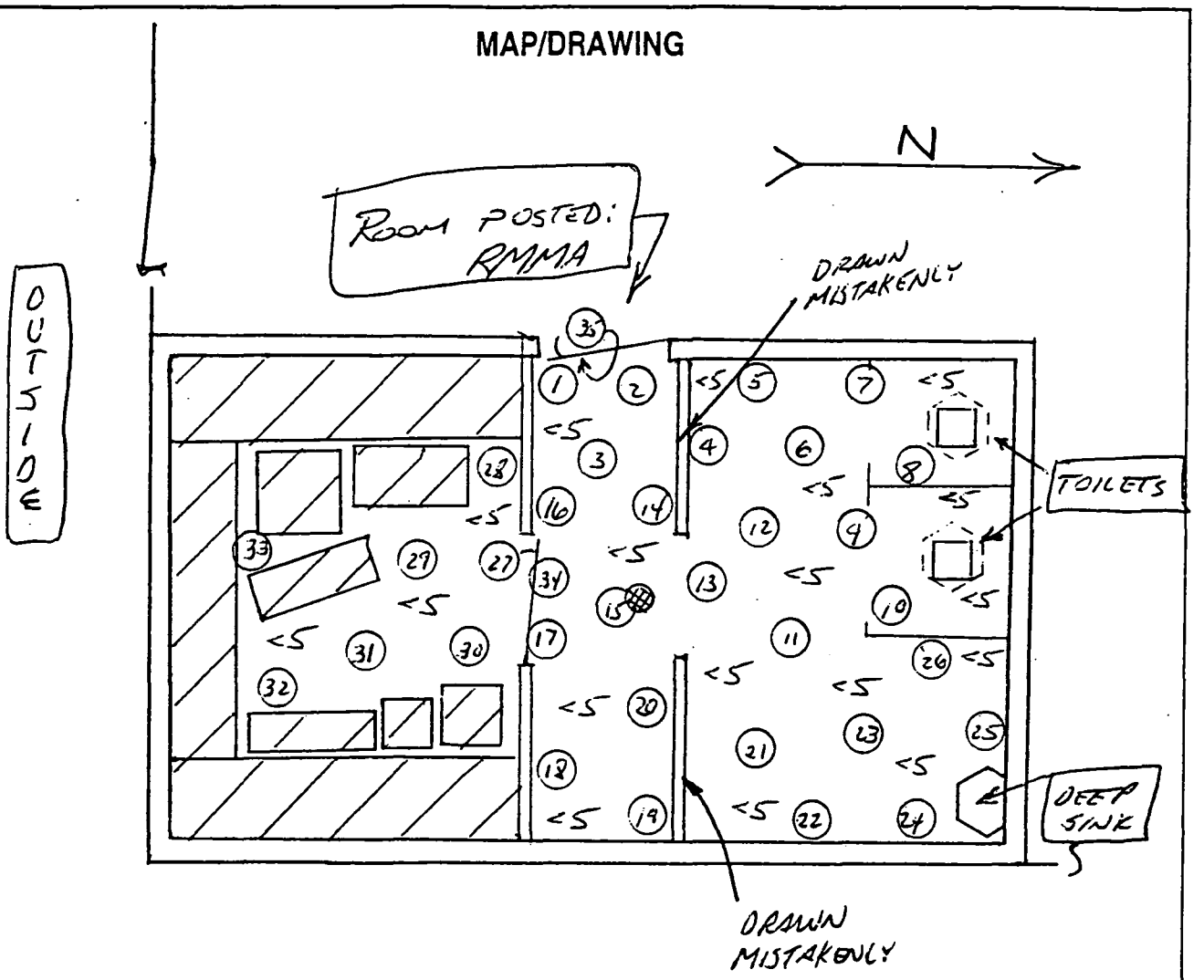
S#	TIME	LUM	FLAG	CPMA	CPMB	CPMC	tSIE	DPM1	2Sigma
45	2.00	0		0.00	0.00	2.00	491.	0.00	0.00
46	2.00	10		0.00	0.00	0.00	563.	0.00	0.00
47	2.00	25		0.00	0.00	0.00	483.	0.00	0.00
48	2.00	0		1.60	1.20	4.00	538.	3.42	9.79
49	2.00	16		0.00	0.00	0.00	575.	0.00	0.00
50	2.00	0		0.10	0.00	0.00	480.	0.21	9.58
51	2.00	20		0.00	0.00	0.00	664.	0.00	0.00
52	2.00	16		1.10	0.70	0.00	668.	2.13	9.85
53	2.00	7		0.00	0.00	0.00	660.	0.00	0.00

R-196 L-1 / L-35 Copy P 4 ✓

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) BLDG "33" ROOM "CHANGEHOUSE"	SURVEY NO. 97-33-5062-SC
PURPOSE: SITE CHARACTERIZATION	RWP NO. N.A
	DATE: 7/9/97
	TIME: 1400

MAP/DRAWING



LEGEND:
- # = ~~mrem/hr~~ MR/HR REM/HR (γ) whole body (#) 7/9/97
- # E = mrem/hr (β+η+γ) extremity on contact
- ▨ = INACCESSIBLE FLOOR AREA
- ⊗ = FLOOR DRAIN
- △ # = mrem/hr neutron
- □ # = air sample number
- (#) = swipe number
- (#/α) or /β = direct cont. measurement in dpm/100cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
NE ELECTRA	5356 / 5357	7/13/97
BICRON MR	3864	12/12/97
	N A	

[redacted] re/HP#) 8396 [redacted] Date: 7/9/97

[redacted] 5374 Date: 07/10/97

[redacted] e/HP#) 8778 Date: 7-21-97

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Charge Authorization No. _____

☑ Removable Contamination ☐ Airborne Activity (check one)

Swipes (dpm/100cm^2) or Airborne (µCi/cc)

Sample #	β/γ	Alpha	Tritium	Comments
1				FLOOR
2				★
3				★
4				★
5				★
6				★
7				★
8				★
9				★
10				★
11				★
12				★
13				★
14				★
15	SEE	ATTACHED		★
16				★
17				★
18				★
19				★
20				★
21				★
22				★
23				★
24				★
25				★
26				★
27				★
28				★
29				★
30				★

☑ Removable Contamination ☐ Airborne Activity (check one)

Swipes (dpm/100cm^2) or Airborne (µCi/cc)

Sample #	β/γ	Alpha	Tritium	Comments
31				★
32				★
33	SEE	ATTACHED		★
34				DOOR HANDLE
35				DOOR HANDLE
		N	A	

COMMENTS: ★ = FLOOR FLOOR AREAS SURVEYED "DIRECT" USING ELECTRA, RESULTS: <5000 DPM/100 cm^2 β, <100 DPM/100 cm^2 α. GAMMA DOSE RATE SURVEY PERFORMED USING BICRON.

Max. Activity on Large Area Wipe (dpm)	Tritium Airborne Activity (µCi/m^3)
N	A

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

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR026
Batch Ended: 7/10/97 10:20

Alpha activity action level (DPM): 20
Beta activity action level (DPM): 200

Certainty level for MDA and flags: 95%

Crosstalk correction performed.

Batch ID: T 97-33-5062-SC ROGERS / WHITE [35] 07-10-97 TAS

Recalibration Date: 8/7/97
Serial Number: 26966-1

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A2	1	0.00	2.13	<MDA	0.00	1.38	<MDA
A3	2	0.00	2.22	<MDA	3.02	3.06	<MDA
A4	3	0.00	1.96	<MDA	0.00	2.27	<MDA
B1	4	0.00	2.11	<MDA	3.73	2.57	<AL
B2	5	0.00	1.92	<MDA	1.67	2.41	<MDA
B3	6	1.69	2.04	<AL	0.00	1.91	<MDA
B4	7	0.00	1.95	<MDA	4.95	3.13	<AL
C1	8	1.86	2.25	<AL	0.00	2.00	<MDA
C2	9	0.00	1.91	<MDA	0.45	1.86	<MDA
C3	10	1.50	2.21	<MDA	0.00	1.42	<MDA
C4	11	0.00	1.99	<MDA	1.91	2.26	<MDA
D1	12	0.00	2.11	<MDA	3.05	2.89	<MDA
D2	13	0.00	1.92	<MDA	0.00	1.88	<MDA
D3	14	0.00	2.04	<MDA	0.00	1.39	<MDA
D4	15	0.00	1.85	<MDA	0.59	1.70	<MDA
A2	16	0.00	2.15	<MDA	0.00	1.83	<MDA
A3	17	0.01	2.18	<MDA	0.00	1.56	<MDA
A4	18	0.00	1.94	<MDA	0.00	1.51	<MDA
B1	19	1.73	2.07	<AL	0.00	1.35	<MDA
B2	20	0.00	1.90	<MDA	0.00	1.77	<MDA
B3	21	0.00	2.05	<MDA	1.15	2.28	<MDA
B4	22	0.00	1.88	<MDA	0.00	1.36	<MDA
C1	23	1.86	2.27	<AL	2.16	2.72	<MDA
C2	24	0.00	1.90	<MDA	0.00	1.38	<MDA
C3	25	0.00	2.24	<MDA	2.19	2.32	<MDA
C4	26	0.00	2.00	<MDA	3.16	2.59	<AL
D1	27	0.00	2.07	<MDA	0.00	1.46	<MDA
D2	28	0.00	1.90	<MDA	0.00	1.43	<MDA
D3	29	1.70	2.04	<AL	0.00	1.39	<MDA
D4	30	0.00	1.85	<MDA	0.59	1.70	<MDA
A2	31	0.00	2.17	<MDA	2.29	2.50	<MDA
A3	32	0.01	2.18	<MDA	0.00	1.56	<MDA

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR026
Batch Ended: 7/10/97 10:20

Alpha activity action level (DPM): 20
Beta activity action level (DPM): 200

Certainty level for MDA and flags: 95%

Crosstalk correction performed.

Recalibration Date: 8/7/97
Serial Number: 26966-1

Batch ID: T 97-33-5062-SC ROGERS / WHITE [35] 07-10-97 TAS

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A4	33	0.00	1.94	<MDA	0.00	1.51	<MDA
B1	34	0.00	2.11	<MDA	3.73	2.57	<AL
B2	35	0.00	1.90	<MDA	0.00	1.77	<MDA

@ 7/15/97

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

	LL	UL	LCR	2S%	BKG
Region A:	0.5 -	18.6	0	0.0	7.30
Region B:	2.0 -	18.6	0	0.0	7.00
Region C:	20.0 -	2000	0	0.0	11.30

Quench Indicator: tSIE/AEC
Ext Std Terminator: Count
T 97-33-5062-SC [L1-L35] ROGERS/WHITE 7-10-97 RLH
Luminescence Correction On
Coincidence Time(ns): 18
Delay Before Burst(ns): Normal
Protocol Data Filename: c:\data\PROT4.DAT
Count Data Filename: c:\data\SDATA4.DAT
Spectrum Data Drive & Path: c:\data

S#	TIME	CPMA	LUM	FLAG	tSIE	DPM1	2Sigma	CPMC
-1	10.00	7.30	0	B	654.72		0.00	11.30
0	2.00	511.70	0		633.04	1008.91	87.81	1.20
1	2.00	0.00	0		535.10	0.00	0.00	0.70
2	2.00	0.00	7		551.35	0.00	0.00	3.20
3	2.00	1.70	0		579.37	3.47	9.34	0.00
4	2.00	1.20	0		542.09	2.56	9.54	0.00
5	2.00	12.70	0		488.58	28.79	14.95	7.70
6	2.00	1.20	0		553.55	2.52	9.37	3.70
7	2.00	0.00	0		519.56	0.00	0.00	0.00
8	2.00	0.00	0		479.03	0.00	0.00	0.00
9	2.00	0.00	0		567.31	0.00	0.00	0.00
10	2.00	0.00	8		563.41	0.00	0.00	0.00
11	2.00	0.20	0		578.26	0.41	8.65	1.70
12	2.00	0.00	0		560.80	0.00	0.00	0.70
13	2.00	0.20	0		565.53	0.41	8.75	0.00
14	2.00	0.00	0		563.76	0.00	0.00	0.00
15	2.00	1.20	0		598.57	2.41	8.95	1.70
16	2.00	1.20	0		595.55	2.41	8.98	0.00
17	2.00	0.70	0		502.18	1.57	9.74	2.20
18	2.00	1.70	0		520.14	3.74	10.07	2.20
19	2.00	0.00	0		497.89	0.00	0.00	1.70
20	2.00	0.00	0		541.97	0.00	0.00	0.00
21	2.00	0.20	0		568.73	0.41	8.72	0.00
22	2.00	0.00	7		466.23	0.00	0.00	0.00
23	2.00	1.70	0		574.67	3.48	9.38	26.20
24	2.00	0.00	0		592.67	0.00	0.00	0.00
25	2.00	0.00	0		429.16	0.00	0.00	0.00
26	2.00	0.00	0		552.87	0.00	0.00	4.20
27	2.00	0.00	0		515.72	0.00	0.00	0.00
28	2.00	0.00	0		378.62	0.00	0.00	1.20
29	2.00	0.00	0		424.24	0.00	0.00	0.20
30	2.00	0.00	0		346.94	0.00	0.00	2.20
31	2.00	0.00	0		466.14	0.00	0.00	3.20
32	2.00	0.00	0		435.50	0.00	0.00	0.20
33	2.00	0.00	0		545.24	0.00	0.00	2.20
34	2.00	0.00	0	E	645.14	0.00	0.00	4.70

