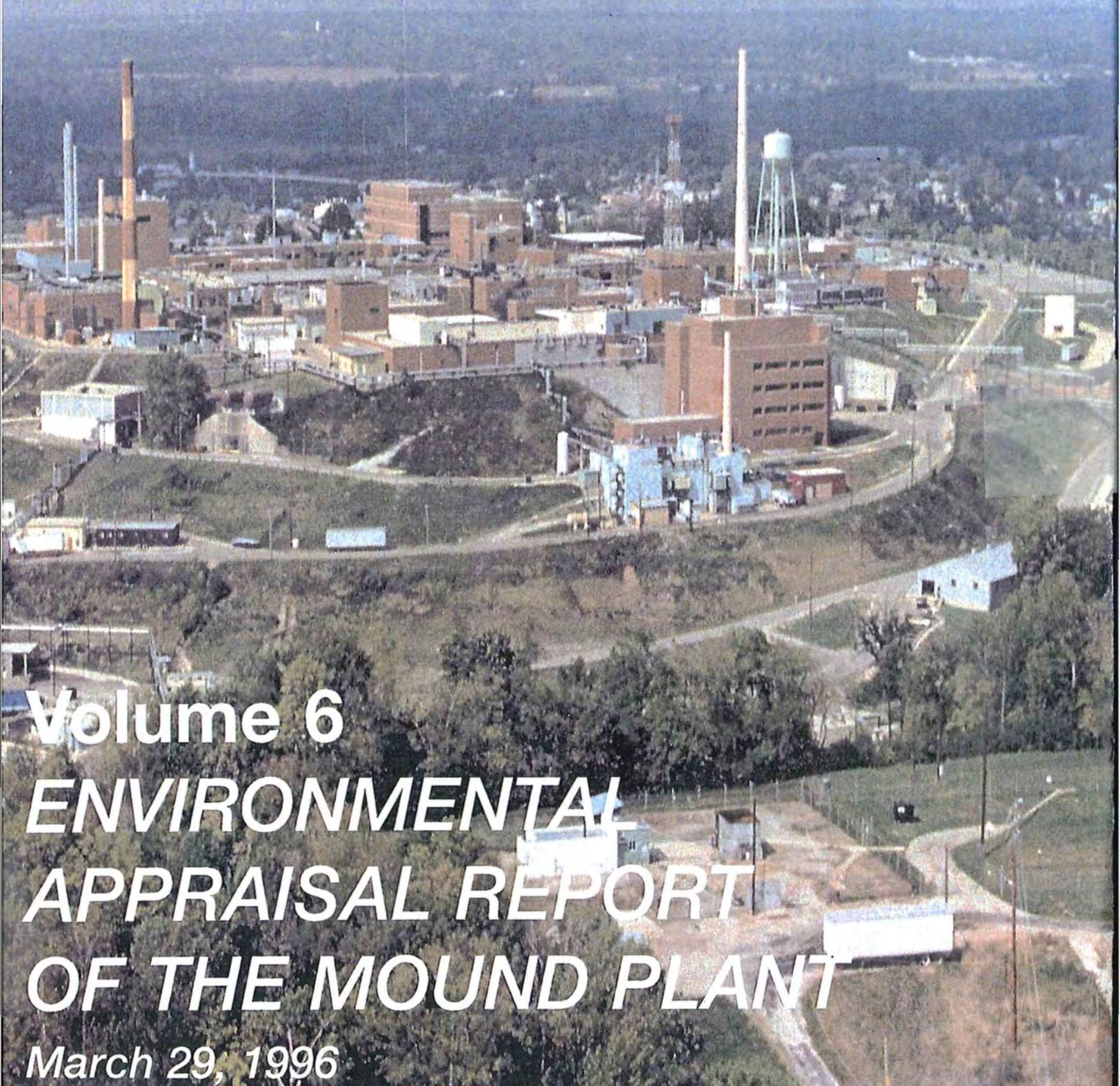


EG&G MOUND-04-01----9610220017



**Volume 6**  
**ENVIRONMENTAL**  
**APPRAISAL REPORT**  
**OF THE MOUND PLANT**

**March 29, 1996**

**ENVIRONMENTAL APPRAISAL REPORT  
OF THE MOUND PLANT  
Volume 6**

**Prepared March 29, 1996 by:**  
EG&G Mound Applied Technologies  
P.O. Box 3000  
1 Mound Road  
Miamisburg, OH 45343

**This report was prepared for EG&G MAT by:**

Nancy Hurst & Associates  
400 Mississippi Street  
Morgantown, WV 26505  
(301) 983-1893/(304) 292-7752