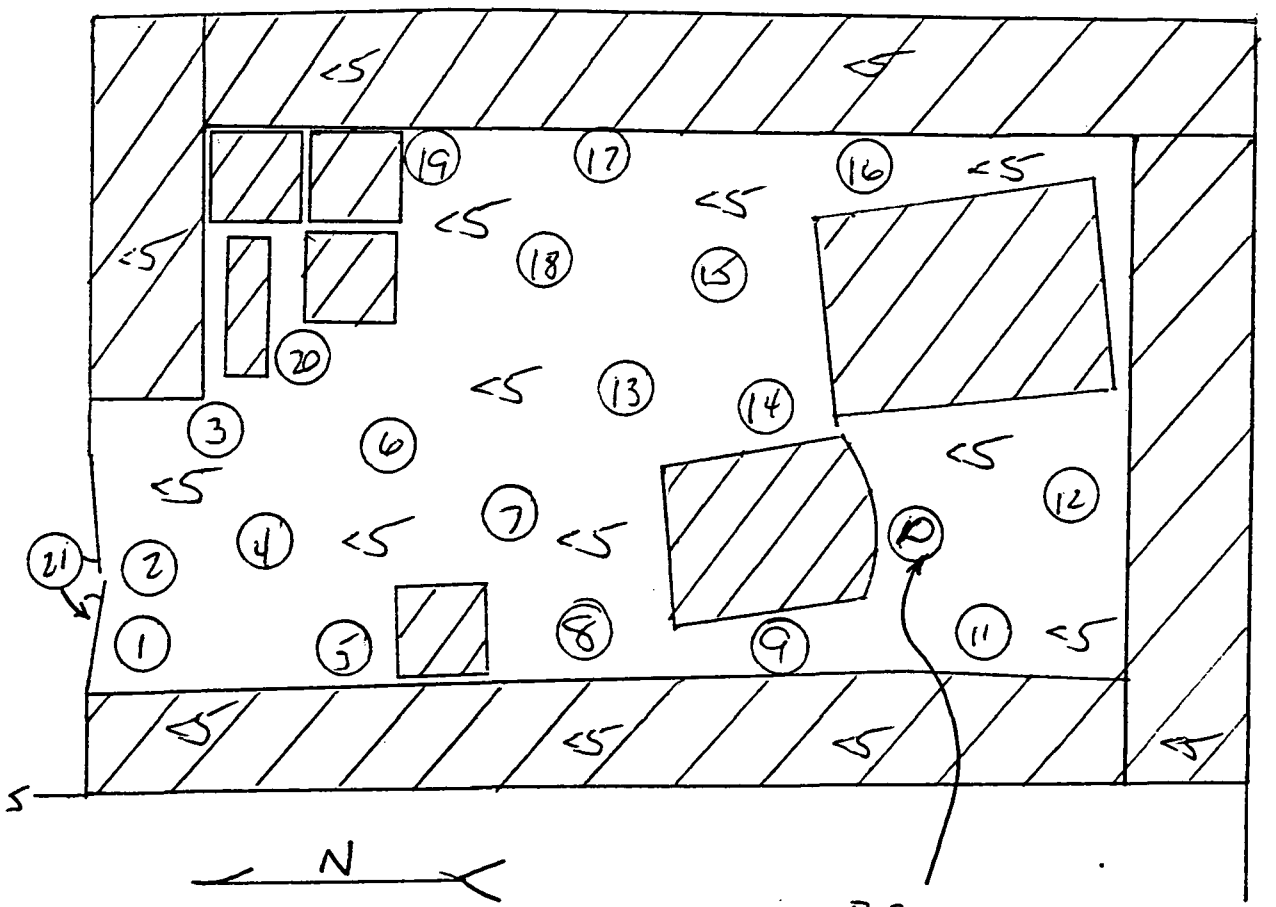
S#	TIME	CPMA	LUM FLAG	tSIE	DPM1	2Sigma	CPMC
35	2.00	0.00	0	638.85	0.00	0.00	0.00

R-146 C-1 / O-21 COPY P7 ✓

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) BLDG "33" "ANNEX"	SURVEY NO. 97-33-5063-SC
PURPOSE: SITE CHARACTERIZATION	RWP NO. NA
	DATE: 7/10/97
	TIME: 1030

MAP/DRAWING



POSTED: RNMA @ BLDG 33 ENTRANCE

DIRECT READINGS: 1833 dpm/100cm²

LEGEND: # = mrem/hr (γ) whole body
E = mrem/hr (β+η+γ) extremity on contact
(#) = mrem/hr neutron
[#] = air sample number
(#) = swipe number
(#/α) or /β = direct cont. measurement in dpm/100cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
NEELECTRA	5309/5320	8/1/97
BICRON MR	3864	12/12/97

[redacted] ature/HP#) 8356 [redacted]	Date: 7/10/97
[redacted] 5377	Date: 07/10/97
[redacted] ture/HP#) 8778	Date: 7-21-97

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Charge Authorization No. _____

☑ Removable Contamination ☐ Airborne Activity (check one)

Swipes (dpm/100cm^2) or Airborne (µCi/cc)

Sample #	β/γ	Alpha	Tritium	Comments
1				FLOOR
2				☆
3				☆
4				☆
5				☆
6				☆
7				☆
8				☆
9				☆
10				☆
11	SEE	ATTACHED		☆
12				☆
13				☆
14				☆
15				☆
16				☆
17				☆
18				☆
19				☆
20				☆
21				DOOR HANDLE
		N	A	

☐ Removable Contamination ☐ Airborne Activity (check one)

Swipes (dpm/100cm^2) or Airborne (µCi/cc)

Sample #	β/γ	Alpha	Tritium	Comments
		N	A	

COMMENTS: ☆ = FLOOR FLOOR AREAS SURVEYED "DIRECT" USING ELECTRA (EXCEPT AS NOTED)
RESULTS: <5000 DPM/100cm^2 β/γ, <100 DPM/100cm^2 α. GAMMA DOSE RATE SURVEY PERFORMED USING BICRON

Max. Activity on Large Area Wipe (dpm)	Tritium Airborne Activity (µCi/m^3)
N	A

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

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR027
Batch Ended: 7/10/97 10:37

Alpha activity action level (DPM): 20
Beta activity action level (DPM): 200

Certainty level for MDA and flags: 95%

Crosstalk correction performed.

Batch ID: T 97-33-5063-SC ROGER/WHITE [21] 07-10-97 TAS

Recalibration Date: 8/7/97
Serial Number: 26966-1

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A2	1	0.00	2.16	<MDA	1.08	2.19	<MDA
A3	2	2.14	2.18	<AL	0.00	1.56	<MDA
A4	3	1.32	1.95	<MDA	0.00	1.93	<MDA
B1	4	0.00	2.07	<MDA	0.00	1.35	<MDA
B2	5	0.00	1.90	<MDA	0.00	1.77	<MDA
B3	6	0.00	2.03	<MDA	0.00	1.44	<MDA
B4	7	0.00	1.93	<MDA	2.66	2.67	<MDA
C1	8	1.87	2.23	<AL	0.00	1.51	<MDA
C2	9	1.59	1.90	<AL	0.00	1.38	<MDA
C3	10	0.00	2.22	<MDA	0.89	1.92	<MDA
C4	11	0.00	1.97	<MDA	0.00	1.39	<MDA
D1	12	0.00	2.07	<MDA	0.00	1.47	<MDA
D2	13	0.00	1.93	<MDA	0.73	2.24	<MDA
D3	14	0.00	2.05	<MDA	0.46	1.86	<MDA
D4	15	1.53	1.84	<AL	0.00	1.26	<MDA
A2	16	0.00	2.13	<MDA	0.00	1.38	<MDA
A3	17	2.14	2.18	<AL	0.00	1.56	<MDA
A4	18	0.00	1.95	<MDA	0.00	1.93	<MDA
B1	19	0.00	2.08	<MDA	1.22	1.85	<MDA
B2	20	0.00	1.88	<MDA	0.00	1.35	<MDA
B3	21	0.00	2.03	<MDA	0.00	1.44	<MDA

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Time: 2.00
Data Mode: DPM Nuclide: 3MVIAL Quench Set: 3MVIAL
Background Subtract: 1st Vial

	LL	UL	LCR	2S%	BKG
Region A:	0.5 -	18.6	0	0.0	6.00
Region B:	2.0 -	18.6	0	0.0	5.70
Region C:	20.0 -	2000	0	0.0	9.20

Quench Indicator: tSIE/AEC
Ext Std Terminator: Count
T 97-33-3063-3C [01-021] ROGERS/WHITE 7-10-97 RLH
Luminescence Correction On
Coincidence Time(ns): 18
Delay Before Burst(ns): Normal
Protocol Data Filename: c:\data\PROT7.DAT
Count Data Filename: c:\data\SDATA7.DAT
Spectrum Data Drive & Path: c:\data

S#	TIME	CPMA	LUM	FLAG	tSIE	DPM1	2Sigma	CPMC
-1	10.00	6.00	2	B	657.80		0.00	9.20
0	2.00	492.50	0		628.08	969.83	85.21	5.80
1	2.00	0.50	0		583.01	1.01	7.96	2.30
2	2.00	0.00	0		581.30	0.00	0.00	1.30
3	2.00	0.00	0		630.36	0.00	0.00	4.80
4	2.00	0.00	0		619.29	0.00	0.00	0.30
5	2.00	0.00	0		581.98	0.00	0.00	3.80
6	2.00	1.00	0		598.64	2.00	8.10	1.30
7	2.00	0.00	0		528.41	0.00	0.00	2.80
8	2.00	0.00	0		592.00	0.00	0.00	0.00
9	2.00	1.50	0		567.60	3.08	8.58	5.80
10	2.00	0.00	0		557.47	0.00	0.00	2.80
11	2.00	0.00	0		574.69	0.00	0.00	1.80
12	2.00	1.00	0		493.56	2.25	9.11	7.30
13	2.00	1.50	0		564.97	3.09	8.60	0.00
14	2.00	1.00	0		537.85	2.15	8.69	0.00
15	2.00	0.00	0		511.94	0.00	0.00	1.30
16	2.00	0.00	0		617.04	0.00	0.00	2.80
17	2.00	0.00	0		471.88	0.00	0.00	4.80
18	2.00	0.00	0		468.90	0.00	0.00	2.30
19	2.00	0.50	8		445.78	1.18	9.24	1.80
20	2.00	0.00	0		597.41	0.00	0.00	0.00
21	2.00	0.00	0		632.34	0.00	0.00	0.30

Copy

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) 33 / main	SURVEY NO. 97-33-5064-sc
PURPOSE: Characterization Survey Isotopic Analysis	RWP NO. NA
	DATE: 7-30-97
	TIME: 1430

MAP/DRAWING

Bldg / Room	Reference RSDS # / Smear #	Smear #
33 / main	97-33-5061-sc / 49	1-2

N A

LEGEND: # = mrem/hr (γ) whole body
E = mrem/hr ($\beta+\eta+\gamma$) extremity on contact
(#) = mrem/hr neutron
[#] = air sample number
(#) = swipe number
(#/α) or /β = direct cont. measurement in dpm/100cm^2

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
NE Electra	5391 / 5409	12-29-97
	N A	

Completed by: (Signature/HP#) [redacted] 8395 /	Date: 7-30-97
Calculated by: (Signature/HP#) [redacted]	Date: 07/31/97
Reviewed/Approved by: (Signature/HP#) [redacted] 6031	Date: 9-11-97

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Charge Authorization No. ____________

☑ Removable Contamination ☐ Airborne Activity (check one)

Swipes (dpm/100cm²) or Airborne (µCi/cc)

Sample #	β/γ	Alpha	Tritium	Comments
1	SEE PRINTOUT		NA	Floor
2	SEE PRINTOUT		NA	Floor

N/A

☐ Removable Contamination ☐ Airborne Activity (check one)

Swipes (dpm/100cm²) or Airborne (µCi/cc)

Sample #	β/γ	Alpha	Tritium	Comments

N/A

COMMENTS: Direct reading < 100 dpm/100cm² α ; < 5000 dpm/100cm² β

Max. Activity on Large Area Wipe (dpm)	Tritium Airborne Activity (µCi/m³)
N	A

NOTES:

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

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Aqua
Data file name: SMEAR035
Batch Ended: 7/31/97 10:24

Alpha activity action level (DPM): 20
Beta activity action level (DPM): 200

Certainty level for MDA and flags: 95%

Crosstalk correction performed.

Recalibration Date: 8/7/97
Serial Number: 26966-1

Batch ID: X 97-33-5064-SC MATHES [2] 07-30-97 JM

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A1	1	0.00	2.13	<MDA	0.00	1.33	<MDA
A2	2	0.00	2.16	<MDA	1.08	2.19	<MDA

Alpha Spectrum Analysis

Sample Description:	Smear #1
Batch Identification:	$970821
Sample Identification:	97-33-5064-SC
Sample Geometry:	Shelf 2
Protocol Description:	12 hour count
Detector Name:	4A
Spectrum File:	c:\aanalyst\selbifs\$970821\0.cnf
Sample Size:	1 Sample
Acquisition Date:	8/21/97
Acquisition Time:	3:42 PM
Acquisition Live Time (s):	43,200

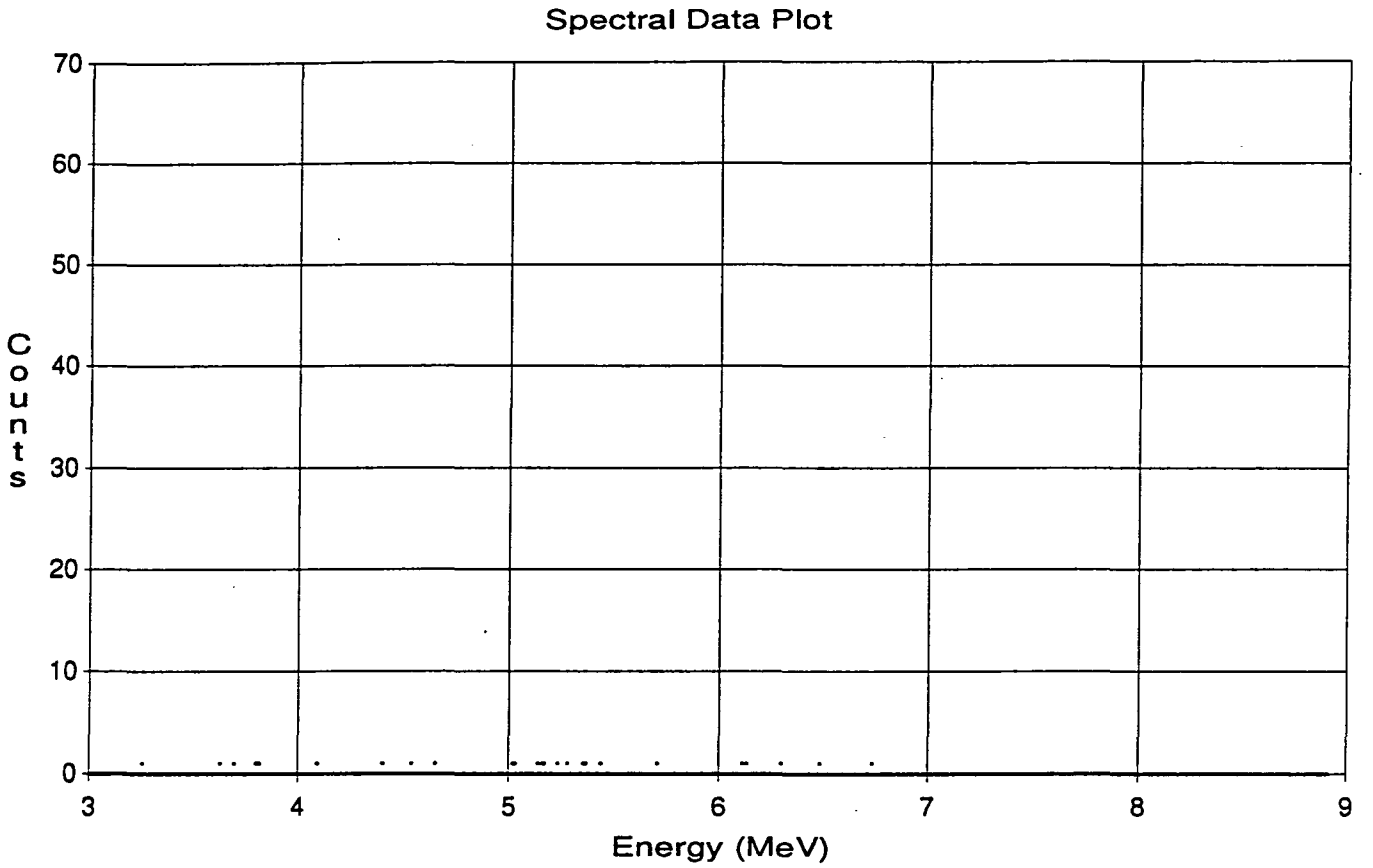
Calibration Due Date: 11/18/97
Detector Serial Number: 08966395A

Peak Activity Report

Peak Energy (keV)	Total Counts	Net Counts	Activity (dpm)	Error (dpm)
N/A	30	20	0.32	0.02

Possible Nuclides

Peak Energy (keV)	Possible Nuclides	Nuclide Peak Energy (keV)	Comments
N/A			



Datasource:	0.CNF		
Live Time:	43200 sec		
Real Time:	43201 sec		
Acq. Start:	8-21-97 3:42:42 PM		
Start:	1	:	3.01 (MeV)
Stop:	2048	:	8.92 (MeV)

Alpha Spectrum Analysis

Sample Description:	Smear #2
Batch Identification:	$970821
Sample Identification:	97-33-5064-SC
Sample Geometry:	Shelf 2
Protocol Description:	12 hour count
Detector Name:	4B
Spectrum File:	c:\aanalyst\selbifs\$970821\1.cnf
Sample Size:	1 Sample
Acquisition Date:	8/21/97
Acquisition Time:	3:42 PM
Acquisition Live Time (s):	43,200

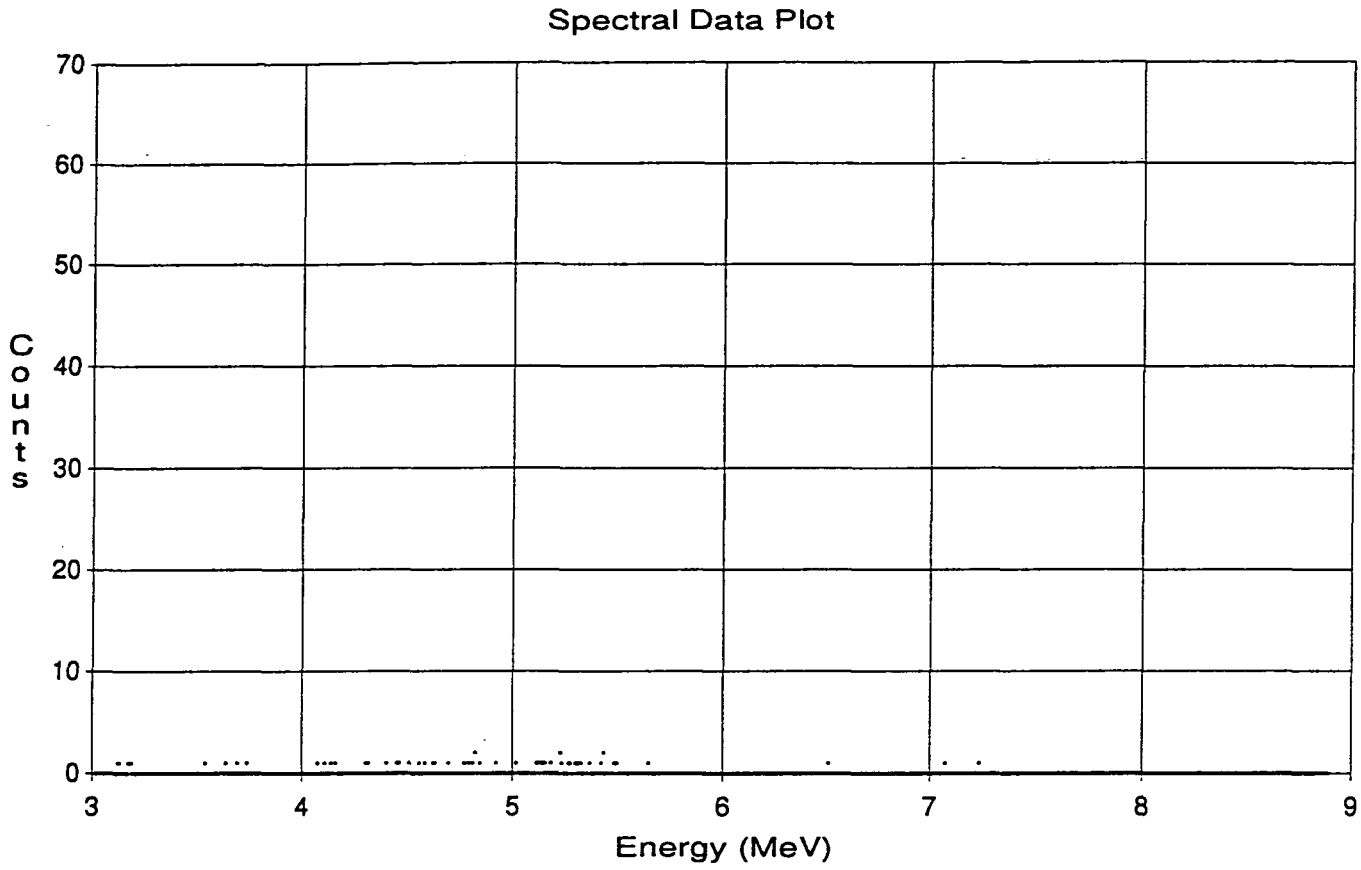
Calibration Due Date: 11/18/97
Detector Serial Number: 08966395B

Peak Activity Report

Peak Energy (keV)	Total Counts	Net Counts	Activity (dpm)	Error (dpm)
N/A	58	57	0.99	0.05

Possible Nuclides

Peak Energy (keV)	Possible Nuclides	Nuclide Peak Energy (keV)	Comments
N/A			



Datasource: A_1_4B (1,CNF)
Live Time: 43200 sec
Real Time: 43201 sec
Acq. Start: 8-21-97 3:42:42 PM
Start: 1 : 3.02 (MeV)
Stop: 2048 : 8.89 (MeV)

Appendix 6.6.2 Asbestos

ACM in buildings can be found in five (5) forms: sprayed or troweled on ceilings and walls (surfacing materials); insulation around pipes, ducts, boilers and tanks (pipe and boiler insulation); transite (in ground piping); and in roofing materials (shingles and roofing felts); other products such as ceiling and floor tiles and wall boards (miscellaneous materials).

Appendix 6.6.3 Lead

Lead Paint

Prior to the 1970s, lead-based paints were nearly exclusively used in U.S. industry. Because of Congressional action, paints used since 1979 are not supposed to contain lead. Therefore, it is said that surfaces painted prior to 1979 "probably contain lead" and those painted after 1979 "may contain lead."

If a building is to be demolished, the paint film is a minuscule portion of the weight of the debris and all may be discarded in a land fill. If a building is to be refurbished, the costly lead survey may be requested to be completed to the degree required by the end use.

Appendix 6.6.4 Chemical History

Appendix 6.7 Occurrence Report

04-97-0003
FINAL - DCrd.

OCCURRENCE REPORT

Sites and Grounds

(Name of Facility)

Environmental Restoration Operations

(Facility Function)

Mound Plant / EG&G Mound Applied Technologies

(Name of Laboratory, Site or Organization)

Name: Katherine G. Koehler
Title: Site Grounds Manager Telephone No.: (937)865-4886

(Facility Manager/Designee)

Name: KOEHLER, KATHY G
Title: SITE GROUNDS MANAGER Telephone No.: (513)865-4886

(Originator/Transmitter)

Donald V. Dixon 5/20/97
Name: Donald V. Dixon Date: 05/20/1997

(Authorized Classifier (AC))

1. OCCURRENCE REPORT NUMBER: OH-MB-EGGM-EGGMAT04-1997-0003
Personnel Shoe/Boot Contamination, SM West Asphalt Area

2. REPORT TYPE AND DATE:

	Date	Time
[ ] Notification	04/09/1997	1715 MTZ
[ ] Initial Update	05/22/1997	1621 MTZ
[ ] Latest Update	05/22/1997	1621 MTZ
[X] Final		

3. OCCURRENCE CATEGORY:
[ ] Emergency [ ] Unusual [X] Off-Normal [ ] Cancelled

4. NUMBER OF OCCURRENCES: 1 ORIG. OR:

5. DIVISION OR PROJECT: EG&G Mound Applied Technologies

6. SECRETARIAL OFFICE: EM - Environmental Management

7. SYSTEM, BLDG., OR EQUIPMENT:
Personnell Contamination, shoes, boots, SM West Asphalt Area

8. UCNI?: No

9. PLANT AREA: SMPP Hill

10. DATE AND TIME DISCOVERED:
04/08/1997 1200 (ETZ)

11. DATE AND TIME CATEGORIZED:
04/08/1997 1500 (ETZ)

12. DOE NOTIFICATION:

13. OTHER NOTIFICATIONS:
04/08/1997 1500 (ETZ) Raymond J. Powell DOE/MEMP

14. SUBJECT OR TITLE OF OCCURRENCE:
Personnel Shoe/Boot Contamination, SM West Asphalt Area

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15. NATURE OF OCCURRENCE:
04) Personnel Radiation Protection
B. Personnel Contamination
01) Facility Condition
F. Violation/Inadequate Procedures

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16. DESCRIPTION OF OCCURRENCE:
On April 8, 1997, at approximately 1200 hours (ETZ), during Environmental Restoration core sampling activities at the SM West Asphalt Paved Area, radiological control frisking detected alpha contamination on five workers of seven workers exiting the area. Alpha contamination was discovered on five of the workers boots and on two of the five workers gloves. The alpha contamination was Plutonium 238. Direct readings taken on two of the workers boots exceeded 2500 dpm (alpha), five times the RADCON Table 2-2 value for total Transuranic surface contamination. The DOE 232.1 reportable readings on two of the workers boots were 2500 dpm (alpha) and 4200 dpm (alpha). The other boot readings were 325 dpm (alpha), 300 dpm (alpha), and 380 dpm (alpha). The glove readings were 450 dpm (alpha), and 350 dpm (alpha).