# Environmental Appraisal of the Mound Plant

## Report Layout

Section	Title	Volume
1.0	EXECUTIVE SUMMARY .....	1
2.0	SCOPE OF REPORT .....	1
3.0	HISTORY OF THE MOUND PLANT .....	1
4.0	CURRENT STATUS OF THE MOUND PLANT .....	1
5.0	APPRAISAL METHODOLOGY .....	1
6.0	SITEWIDE OVERVIEW .....	1
7.0	REFERENCES .....	1
8.0	EXHIBITS .....	1
9.0	BUILDING APPRAISALS .....	2
	(A, B, C, COS, DS, E/E Annex, G (Garage), GH, GIS, GP-1)	
	BUILDING APPRAISALS .....	3
	(GP-5, GP-8, GP-44, GW, H, HH, I, M, Modular 4, OSE)	
	BUILDING APPRAISALS .....	4
	(OSW, P, PH, PS, R, SD, SM, SST, SW, T)	
	BUILDING APPRAISALS .....	5
	(W, WD/WDA, WH-1, WH-2, WH-3, 1, 2, 3, 13, 14, 16, 17, 19, 21, 22)	
	BUILDING APPRAISALS .....	6
	(23, 24, 25, 26, 27, 28, 29, 30, 31, 31-A, 33, 34, 35, 36)	
	BUILDING APPRAISALS .....	7
	(37, 38, 39, 40, 42, 43, 44, 45, 46, 47)	
	BUILDING APPRAISALS .....	8
	(48, 49, 50, 51, 55, 56, 57, 58, 59, 60, 61, 63-E/63-W, 65, 66, 67)	
	BUILDING APPRAISALS .....	9
	(68, 69, 70, 71, 72, 73, 74, 79, 85, 87, 88, 89, 90, 91, 92)	
	BUILDING APPRAISALS .....	10
	(93, 94, 95, 96, 98, 99, 100, 101, 102, 104, 105, 106, 112, 113, 120)	
	BUILDING APPRAISALS .....	11
	(Generator 1, 6; Magazines 5, 6, 7, 8, 10, 11, 20, 52, 53, 54, 64, 80, 81, 82, 83, 84)	
10.0	APPENDIX I .....	12
	(Unclassified Controlled Nuclear Information (UCNI))	