Core Sampling activities at fourteen locations at the SM West Asphalt area were being done in order to further assess the magnitude and extent of known Plutonium 238 contamination below the asphalt paved area. Further assessment was necessary to determine whether or not the (future) removal action work would have to be "tented" to avoid violation of allowable NESHAP limits. The NESHAP limit at the fence line is 1 millirem per hour dose rate. Removal Actions which are anticipated as potentially generating 1/10 of the NESHAP limits at the plant fence line require enclosure prior to work initiation.

Prior to initiating core sampling activities on April 8, 1997, Environmental Restoration data in the work package revealed the presence of Plutonium 238 in the general area ranging from 2.71 picocuries/gram to 64,643 picocuries/gram. Within approximately a 20 foot radius of the area where sixth core boring resided (GIS Preliminary location: x=1466186.5, y=598161.0), two sampling points taken during previous assessment activities indicated Plutonium 238 present at 870.6 picocuries/gram and 64,643 picocuries/gram. A general soil sampling Radiation Work Permit had been issued for this assessment work with stop work levels of 20 dpm/100cm2 removable alpha. The RWP issued for this work did not required

16. DESCRIPTION OF OCCURRENCE: (continued)
any anti-contamination clothing.

During excavation of the sixth core boring, direct readings from the auger revealed 8000 dpm/100cm2 removable alpha. RCT's informed the workers that work had to be stopped. Soils on the ground around the sixth core boring ranged from 21 dpm/100cm2 to 8000dpm/100cm2. Workers boots and gloves became contaminated as a result of walking through and touching contaminated soils in the work area. Work was immediately stopped after bringing the area into a safe condition (wetting down the auger and tarping the area).

This occurrence report was reviewed by an authorized derivative classifier (Donald V. Dixon, Facilities Management) on 5/20/97 at 1600 hours (ETZ) and does not contain and UCNI or classified information.

17. OPERATING CONDITIONS OF FACILITY AT TIME OF OCCURRENCE:
Normal Plant Operations

18. ACTIVITY CATEGORY:
Facility Decontamination/Decommissioning

19. IMMEDIATE ACTIONS TAKEN AND RESULTS:
When the stop work levels on the RWP were exceeded, work was brought into a safe condition and stopped. Workers were frisked upon exiting the work area and alpha contamination was detected on their boots (5 of 7 workers) and their gloves (2 of the 5 workers with contaminated boots). The workers boots and gloves were decontaminated and non-detects were obtained with the NE Electra after decontamination. Nose Wipes were taken and indicate no uptake as a result of the potential airborne contamination. Non-routine bioassay sampling was not required because Decontamination workers submit samples for Plutonium 238 on a monthly basis.

The SM West Asphalt Area was posted as a "High Contamination Area". A site specific RWP was issued on 4/9/97. The site specific RWP requires PPE. PPE required includes: coveralls, hood, rubber gloves, cotton glove liners, plastic shoe covers, plastic shoe booties, taped wrists/andle opening, secondary rubber gloves, secondary plastic shoe booties, full face respiratory protection, whole body TLD, Bioassay for Plutonium 238/239, Continuous RCT coverage, and whole body frisk (alpha and beta.

20. DIRECT CAUSE:
2) PROCEDURE PROBLEM
A. Defective or Inadequate Procedure

21. CONTRIBUTING CAUSE(S):
    3) PERSONNEL ERROR
       A. Inattention to Detail

22. ROOT CAUSE:
    6) MANAGEMENT PROBLEM
       B. Work Organization/Planning Deficiency

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23. DESCRIPTION OF CAUSE:
The direct cause of the occurrence was due to an inadequate procedure. Radiological Operations procedures were not written in a manner to prevent excavation in known High Contamination Areas without a job specific RWP which would require appropriate anti-contamination clothing and other administrative controls (stop work levels).

The contributing cause of this occurrence was due to a personnel error associated with an inattention to detail. Issuing a general soil intrusion RWP with stop work levels of 20 dpm/100 cm2 removable alpha when know Pu-238 contamination is known to reside (activities exceeding 64,000 picocuries/gram) in the excavation work area was a mistake. To not require anti-contamination clothing prior to encountering high activity contaminated soils was also a mistake.

The root cause of the occurrence was due to a work organization planning deficiency. Data was available which indicated that the stop work levels on the general Soil Intrusion RWP's would be exceeded. Soils containing Plutonium 238 contamination with activity levels of over 64,000 pirocuries/gram resided below the asphalt paved surface. The SM West Asphalt Area should have been posted as a controlled area and appropriate administrative controls been required on the RWP prior to initiation the excavation work.

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24. EVALUATION: (By Facility Manager/Designee)
A critique was held on 4/9/97 and Radiological Operations personnel agreed that they needed to evaluated radiological controls necessary to work (excavate) in areas that are not "Contamination areas" in their present state but are known to contain subsurface contamination at elevated (radionuclide) activity levels. Anti-contamination clothing should be specified which would minimize the potential for worker contamination and/or uptake in areas where higher levels of removable contamination are known to be present in the work area.

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25. IS FURTHER EVALUATION REQUIRED?: Yes [ ] No [X]

26. CORRECTIVE ACTIONS:
(* = Date added/revised since final report was signed off)

26. CORRECTIVE ACTIONS: (continued)
(* = Date added/revised since final report was signed off)

01) Radiological Operations personnel will modify MD-80036, Radiological Operations Procedures, Operation 90004 entitled "Radiological Posting and Radioactive Materials Labeling to require the posting of Contamination Areas of known underground removable contamination with activity levels in excess of the DOE RADCON Table 2-2 Values. The signs will state "Caution, Contamination Area, Subsurface Area Only, (trefoil), Site Specific RWP Required for subsurface work, Protective Clothing Required for subsurface work, Personnel and Equipment Monitoring Required for Exit after performing subsurface work".

TARGET COMPLETION DATE: 06/30/1997 COMPLETION DATE: Not given

02) Train RCTs on the new posting requirement for subsurface Contaminated areas. The training will include a.)the need to perform frequent in-process smearing of digging device and the expectation that workers will be prevented from co-mingling with excavated soils or digging devices until field counting results are obtained, b.) Anticipate the maximum radionuclide activity levels from review of available data. If Stop Work levels on the general soil intrusion RWP would likely be exceeded, generate a site specific RWP to address hazards at hand. c.) Prescribe PPE that will protects employees from expected conditions.

TARGET COMPLETION DATE: 06/30/1997 COMPLETION DATE: Not given

03) Post subsurface soils areas which contain removable contamination at levels known to exceed those specified in RADCON Table 2-2.

TARGET COMPLETION DATE: 07/30/1997 COMPLETION DATE: Not given

27. IMPACT ON ENVIRONMENT, SAFETY AND HEALTH:
This event did not have an impact on the environment, safety, or health. Employee's Pu-238 contaminated boots and gloves were decontaminated prior to leaving the work area. There were no personnel uptakes or spread of radionuclide contamination as a result of this incident.

28. PROGRAMMATIC IMPACT:
Radiological Controls will implement better planning for

28. PROGRAMMATIC IMPACT: (continued)
performing work in Environmental Restorations sites. Available data for each site must be reviewed to ensure personnel safety and environmental protection.

29. IMPACT UPON CODES AND STANDARDS:
None

30. LESSONS LEARNED:
If a known contaminiation area exists with high activity contamination either below grade (soils) or behind a structure/wall (buildings), the area must be posted properly, proper administrative controls identified/implemented, and procedures are correct, to minimize the potential for personnel exposure.

31. SIMILAR OCCURRENCE REPORT NUMBERS:
1) None

32. USER FIELD #1:

33. USER FIELD #2:

34. DOE FACILITY REPRESENTATIVE INPUT:

Entered by: Date:

35. DOE PROGRAM MANAGER INPUT:

Entered by: Date:

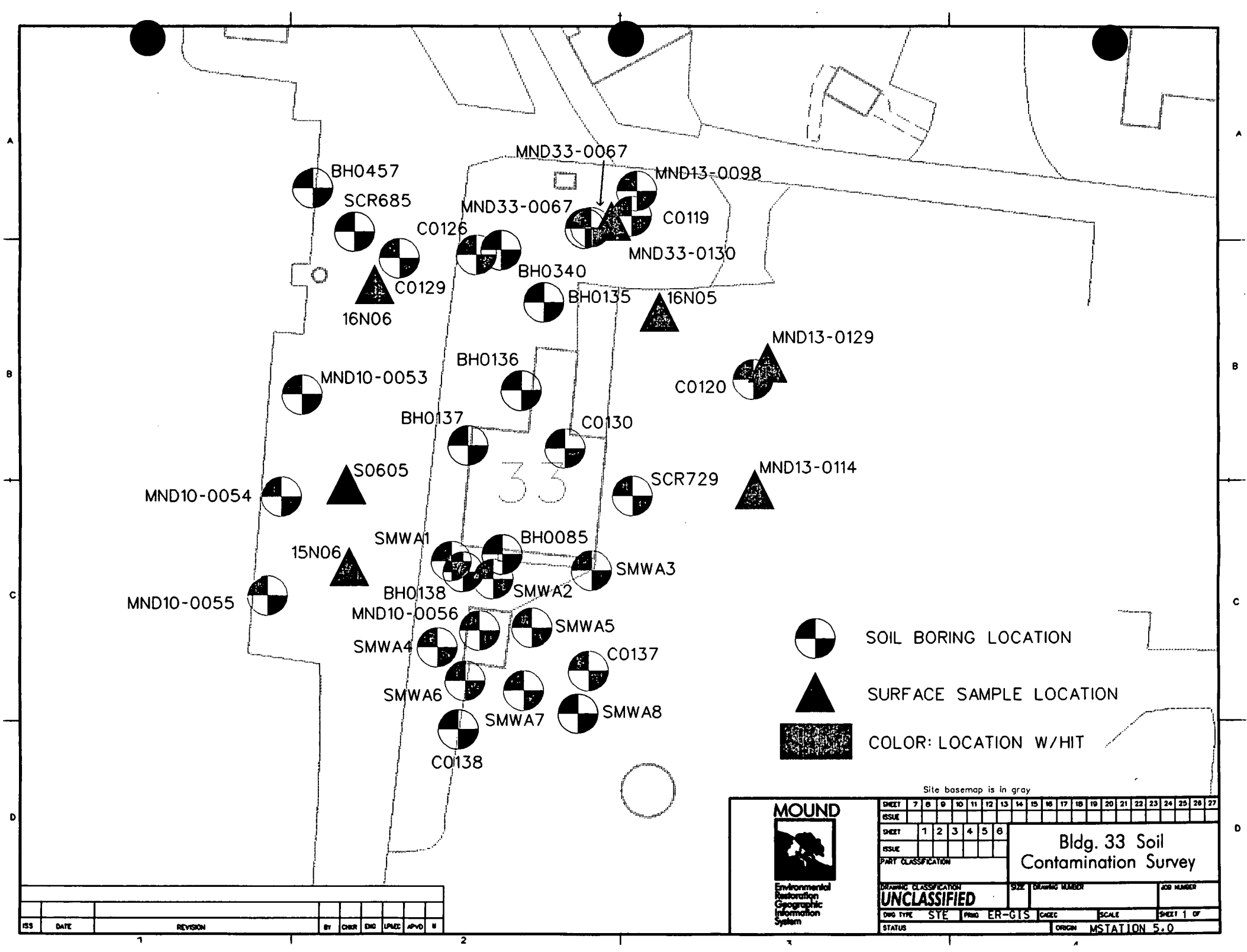
36. SIGNATURES: (FM's original signature on hardcopy)