**Environmental Appraisal of the Mound Plant**  
**Table of Contents for Volume 6**

<b>Section</b>	<b>Title</b>	<b>Page</b>
<b>9.0</b>	<b>BUILDING APPRAISALS</b>	
<b>9.46</b>	<b>Building 23</b> .....	<b>9.46-1</b>
	9.46.1 Scope of Building 23 Report .....	9.46-1
	9.46.2 Description of Building 23 .....	9.46-1
	9.46.3 Summary of Findings .....	9.46-1
	9.46.4 Observations .....	9.46-2
	9.46.5 Findings and Recommendations .....	9.46-4
	9.46.6 Attachments .....	9.46-7
<b>9.47</b>	<b>Building 24</b> .....	<b>9.47-1</b>
	9.47.1 Scope of Building 24 Report .....	9.47-1
	9.47.2 Description of Building 24 .....	9.47-1
	9.47.3 Summary of Findings .....	9.47-1
	9.47.4 Observations .....	9.47-1
	9.47.5 Findings and Recommendations .....	9.47-4
	9.47.6 Attachments .....	9.47-5
<b>9.48</b>	<b>Building 25</b> .....	<b>9.48-1</b>
	9.48.1 Scope of Building 25 Report .....	9.48-1
	9.48.2 Description of Building 25 .....	9.48-1
	9.48.3 Summary of Findings .....	9.48-1
	9.48.4 Observations .....	9.48-1
	9.48.5 Findings and Recommendations .....	9.48-3
	9.48.6 Attachments .....	9.48-5
<b>9.49</b>	<b>Building 26</b> .....	<b>9.49-1</b>
	9.49.1 Scope of Building 26 Report .....	9.49-1
	9.49.2 Description of Building 26 .....	9.49-1
	9.49.3 Summary of Findings .....	9.49-1
	9.49.4 Attachment .....	9.49-3
<b>9.50</b>	<b>Building 27</b> .....	<b>9.50-1</b>
	9.50.1 Scope of Building 27 Report .....	9.50-1
	9.50.2 Description of Building 27 .....	9.50-1
	9.50.3 Summary of Findings .....	9.50-1
	9.50.4 Attachments .....	9.50-3
<b>9.51</b>	<b>Building 28</b> .....	<b>9.51-1</b>
	9.51.1 Scope of Building 28 Report .....	9.51-1
	9.51.2 Description of Building 28 .....	9.51-1
	9.51.3 Summary of Findings .....	9.51-1
	9.51.4 Attachments .....	9.51-3

**Environmental Appraisal of the Mound Plant**  
**Table of Contents for Volume 6**

(Continued)

	Page
<b>9.52 Building 29</b> .....	<b>9.52-1</b>
9.52.1 Scope of Building 29 Report .....	9.52-1
9.52.2 Description of Building 29 .....	9.52-1
9.52.3 Summary of Findings .....	9.52-2
9.52.4 Observations .....	9.52-2
9.52.5 Findings and Recommendations .....	9.52-5
9.52.6 Attachments .....	9.52-7
<b>9.53 Building 30</b> .....	<b>9.53-1</b>
9.53.1 Scope of Building 30 Report .....	9.53-1
9.53.2 Description of Building 30 .....	9.53-1
9.53.3 Summary of Findings .....	9.53-1
9.53.4 Observations .....	9.53-2
9.53.5 Findings and Recommendations .....	9.53-5
9.53.6 Attachments .....	9.53-7
<b>9.54 Building 31</b> .....	<b>9.54-1</b>
9.54.1 Scope of Building 31 Report .....	9.54-1
9.54.2 Description of Building 31 .....	9.54-1
9.54.3 Summary of Findings .....	9.54-1
9.54.4 Observations .....	9.54-1
9.54.5 Findings and Recommendations .....	9.54-4
9.54.6 Attachments .....	9.54-7
<b>9.55 Building 31-A</b> .....	<b>9.55-1</b>
9.55.1 Scope of Building 31-A Report .....	9.55-1
9.55.2 Description of Building 31-A .....	9.55-1
9.55.3 Summary of Findings .....	9.55-1
9.55.4 Observations .....	9.55-1
9.55.5 Findings and Recommendations .....	9.55-3
9.55.6 Attachments .....	9.55-5
<b>9.56 Building 33</b> .....	<b>9.56-1</b>
9.56.1 Scope of Building 33 Report .....	9.56-1
9.56.2 Description of Building 33 .....	9.56-1
9.56.3 Summary of Findings .....	9.56-2
9.56.4 Observations .....	9.56-2
9.56.5 Findings and Recommendations .....	9.56-5
9.56.6 Attachments .....	9.56-7

**Environmental Appraisal of the Mound Plant**  
**Table of Contents for Volume 6**

(Continued)

		<b>Page</b>
<b>9.57</b>	<b>Building 34</b> .....	<b>9.57-1</b>
	9.57.1 Scope of Building 34 Report .....	9.57-1
	9.57.2 Description of Building 34 .....	9.57-1
	9.57.3 Summary of Findings .....	9.57-2
	9.57.4 Observations .....	9.57-2
	9.57.5 Findings and Recommendations .....	9.57-5
	9.57.6 Attachments .....	9.57-7
 <b>9.58</b>	 <b>Building 35</b> .....	 <b>9.58-1</b>
	9.58.1 Scope of Building 35 Report .....	9.58-1
	9.58.2 Description of Building 35 .....	9.58-1
	9.58.3 Summary of Findings .....	9.58-1
	9.58.4 Observations .....	9.58-2
	9.58.5 Findings and Recommendations .....	9.58-4
	9.58.6 Attachments .....	9.58-5
 <b>9.59</b>	 <b>Building 36</b> .....	 <b>9.59-1</b>
	9.59.1 Scope of Building 36 Report .....	9.59-1
	9.59.2 Description of Building 36 .....	9.59-1
	9.59.3 Summary of Findings .....	9.59-1
	9.59.4 Observations .....	9.59-2
	9.59.5 Findings and Recommendations .....	9.59-5
	9.59.6 Attachments .....	9.59-7

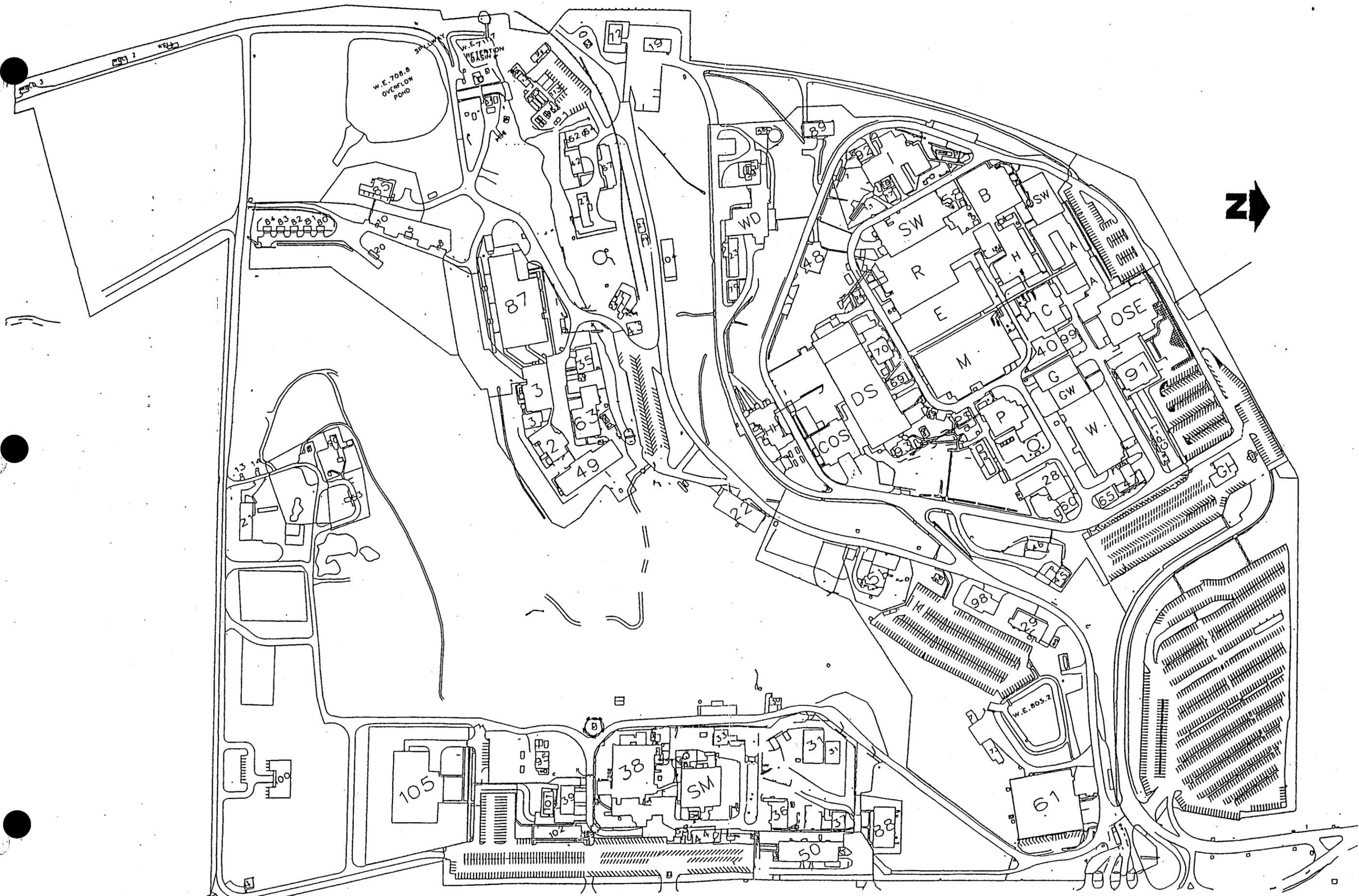
# Environmental Appraisal of the Mound Plant