Approved by: Katherine G. Koehler Date: 05/22/1997
Facility Manager/Designee Telephone No.: (937)865-4886

Approved by: Date:
DOE Facility Representative/Designee Telephone No.:

Approved by: Date:
DOE Program Manager/Designee Telephone No.:

Appendix 6.8 Noted Soil Contamination, Vicinity


MND33-0067
BH0457
MND13-0098
SCR685
MND33-0067
C0119
C0126
MND33-0130
C0129
BH0340
BH0135
16N06
16N05
MND13-0129
BH0136
MND10-0053
C0120
BH0137
C0130
33
S0605
MND13-0114
MND10-0054
SCR729
SMWA1
BH0085
15N06
SMWA3
BH0138
SMWA2
MND10-0055
MND10-0056
SMWA5
SMWA4
C0137
SMWA6
SMWA7
SMWA8
C0138
SOIL BORING LOCATION
SURFACE SAMPLE LOCATION
COLOR: LOCATION W/HIT
Site basemap is in gray
MOUND
Environmental Restoration Geographic Information System
Bldg. 33 Soil Contamination Survey
UNCLASSIFIED
STE
ER-GIS
MSTATION 5.0
ISS
DATE
REVISION
BY
CHKR
ENG
LDAES
APVD
M

Location_name	Location_type	Collection_date	Media	Value_name	Value	Value_units	Det limit	Start_depth	End_depth	Depth_unit
15N06	Surface location	19940907	Soil	Total Aromatic Hydrocarbons	2892152	IC		0	1.5	FT
15N06	Surface location	19940907	Soil	Total C5 TO C11 Petrolium Hydrocarbons	5475698	IC		0	1.5	FT
15N06	Surface location	19940907	Soil	Total Semivolatile Hydrocarbons	93427	IC		0	1.5	FT
16N05	Surface location	19940922	Soil	Plutonium-238	243	PCI/G		0	1.5	FT
16N05	Surface location	19940922	Soil	Total Aromatic Hydrocarbons	212721	IC		0	1.5	FT
16N05	Surface location	19940922	Soil	Total C5 TO C11 Petrolium Hydrocarbons	409844	IC		0	1.5	FT
16N05	Surface location	19940922	Soil	Total Semivolatile Hydrocarbons	1318	IC		0	1.5	FT
16N06	Surface location	19940906	Soil	Total Aromatic Hydrocarbons	3921286	IC		0	1.5	FT
16N06	Surface location	19940906	Soil	Total C5 TO C11 Petrolium Hydrocarbons	7202920	IC		0	1.5	FT
16N06	Surface location	19940906	Soil	Total Semivolatile Hydrocarbons	86244	IC		0	1.5	FT
C0119	Borehole	19821201	Soil	Plutonium-238	17.81	PCI/G	0.01	1.5	1.5	FT
C0119	Borehole	19821201	Soil	Plutonium-238	1.78	PCI/G	0.01	3	3	FT
C0119	Borehole	19821201	Soil	Plutonium-238	9.98	PCI/G	0.01	4.5	4.5	FT
C0119	Borehole	19821201	Soil	Plutonium-238	2.29	PCI/G	0.01	6	6	FT
C0119	Borehole	19821201	Soil	Plutonium-238	17.9	PCI/G	0.01	7.5	7.5	FT
C0119	Borehole	19821201	Soil	Plutonium-238	6.24	PCI/G	0.01	10	10	FT
C0120	Borehole	19821201	Soil	Plutonium-238	83.7	PCI/G	0.01	1.5	1.5	FT
C0120	Borehole	19821201	Soil	Plutonium-238	32.3	PCI/G	0.01	3	3	FT
C0120	Borehole	19821201	Soil	Plutonium-238	0.18	PCI/G	0.01	4.5	4.5	FT
C0120	Borehole	19821201	Soil	Plutonium-238	0.29	PCI/G	0.01	6	6	FT
C0120	Borehole	19821201	Soil	Plutonium-238	83	PCI/G	0.01	7.5	7.5	FT
C0120	Borehole	19821201	Soil	Plutonium-238	6.92	PCI/G	0.01	10	10	FT
C0120	Borehole	19821201	Soil	Plutonium-238	0.56	PCI/G	0.01	12	12	FT
C0126	Borehole	19821201	Soil	Plutonium-238	5.57	PCI/G	0.01	1.5	1.5	FT
C0126	Borehole	19821201	Soil	Plutonium-238	79	PCI/G	0.01	3	3	FT
C0126	Borehole	19821201	Soil	Plutonium-238	6.51	PCI/G	0.01	4.5	4.5	FT
C0126	Borehole	19821201	Soil	Plutonium-238	0.37	PCI/G	0.01	6	6	FT
C0129	Borehole	19821201	Soil	Plutonium-238	3.7	PCI/G	0.01	1.5	1.5	FT
C0129	Borehole	19821201	Soil	Plutonium-238	0.41	PCI/G	0.01	3	3	FT
C0129	Borehole	19821201	Soil	Plutonium-238	0.92	PCI/G	0.01	4.5	4.5	FT
C0129	Borehole	19821201	Soil	Plutonium-238	0.85	PCI/G	0.01	6	6	FT
C0129	Borehole	19821201	Soil	Plutonium-238	0.05	PCI/G	0.01	7.5	7.5	FT
C0129	Borehole	19821201	Soil	Plutonium-238	0.04	PCI/G	0.01	9	9	FT
C0130	Borehole	19821201	Soil	Plutonium-238	48.1	PCI/G	0.01	1.5	1.5	FT
C0130	Borehole	19821201	Soil	Plutonium-238	1.41	PCI/G	0.01	3	3	FT
C0130	Borehole	19821201	Soil	Plutonium-238	1.25	PCI/G	0.01	4.5	4.5	FT
C0130	Borehole	19821201	Soil	Thorium-232	9.99	PCI/G	2	4.5	4.5	FT
C0130	Borehole	19821201	Soil	Plutonium-238	0.39	PCI/G	0.01	7.5	7.5	FT
C0130	Borehole	19821201	Soil	Plutonium-238	0.37	PCI/G	0.01	9	9	FT
C0137	Borehole	19821201	Soil	Plutonium-238	4.78	PCI/G	0.01	1.5	1.5	FT
C0137	Borehole	19821201	Soil	Thorium-232	2.38	PCI/G	2	1.5	1.5	FT
C0137	Borehole	19821201	Soil	Plutonium-238	1.24	PCI/G	0.01	3	3	FT
C0137	Borehole	19821201	Soil	Thorium-232	2.9	PCI/G	2	3	3	FT

MND10-0053	Borehole	19890724	Soil	Aluminum	1430	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Arsenic	2.1	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Barium	373	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Beryllium	0.77	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Cadmium	6.4	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Calcium	196000	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Chromium	4.1	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Cobalt	6.1	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Fluoranthene	120	UG/KG	710	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Iron	4390	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Magnesium	56300	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Manganese	362	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	N-Nitrosodiphenylamine	140	UG/KG	710	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Nickel	15.4	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Plutonium-238	10	PCI/G		0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Potassium	593	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Pyrene	89	UG/KG	710	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Sodium	2750	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Thorium-232	0.1	PCI/G		0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Vanadium	17.8	MG/KG	0	0	0.5	FT
MND10-0053	Borehole	19890724	Soil	Aluminum	13100	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Arsenic	5.2	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Barium	481	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Beryllium	1.1	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Bis(2-ethylhexyl)phthalate	96	UG/KG	790	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Cadmium	4.2	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Calcium	65500	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Chromium	19.6	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Cobalt	13.8	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Copper	15.3	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Di-n-octyl Phthalate	82	UG/KG	790	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Fluoranthene	140	UG/KG	790	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Iron	24600	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Magnesium	10700	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Manganese	498	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Nickel	39.9	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Phenanthrene	87	UG/KG	790	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Plutonium-238	10	PCI/G		3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Potassium	2200	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Pyrene	110	UG/KG	790	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Silver	2.9	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Sodium	4080	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Thallium	0.23	MG/KG	0	3	7.5	FT
MND10-0053	Borehole	19890724	Soil	Thorium-232	0.6	PCI/G		3	7.5	FT

MND10-0053	Borehole	19890724	Soil	Vanadium	16.3	MG/KG	0	3	7.5 FT
MND10-0053	Borehole	19890724	Soil	1,1,1-Trichloroethane	2	UG/KG	5	7	7.5 FT
MND10-0053	Borehole	19890724	Soil	2-Butanone	5	UG/KG	11	7	7.5 FT
MND10-0053	Borehole	19890724	Soil	Acetone	15	UG/KG	11	7	7.5 FT
MND10-0053	Borehole	19890724	Soil	Methylene Chloride	22	UG/KG	5	7	7.5 FT
MND10-0053	Borehole	19890724	Soil	Tetrachloroethene	1	UG/KG	5	7	7.5 FT
MND10-0054	Borehole	19890724	Soil	1,1,1-Trichloroethane	1	UG/KG	5	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	2-Butanone	3	UG/KG	10	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Acetone	11	UG/KG	10	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Aluminum	1510	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Arsenic	2.2	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Barium	430	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Benzo(k)fluoranthene	180	UG/KG	1800	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Beryllium	0.8	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Cadmium	8	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Calcium	176000	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Chromium	8.1	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Chrysene	200	UG/KG	1800	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Cobalt	6.9	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Fluoranthene	310	UG/KG	1800	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Iron	3940	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Magnesium	78100	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Manganese	264	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Methylene Chloride	18	UG/KG	5	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	N-Nitrosodiphenylamine	330	UG/KG	1800	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Nickel	17.8	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Plutonium-238	18	PCI/G		0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Potassium	627	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Pyrene	290	UG/KG	1800	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Sodium	2430	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Tetrachloroethene	1	UG/KG	5	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Thorium-232	0.1	PCI/G		0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Toluene	3	UG/KG	5	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Vanadium	21	MG/KG	0	0	0.5 FT
MND10-0054	Borehole	19890724	Soil	Aluminum	7650	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Barium	460	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Beryllium	0.79	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Cadmium	3.9	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Calcium	99800	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Chromium	14.3	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Cobalt	11.6	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Copper	8.3	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Iron	17300	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Magnesium	15100	MG/KG	0	3	6.5 FT

MND10-0054	Borehole	19890724	Soil	Manganese	323	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Nickel	32.5	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Plutonium-238	12	PCI/G		3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Potassium	2280	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Sodium	3440	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Thorium-232	0.1	PCI/G		3	6.5 FT
MND10-0054	Borehole	19890724	Soil	Vanadium	11.7	MG/KG	0	3	6.5 FT
MND10-0054	Borehole	19890724	Soil	1,1,1-Trichloroethane	8	UG/KG	5	6	6.5 FT
MND10-0054	Borehole	19890724	Soil	2-Butanone	4	UG/KG	10	6	6.5 FT
MND10-0054	Borehole	19890724	Soil	Acetone	18	UG/KG	10	6	6.5 FT
MND10-0054	Borehole	19890724	Soil	Methylene Chloride	16	UG/KG	5	6	6.5 FT
MND10-0054	Borehole	19890724	Soil	Tetrachloroethene	1	UG/KG	5	6	6.5 FT
MND10-0054	Borehole	19890724	Soil	Toluene	2	UG/KG	5	6	6.5 FT
MND10-0055	Borehole	19890724	Soil	1,1,1-Trichloroethane	33	UG/KG	5	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	2-Butanone	5	UG/KG	10	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Acetone	10	UG/KG	10	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Aluminum	2460	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Aluminum	2440	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Arsenic	3.8	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Arsenic	3	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Barium	424	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Barium	389	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Benzoic Acid	180	UG/KG	7100	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Benzoic Acid	280	UG/KG	7000	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Beryllium	0.81	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Beryllium	0.71	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Cadmium	6.8	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Cadmium	6.7	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Calcium	189000	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Calcium	162000	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Chromium	7.1	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Chromium	9.3	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Cobalt	7.3	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Cobalt	7.1	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Iron	6050	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Iron	6700	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Magnesium	56600	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Magnesium	54700	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Manganese	265	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Manganese	328	MG/KG	0	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	Mercury	0.12	MG/KG	0	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	Methylene Chloride	18	UG/KG	5	0	0.5 FT
MND10-0055	Borehole	19890724	Soil	N-Nitrosodiphenylamine	280	UG/KG	1400	0	8.2 FT
MND10-0055	Borehole	19890724	Soil	N-Nitrosodiphenylamine	530	UG/KG	1400	0	0.5 FT