## LIST OF ACRONYMS

ACBM	asbestos-containing building material
ASTM	American Society for Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
D&D	decontamination and decommissioning
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
EA	environmental assessment
EMSOC	Energetic Materials Safety Overview Committee
EPA	Environmental Protection Agency
ER	environmental restoration
ES&H	environment, safety and health
FY	fiscal year
HAZWOPPER	hazardous waste operation and emergency response training
HEPA	high-efficiency particulate air
HP	health physics
LDR	Land Disposal Restricted
LSA	low specific activity
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollution
NIOSH	National Institute for Occupational Safety and Health
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
NTS	Nevada Test Site (DOE)
OAC	Ohio Administrative Code
OEPA	Ohio Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
OSP	Orphan Source Program
PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
RTG	radioisotopic thermoelectric generator
SAR	Safety Analysis Report
SARA	Superfund Amendments and Reauthorization Act
SPCC	spill prevention, control, and countermeasures
TRU	transuranic
TRUESOC	Transuranic Environmental and Safety Overview Committee
TSCA	Toxic Substances Control Act
UST	underground storage tank
UCNI	unclassified controlled nuclear information
VOC	volatile organic compounds

**This page intentionally left blank.**





BUILDING LOCATION MAP



# Environmental Appraisal of the Mound Plant

## 9.46 BUILDING 23

### 9.46.1 Scope of Building 23 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 23 on February 27, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.46.6.1). Escorting the appraisers were knowledgeable personnel such as the building manager and the process owner. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.46.6.2).

### 9.46.2 Description of Building 23

Building 23 is a one-story, 3,422-square-foot, reinforced concrete block building with a built-up membrane roof. Its location is shown in Attachment 3 (Section 9.46.6.3). The building is bordered by a hillside to the north, Building WD to the west, Building 79 to the east, and a roadway to the south. Floor plans are presented as Attachment 4 (Section 9.46.6.4). The building is serviced by central steam for heat, chilled water, and electrical service (*Mound Facility Physical Characterization*, 12-1-93).

Building 23 was constructed in 1966. The building was originally constructed as a warehouse for the staging and shipping of low-level radioactive waste. Then the building was used to store mixed and transuranic (TRU) mixed waste. The building was modified in 1994 to contain spills by coating the floor and installing trenches and dikes. The building is known to be contaminated with radioactive materials (*Mound Facility Physical Characterization*, 12-1-93).

### 9.46.3 Summary of Findings

The appraisal of Building 23 addressed building-specific issues within the mixed waste management program at Mound. For a review of the mixed waste management program, refer to Volume 1, Section 6.0, Sitewide Overview. The appraisal team did not include the verification that everything stored in the building was identified in the permit.

Building 23 currently houses mixed waste storage. A Part B Resource Conservation and Recovery Act (RCRA) permit application has been filed with the Ohio Environmental Protection Agency (OEPA). The building is currently operating as a RCRA storage facility under interim status. There is a Federal Facility Compliance Agreement between the Department of Energy (DOE) and the OEPA that specifies Mound's management of mixed waste. A part of this

## **Environmental Appraisal of the Mound Plant**

agreement was the development of Mound's Mixed Waste Site Treatment Plan which allows Mound to store characterized legacy waste until treatment and disposal options are identified and available. The building is well-maintained, and in compliance with requirements for storage practices and operating records. Several issues of environmental concern were identified during the walk-through or during review of reference materials.

### **9.46.4 Observations**

#### **9.46.4.1 Air Emissions**

There was one air emission source in the building that was not identified on the air emission inventory. This air emission source is identified on the EAC which is presented as Attachment 1 (Section 9.46.6.1). No air emission permit applications have been submitted to OEPA for activities in the building. There are no fuel-burning units located in the building. There is no evidence of fugitive dust.

#### **9.46.4.2 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.

##### **9.46.4.2.1 Sanitary Wastewater**

The building does not have sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.46.6.5), the building is not serviced by a sanitary line.

##### **9.46.4.2.2 Storm Wastewater**

The building does appear to be serviced by storm drains according to Attachment 5 (Section 9.46.6.5). In 1994, the building was modified to contain all spills. There are no interior floor drains. In the event that the eyewash or safety shower would be activated it would drain into the trench. The trench is segregated at regular intervals to prevent commingling of incompatible wastes in the event of a spill. Sump integrity is checked through annual inspection by EG&G MAT facility maintenance. The building is diked and contains trenches. The floor and trenches

## **Environmental Appraisal of the Mound Plant**

are coated. Exterior grates and drains were not tested to confirm that they connect to the storm drainage system. Roof drains are not piped directly to a storm drain. Storm water is either absorbed into the ground or flows down hill as surface water to the nearest storm water drain.

### **9.46.4.2.3 Chemicals**

A list of chemicals used in Building 23 is included in the BMQ, presented as Attachment 2 (Section 9.46.6.2). 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 was not attempted as 1995 data were being compiled at the time of the appraisal. Storage, handling, and disposal of chemicals in the BMQ were reviewed to assure conformance to regulations related to 40 CFR 122, 40 CFR 261-265,268, and 29 CFR 1910.

Building 23 is inspected weekly to confirm that containers are intact, that there is adequate spill containment, and that safety equipment is in working order. Several of the containers of mixed wastes stored in the building contain chemicals that are identified as Clean Water Act (CWA) priority pollutants in 40 CFR Part 122, Appendix D, Table V. These include benzene, lead, mercury, asbestos, and toluene. A list of materials stored in the building as mixed waste is maintained in the RCRA operating record. Chemical storage and handling procedures are in place for proper storage and disposal of chemicals. There have been no reported spills from Building 23.

### **9.46.4.3 Potable and Service Water**

Potable water is not supplied to the building.

### **9.46.4.4 Chemical Storage and Hazardous Materials**

Chemicals used in the mixed waste processes are stored in Building 23. There are some chemicals that are stored in flammable storage cabinets which meet standard National Fire Protection Association (NFPA) requirements. There are acid storage cabinets. Chemicals are stored in the building in accordance with applicable standards. Material Safety Data Sheets (MSDS's) were available in the building. Observed in the polychlorinated biphenyl (PCB) storage area were several containers of mercury waste, poisons, PCB's, and hazardous wastes. There was insufficient time to evaluate chemicals' compatibility, procedures for determining chemical compatibility and procedures for segregating extremely hazardous materials, and the contingency plan in this potentially high-hazard area.

The building is inadequate in size; the aiseways are too small for emergency response. Two 55-gallon drums were stored on top of 30-gallon drums.

The building is equipped with appropriate emergency response equipment such as a spill control kit, eyewash, safety shower, and fire extinguisher. Equipment is inspected weekly. Fire extinguishers are bar-coded. The inspection date database is maintained in the fire station, Building 98. There is an Emergency Evacuation Plan, and signs were posted in work areas.

## **Environmental Appraisal of the Mound Plant**

There are no aboveground storage tanks in or around the building and no underground storage tanks are associated with this building. There are sumps in the building. They are inspected weekly for cracks or to see if liquid is present. The sumps do not drain to either sanitary or storm lines. They are self-contained and require physical pumping to remove liquids. There are no separators, or catch basins, in or around the building.