MND10-0055	Borehole	19890724	Soil	Nickel	17.7	MG/KG	0	0	8.2	FT
MND10-0055	Borehole	19890724	Soil	Nickel	18.5	MG/KG	0	0	0.5	FT
MND10-0055	Borehole	19890724	Soil	Plutonium-238	23	PCI/G		0	8.2	FT
MND10-0055	Borehole	19890724	Soil	Plutonium-238	5	PCI/G		0	0.5	FT
MND10-0055	Borehole	19890724	Soil	Potassium	761	MG/KG	0	0	8.2	FT
MND10-0055	Borehole	19890724	Soil	Potassium	689	MG/KG	0	0	0.5	FT
MND10-0055	Borehole	19890724	Soil	Sodium	2150	MG/KG	0	0	8.2	FT
MND10-0055	Borehole	19890724	Soil	Sodium	2090	MG/KG	0	0	0.5	FT
MND10-0055	Borehole	19890724	Soil	Tetrachloroethene	2	UG/KG	5	0	0.5	FT
MND10-0055	Borehole	19890724	Soil	Thorium-232	0.2	PCI/G		0	8.2	FT
MND10-0055	Borehole	19890724	Soil	Thorium-232	0.4	PCI/G		0	0.5	FT
MND10-0055	Borehole	19890724	Soil	Toluene	1	UG/KG	5	0	0.5	FT
MND10-0055	Borehole	19890724	Soil	Vanadium	19.2	MG/KG	0	0	8.2	FT
MND10-0055	Borehole	19890724	Soil	Vanadium	18.2	MG/KG	0	0	0.5	FT
MND10-0055	Borehole	19890724	Soil	1,1,1-Trichloroethane	2	UG/KG	5	6.7	7	FT
MND10-0055	Borehole	19890724	Soil	2-Butanone	5	UG/KG	10	6.7	7	FT
MND10-0055	Borehole	19890724	Soil	4-Methyl-2-pentanone	2	UG/KG	10	6.7	7	FT
MND10-0055	Borehole	19890724	Soil	Acetone	23	UG/KG	10	6.7	7	FT
MND10-0055	Borehole	19890724	Soil	Methylene Chloride	17	UG/KG	5	6.7	7	FT
MND10-0055	Borehole	19890724	Soil	Tetrachloroethene	4	UG/KG	5	6.7	7	FT
MND10-0055	Borehole	19890724	Soil	Toluene	2	UG/KG	5	6.7	7	FT
MND10-0056	Borehole	19890807	Soil	1,1,1-Trichloroethane	2	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	2-Butanone	9	UG/KG	11	0.5	1	FT
MND10-0056	Borehole	19890807	Soil	2-Butanone	2	UG/KG	10	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Acetone	21	UG/KG	11	0.5	1	FT
MND10-0056	Borehole	19890807	Soil	Acetone	14	UG/KG	10	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Aluminum	1080	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Arsenic	1.9	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Barium	254	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Cadmium	6.8	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Calcium	186000	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Chromium	6.4	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Cobalt	6.3	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Ethylbenzene	3	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890807	Soil	Ethylbenzene	3	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Fluoranthene	21000	UG/KG	77000	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Iron	3420	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Lead	4.8	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Magnesium	62900	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Manganese	186	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Methylene Chloride	4	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890807	Soil	Methylene Chloride	5	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Nickel	15.7	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Plutonium-238	8	PCI/G		0.5	1	FT

MND10-0056	Borehole	19890806	Soil	Potassium	509	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Sodium	1260	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Thallium	0.21	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Thorium-232	1.9	PCI/G		0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Toluene	14	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890807	Soil	Toluene	57	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Trichloroethene	2	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890807	Soil	Trichloroethene	2	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Vanadium	26.1	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Xylenes, Total	6	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890807	Soil	Xylenes, Total	4	UG/KG	5	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Zinc	210	MG/KG	0	0.5	1	FT
MND10-0056	Borehole	19890806	Soil	Acetone	9	UG/KG	11	3	5	FT
MND10-0056	Borehole	19890806	Soil	Aluminum	4510	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Arsenic	1.4	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Barium	327	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Beryllium	1.2	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890807	Soil	Beta-BHC	160	UG/KG	43	3	5	FT
MND10-0056	Borehole	19890806	Soil	Cadmium	3.1	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Calcium	267000	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Chromium	3.8	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Cobalt	8.6	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Iron	10900	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Lead	7.7	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Magnesium	11700	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Manganese	300	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Methylene Chloride	6	UG/KG	5	3	5	FT
MND10-0056	Borehole	19890806	Soil	Nickel	22.6	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Plutonium-238	2056	PCI/G		3	5	FT
MND10-0056	Borehole	19890806	Soil	Potassium	999	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Sodium	1650	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Thorium-232	1.5	PCI/G		3	5	FT
MND10-0056	Borehole	19890806	Soil	Toluene	5	UG/KG	5	3	5	FT
MND10-0056	Borehole	19890806	Soil	Vanadium	17.2	MG/KG	0	3	5	FT
MND10-0056	Borehole	19890806	Soil	Zinc	217	MG/KG	0	3	5	FT
MND13-0098	Borehole	19890806	Soil	Acetone	9	UG/KG	11	0	0.5	FT
MND13-0098	Borehole	19890806	Soil	Aluminum	7610	MG/KG	0	0	0.5	FT
MND13-0098	Borehole	19890806	Soil	Arsenic	5.7	MG/KG	0	0	0.5	FT
MND13-0098	Borehole	19890806	Soil	Barium	413	MG/KG	0	0	0.5	FT
MND13-0098	Borehole	19890806	Soil	Benzo(a)anthracene	280	UG/KG	1300	0	0.5	FT
MND13-0098	Borehole	19890806	Soil	Benzo(a)pyrene	290	UG/KG	1300	0	0.5	FT
MND13-0098	Borehole	19890806	Soil	Benzo(b)fluoranthene	310	UG/KG	1300	0	0.5	FT
MND13-0098	Borehole	19890806	Soil	Benzo(g,h,i)perylene	220	UG/KG	1300	0	0.5	FT
MND13-0098	Borehole	19890806	Soil	Benzo(k)fluoranthene	280	UG/KG	1300	0	0.5	FT

MND13-0098	Borehole	19890806	Soil	Beryllium	1.2	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Cadmium	3.8	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Calcium	42600	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Chromium	16.9	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Chrysene	340	UG/KG	1300	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Cobalt	15.4	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Copper	17.4	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Fluoranthene	590	UG/KG	1300	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Indeno(1,2,3-cd)pyrene	170	UG/KG	1300	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Iron	17700	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Lead	27	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Magnesium	10900	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Manganese	1010	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Methylene Chloride	4	UG/KG	6	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Nickel	30.4	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Phenanthrene	170	UG/KG	1300	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Plutonium-238	534	PCI/G		0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Potassium	1150	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Pyrene	620	UG/KG	1300	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Silver	2.6	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Sodium	1580	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Thallium	0.36	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Thorium-232	5.1	PCI/G		0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Toluene	3	UG/KG	6	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Vanadium	19.6	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890806	Soil	Zinc	263	MG/KG	0	0	0.5 FT
MND13-0098	Borehole	19890807	Soil	Acetone	2	UG/KG	12	3	5 FT
MND13-0098	Borehole	19890806	Soil	Acetone	10	UG/KG	12	3	5 FT
MND13-0098	Borehole	19890806	Soil	Aluminum	9370	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Arsenic	6.4	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Barium	393	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Beryllium	1.3	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Cadmium	3.4	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Calcium	34400	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Chromium	19	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Cobalt	16.8	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Copper	18.1	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Fluoranthene	160	UG/KG	990	3	5 FT
MND13-0098	Borehole	19890806	Soil	Iron	18500	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Lead	22.1	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Magnesium	8080	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Manganese	579	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890806	Soil	Mercury	0.17	MG/KG	0	3	5 FT
MND13-0098	Borehole	19890807	Soil	Methylene Chloride	5	UG/KG	6	3	5 FT

MND13-0098	Borehole	19890806	Soil	Methylene Chloride	5	UG/KG	6	3	5	FT
MND13-0098	Borehole	19890806	Soil	Nickel	31.7	MG/KG	0	3	5	FT
MND13-0098	Borehole	19890806	Soil	Plutonium-238	25	PCI/G		3	5	FT
MND13-0098	Borehole	19890806	Soil	Potassium	1150	MG/KG	0	3	5	FT
MND13-0098	Borehole	19890806	Soil	Pyrene	130	UG/KG	990	3	5	FT
MND13-0098	Borehole	19890806	Soil	Silver	3.2	MG/KG	0	3	5	FT
MND13-0098	Borehole	19890806	Soil	Sodium	1840	MG/KG	0	3	5	FT
MND13-0098	Borehole	19890806	Soil	Thorium-232	0.5	PCI/G		3	5	FT
MND13-0098	Borehole	19890806	Soil	Toluene	7	UG/KG	6	3	5	FT
MND13-0098	Borehole	19890806	Soil	Trichloroethene	1	UG/KG	6	3	5	FT
MND13-0098	Borehole	19890806	Soil	Vanadium	20.7	MG/KG	0	3	5	FT
MND13-0098	Borehole	19890806	Soil	Zinc	263	MG/KG	0	3	5	FT
MND13-0114	Surface location	19910903	Soil	Aluminum	2980	MG/KG	39.8	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Arsenic	2.9	MG/KG	2	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Benzo(a)anthracene	64	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Benzo(a)pyrene	52	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Benzo(b)fluoranthene	67	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Benzo(k)fluoranthene	48	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Bis(2-ethylhexyl)phthalate	450	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Calcium	144000	MG/KG	994	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Chromium	3.6	MG/KG	2	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Chrysene	84	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Copper	8.4	MG/KG	5	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Fluoranthene	160	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Iron	10700	MG/KG	19.9	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Lead	6.1	MG/KG	3	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Magnesium	38800	MG/KG	994	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Manganese	318	MG/KG	3	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Phenanthrene	41	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Pyrene	100	UG/KG	340	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Vanadium	14.5	MG/KG	9.9	1.5	2	FT
MND13-0114	Surface location	19910903	Soil	Zinc	28.9	MG/KG	4	1.5	2	FT
MND13-0115	Surface location	19910903	Soil	Chloride	2.5	MG/KG	1.3	1.5	2	FT
MND13-0115	Surface location	19910903	Soil	Nitrate	67.9	MG/KG	1.3	1.5	2	FT
MND13-0115	Surface location	19910903	Soil	Sulfate	50.8	MG/KG	1.3	1.5	2	FT
MND13-0129	Surface location	19910904	Soil	Chloride	19.4	MG/KG	1.4	1.5	2	FT
MND13-0129	Surface location	19910904	Soil	Nitrate	51.7	MG/KG	1.4	1.5	2	FT
MND13-0129	Surface location	19910904	Soil	Sulfate	38.1	MG/KG	1.4	1.5	2	FT
MND33-0067	Borehole	19911122	Soil	1,2-Dichloroethene	1	UG/KG	6	8	10	FT
MND33-0067	Borehole	19911122	Soil	2-Butanone	5	UG/KG	11	8	10	FT
MND33-0067	Borehole	19911122	Soil	2-Hexanone	2	UG/KG	11	8	10	FT
MND33-0067	Borehole	19911122	Soil	4-Methyl-2-pentanone	2	UG/KG	11	8	10	FT
MND33-0067	Borehole	19911122	Soil	Xylenes, Total	2	UG/KG	6	8	10	FT
MND33-0130	Surface location	19920205	Soil	Acenaphthene	150	UG/KG	840	0	0.5	FT

MND33-0130	Surface location	19920205	Soil	Acenaphthene	110	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Aluminum	5260	MG/KG	6	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Aluminum	4540	MG/KG	6	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Anthracene	740	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Anthracene	820	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Antimony	26.1	MG/KG	3	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Antimony	18.6	MG/KG	3	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Barium	47	MG/KG	0.2	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Barium	58.8	MG/KG	0.2	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(a)anthracene	1900	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(a)anthracene	930	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(a)pyrene	1700	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(a)pyrene	910	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(b)fluoranthene	1400	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(b)fluoranthene	1100	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(g,h,i)perylene	1300	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(g,h,i)perylene	600	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(k)fluoranthene	1500	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzo(k)fluoranthene	770	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzoic Acid	190	UG/KG	4100	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Benzoic Acid	180	UG/KG	4000	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Beryllium	1.4	MG/KG	0.2	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Beryllium	1.3	MG/KG	0.2	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Bis(2-ethylhexyl)phthalate	740	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Bis(2-ethylhexyl)phthalate	660	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Cadmium	7.9	MG/KG	0.2	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Cadmium	6.4	MG/KG	0.2	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Calcium	128000	MG/KG	2	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Calcium	122000	MG/KG	2	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Chloride	121.28	MG/KG	0.5	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Chloride	104.41	MG/KG	0.5	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Chromium	23.3	MG/KG	1	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Chromium	22.8	MG/KG	1	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Chrysene	2200	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Chrysene	1200	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Cobalt	6.2	MG/KG	1	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Cobalt	4.5	MG/KG	1	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Copper	63.2	MG/KG	1	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Copper	35.8	MG/KG	1	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Dibenz(a,h)anthracene	450	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Dibenz(a,h)anthracene	210	UG/KG	820	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Dibenzofuran	120	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Fluoranthene	5200	UG/KG	840	0	0.5 FT
MND33-0130	Surface location	19920205	Soil	Fluoranthene	2900	UG/KG	820	0	0.5 FT

MND33-0130	Surface location	19920205	Soil	Fluorene	290	UG/KG	840	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Fluorene	130	UG/KG	820	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Indeno(1,2,3-cd)pyrene	1300	UG/KG	840	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Indeno(1,2,3-cd)pyrene	710	UG/KG	820	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Iron	11000	MG/KG	1	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Iron	5120	MG/KG	1	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Lead	39.1	MG/KG	0.2	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Lead	28.6	MG/KG	0.2	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Magnesium	42500	MG/KG	5	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Magnesium	34500	MG/KG	5	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Manganese	562	MG/KG	0.2	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Manganese	504	MG/KG	0.2	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Nickel	16.4	MG/KG	2	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Nickel	13	MG/KG	2	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Nitrate	2.69	MG/KG	0.1	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Phenanthrene	3000	UG/KG	840	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Phenanthrene	1500	UG/KG	820	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Potassium	402	MG/KG	10	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Potassium	402	MG/KG	10	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Pyrene	3200	UG/KG	840	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Pyrene	1700	UG/KG	820	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Silver	12.5	MG/KG	1	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Silver	11.7	MG/KG	1	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Sodium	554	MG/KG	10	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Sodium	538	MG/KG	10	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Tetrachloroethene	47	UG/KG	6	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Tetrachloroethene	110	UG/KG	6	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Trichloroethene	3	UG/KG	6	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Vanadium	18.1	MG/KG	1	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Vanadium	15.3	MG/KG	1	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Zinc	288	MG/KG	0.5	0	0.5	FT
MND33-0130	Surface location	19920205	Soil	Zinc	159	MG/KG	0.5	0	0.5	FT
S0605	Surface location	19850601	Soil	Radium-226	0.7	PCI/G		0	0	FT
SCR729	Borehole	19910923	Soil	Thorium-232	2.7	PCI/G		3	4	FT
SMWA1	Borehole	19970416	Soil	Plutonium-238	1124	PCI/G	82	0.5	1	FT
SMWA1	Borehole	19970416	Soil	Plutonium-238	1176	PCI/G	40	1	3	FT
SMWA2	Borehole	19970408	Soil	Plutonium-238	926	PCI/G	39	1	3	FT
SMWA2	Borehole	19970408	Soil	Plutonium-238	115	PCI/G	50	3	5	FT
SMWA3	Borehole	19970407	Soil	Plutonium-238	34	PCI/G	24	3	5	FT
SMWA4	Borehole	19970416	Soil	Plutonium-238	749	PCI/G	37	1	3	FT
SMWA4	Borehole	19970416	Soil	Plutonium-238	90	PCI/G	42	3	5	FT
SMWA5	Borehole	19970407	Soil	Plutonium-238	3912	PCI/G	97	0.5	1	FT
SMWA5	Borehole	19970407	Soil	Plutonium-238	560	PCI/G	38	1	3	FT
SMWA6	Borehole	19970408	Soil	Plutonium-238	17996	PCI/G	188	0.5	1	FT

SMWA6	Borehole	19970408	Soil	Plutonium-238	1547	PCI/G	40	1	3	FT
SMWA6	Borehole	19970408	Soil	Plutonium-238	332	PCI/G	56	3	5	FT
SMWA7	Borehole	19970407	Soil	Plutonium-238	10354	PCI/G	87	0.5	1	FT
SMWA7	Borehole	19970407	Soil	Plutonium-238	588	PCI/G	66	1	3	FT
SMWA7	Borehole	19970407	Soil	Plutonium-238	414	PCI/G	29	3	5	FT

Appendix 6.9 Structure Specific Work Plan For Building 33 (Extract)

Structure Specific Work Plan for Building 33

DECEMBER 1997

Project Scope

This project will remove the superstructure of Building 33 and a small segment (1-2 sq. Ft.) of floor slab currently in a storage area. The remaining slab and foundation of the building will be left in place until a later date. With the highly contaminated (radiological) soil area adjacent to the south side of the building, the below grade removal of the slab and foundation will occur in the future. This entire below grade area will be remediated as a unit after Building 38 has been dismantled and additional sub-surface characterization has been completed.

ISOLATION OF UTILITIES

The isolation of utilities associated with Building 33 will be accomplished as Maintenance activities and the normal Job Safety & Hazard Analysis (JSHA) used in maintaining and modifying utility lines on site will be utilized. These utilities include:

Domestic water- the domestic water take-off for Building 33 is between two sectional valves on the plant water loop. These valves will be closed to allow removal of the structure. In the spring (warmer temperatures), the branch line will be unearthed at the main line and the branch will be capped. The sectional valves will then be opened.

Compressed air and argon- there are no valves from the main supply lines on the West Stanchion system, the shutoff valves are located inside the building. A shutdown of the compressed air line and argon line feeding the SM/PP complex must be arranged.

Steam and condensate- the valves for the building are located on a stanchion bridge which crosses

the internal SP/PP roadway. The valves will be closed and the lines disconnected to allow for the structure removal and pipe bridge removal over the road.. During the Spring shutdown of the steam system to the SM/PP complex, these lines will be capped at the main lines. The last branch stanchion on the west side of the road will then be removed.

Fire water- the fire protection engineer will perform a Fire Hazard Analysis (FHA) of the building and the sprinkler system would be deactivated. The PIV north of the building would be closed.

NOTE: The domestic and fire water would be shut off and drained prior to the isolation of the steam and condensate system.

Fire alarm line- the line will be disconnected upon completion of the FHA by the fire protection engineer.

Telephone lines - phone lines to be disconnected immediately.

Molan lines- the molan system utilizes Building 33 for the line amplifiers. The molan line continues to Building 95 and is used for "carrying" the chiller system controls signals. This will be changed to a different system (most likely is telephone dial-up and modem). Molan branch associated with Building 33 would then be deactivated.

Air conditioning (residential type) - the Freon will be evacuated and recovered from the system.

Electrical power- the electrical power is from an overhead 480v/3phase line from a motor control center located in Building 36. A short outage will be required which will effect Buildings 31, 31a and 30. This will be the last isolation activity prior to structural demolition.

PRE-STRUCTURE REMOVAL ITEMS

1. All excess material and equipment shall be removed from the building.

2. Disconnect weather monitor and wind speed unit from roof. Deliver to project engineer.

3. Remove florescent light tubes, ballasts, sodium vapor lights and mercury vapor lights and store for Waste Management representative.

4. Remove mercury containing thermostats from the HVAC system and store for Waste Management representative.

5. Water lines, steam and condensate lines are insulated with a combination of fiberglass and "mudded" asbestos joints. A section of fiberglass is to be removed on each side of the "mudded" asbestos joints. The "mudded" joint areas are to be sealed in plastic back to the exposed pipe within the fiberglass area. The plastic is to be sealed to the exposed pipe. The pipes are to be cut at the sealed areas with a saw or pipecutter and the exposed ends are to be taped. NOTE: torch

cutting will not be permitted with the fire sprinkler system deactivated. The sealed ACM joint is to be placed in a bag or drum marked for asbestos waste. See Asbestos Abatement Manual. NOTE: Notification to Regional Air Pollution Control Agency 10 working days prior to removal.

STRUCTURAL DEMOLITION

1. Structural demolition will follow the General Work Plan.

2. Establish Demolition Zone with orange construction fence, 75 feet from building perimeter.

3. Establish air monitoring and setup water hoses for dust control.

4. Demolition will require excavators with bucket, shear and grapple. Front loaders may also be used for loading construction debris.

5. Debris will be placed in roll-offs for disposal off site.

6. Demolition of the building will start on the east side of the building (metal storage attachment) and continue toward the west side of the building. Upon removing the metal storage unit on the east side, a small segment of concrete (12" x 12") must be removed due to contamination. The contaminated area is coated with paint and marked.

7. An RWP must be written.

8. The painted area will be saw cut and broken out. The concrete will be disposed as LSA waste.

9. The remaining block and steel structure will be removed using the heavy equipment.

10. Lead from sanitary drain fittings and the roof flashing for drain vent lines needs to be segregated and set aside for Waste Disposal representative.

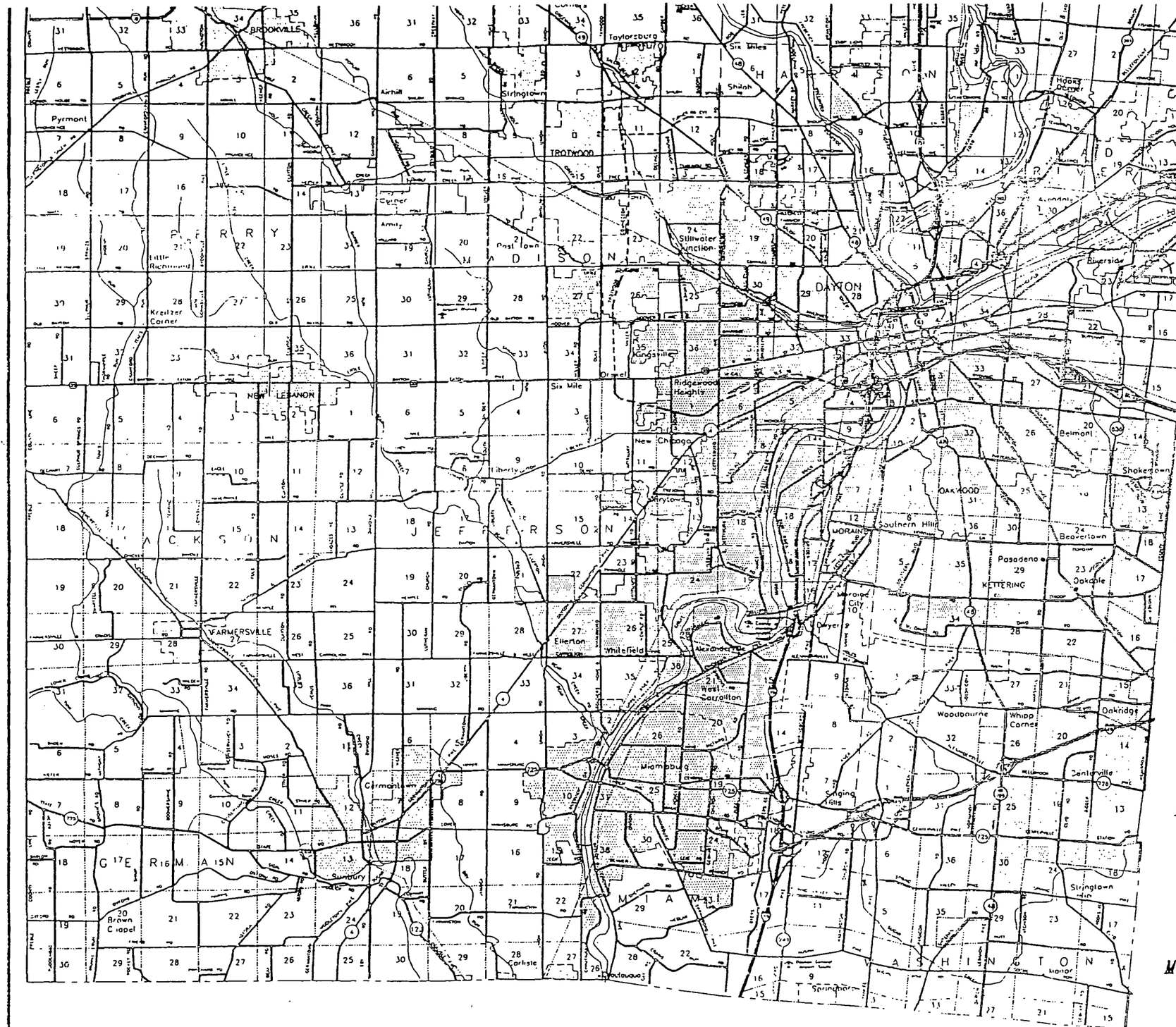
11. The overhead lines and stanchions which fed the building are to be removed back to the 1st branch stanchion on the west side of the road (all lines disconnected or valves closed earlier).

12. The metal storage building south of Building 33 is also to be removed. The metal walls need to be cut above the asphalt. The asphalt beneath the storage building must <u>not</u> be disturbed since highly contaminated soil is present beneath the asphalt.

13. Plumber's plugs are to placed in the exposed sanitary and storm sewer lines.

FOUNDATION REMOVAL

Note: No slab or foundation removal will occur at this time except for the small quantity listed in item 8 under structure removal.



0 1/2 1 2 3 4

SCALE IN MILES

REX A. DICKEY, P.E.,P.S.

MONTGOMERY COUNTY ENGINEER

FEBRUARY, 1992

FSD * REVISION NUMBER

Legend

PROJECTS

- Test Fire Valley
- SM/PP Hill
- Main Hill Non-RAD
- Waste Management
- Main Hill Tritium
- Main Hill RAD
- Isotope Power

PRS STATUS

- D & D PRS's
- NFA PRS's
- NFAPS PRS's
- RA,FA,UB PRS's

TN GN MN

0 100 200 400 600 800 1000

Scale in Feet

ISS	DATE	REVISION	BY	CHKR	ENG	M
*	**/**/**	*	*	*	*	

MOUND

Environmental Restoration Geographic Information System

SHEET	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27					
ISSUE																										
SHEET	1	2	3	4	5	6																				
ISSUE	*																									

( ) TITLE CLASSIFICATION

Building Ownership with PRS's

PART CLASSIFICATION

DRAWING CLASSIFICATION	SIZE	DRAWING NUMBER	JOB NUMBER
UNCLASSIFIED	D	FSD *	*

DWG TYPE	PRMG	CADEC	SCALE	SHEET
*		*	*	1 OF *

STATUS MD-REL -**/**/** ORIGIN MSTATION 5.0

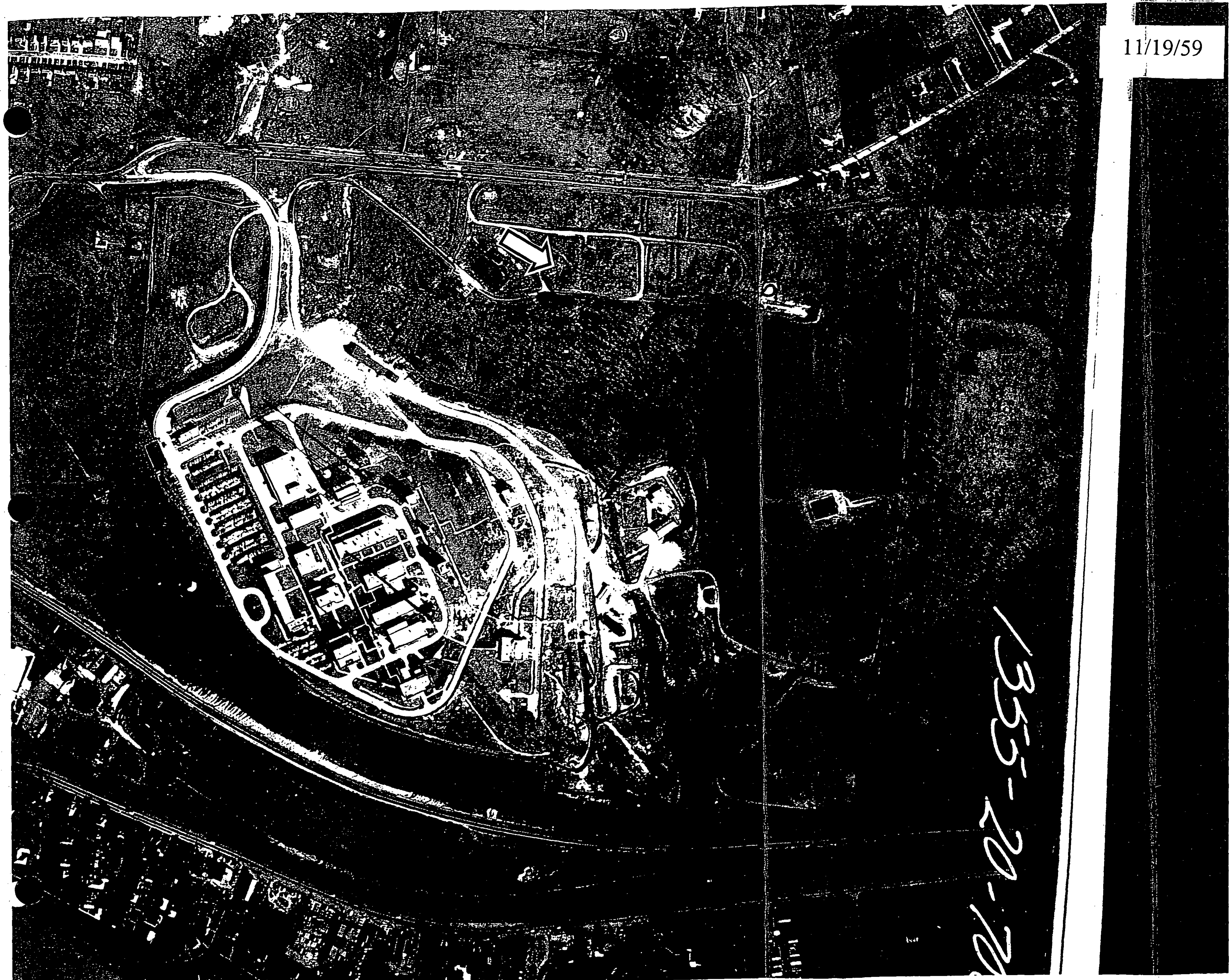
04/04/94

06/83

04/14/73

03/30/68

04/07/65



11/19/59
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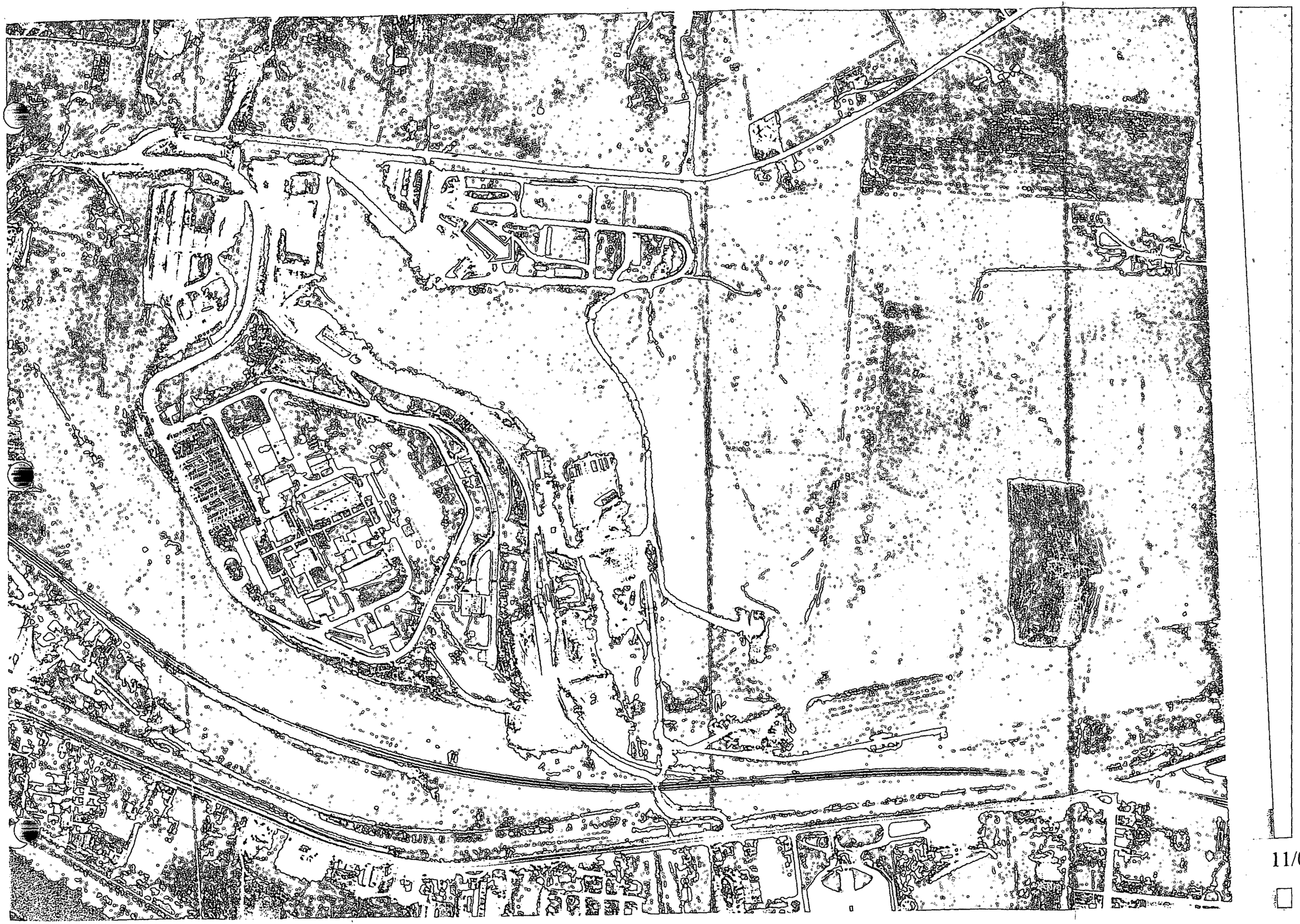
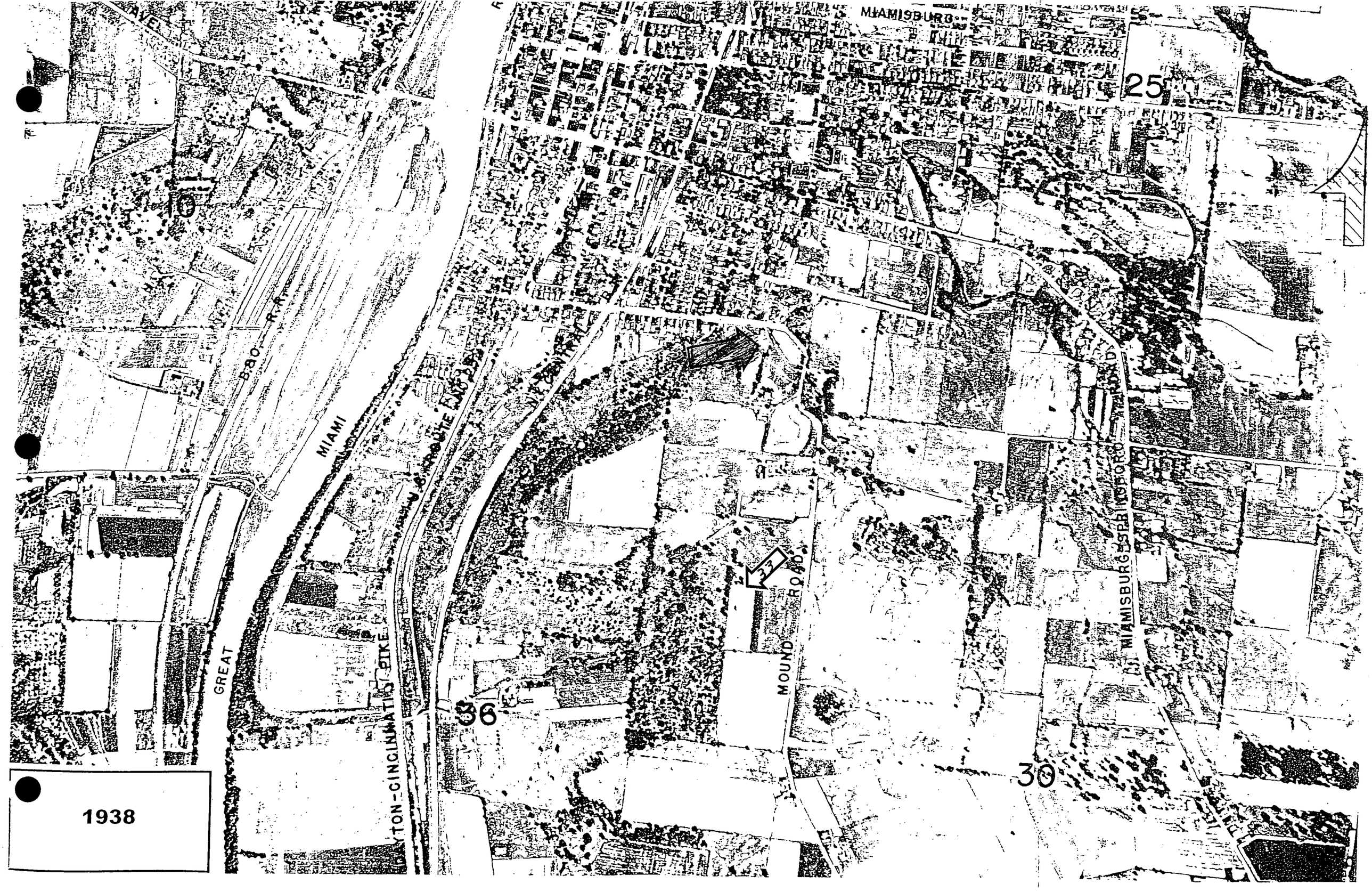


11/08/49


MIAMISBURG
25
10
B&O R.R.
MIAMI
GREAT
DAYTON-CINCINNATI PIKE
MOUND ROAD
MIAMISBURG-SPRINGBORO RD.
33
6
30
1938