The building was tested and does contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There was no evidence of friable asbestos.

Wastes consisting of PCB-contaminated oils and a press are stored in Building 23. There are no capacitors or transformers containing PCB's located in the building (1995 PCB Annual Document Log).

### **9.46.4.5 Solid, Hazardous, and Radioactive Wastes**

Solid wastes generated are primarily paper. Solid wastes are removed by decontamination personnel to a central location. Scrap metal is collected at a specific site, then sent offsite to be recycled by a contractor. These service contracts are maintained by Waste Management. Classified paper is collected and taken to the Montgomery County South Incinerator by Security. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

Wastes are segregated and stored by compatibility and Department of Transportation (DOT) classification. The building does contain some legacy waste which is not well characterized. Personnel are in the process of trying to characterize these containers. Some of the legacy wastes were improperly placed in incompatible containers. The waste from these containers has been repackaged into compatible containers. The mixed waste storage procedures and appearance conform to RCRA requirements. Mixed wastes are collected and transported by a representative of the EG&G Waste Management Group, and are stored in Building 23 for ultimate disposal. All entrances should be posted with the following sign "Danger-Unauthorized Personnel Keep Out" in accordance with requirements OAC 3745-54-14. One sign was posted at the primary entrance, the secondary entrance was not posted. There is no onsite treatment of waste. Individuals working in the building have completed Hazardous Waste Operation and Emergency Response (HAZWOPPER), RADWORKER II, and RCRA training. The building manager was provided no training to perform his functions as building manager.

### **9.46.4.6 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.

### **9.46.5 Findings and Recommendations**

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.46.6.6).

## **Environmental Appraisal of the Mound Plant**

The environmental appraisal of Building 23 indicates that the following action items, in priority order, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

- 23-1 There are emission sources not identified on EG&G MAT's air emission inventory. Evaluate air sources that are not permitted and submit appropriate documentation to RAPCA.
- 23-2 All entrances shall be posted with the following sign "Danger-Unauthorized Personnel Keep Out" in accordance with requirements in OAC 3745-54-14.
- 23-3 Evaluate chemical compatibility, procedures for determining chemical compatibility and procedures for segregating extremely hazardous materials, and the contingency plan in this potentially high-hazard area.
- 23-4 It is recommended that 55-gallon drums not be stored on top of 30-gallon drums.
- 23-5 Provide training to building managers on building specifics, process operations, security, and other responsibilities.

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.46.6.1 Environmental Appraisal Checklist**

# ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 23

Appraisers:

[Signature]  
Name \_\_\_\_\_ Discipline \_\_\_\_\_

[Signature]  
Name \_\_\_\_\_ Discipline \_\_\_\_\_

\_\_\_\_\_  
Name \_\_\_\_\_ Discipline \_\_\_\_\_

\_\_\_\_\_  
Name \_\_\_\_\_ Discipline \_\_\_\_\_

Building Manager: JAMES E. LENTZ

Process Manager: JAMES E. LENTZ

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: 2/27/96

**ENVIRONMENTAL APPRAISAL  
CHECKLIST**

**Table of Contents**

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

## Environmental Approval Checklist

Building Name: 23

PUCKETT SIZEMORE  
 Appraisers: HOAGLAND PUCKETT

Date: 2-27-96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list?	Y/N	
	Are they properly contained?	Y/N	
	Is the building in operation? What are the processes and where do they discharge to?	Y/N <hr/> <hr/>	WASTE CHARACTERIZATION NO DISCHARGE
	Do the floor drains, sinks & toilets appear to be draining properly?	Y/N	NA
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary Storm	NO
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	Y/N <hr/> <hr/> Y/N Y/N	NOT ANYMORE  NA NA
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	Y/N  Y/N Y/N	OUTSIDE  BLDG. IS DIKED; EPOXY LINED TRENCHES; CAN CONTAIN ALL SPILLS

9:46-11

# Environmental Appraisal Checklist

Building Name: 23

Appraisers: PUCKETT SIZEMORE  
BAGLAND

Date: 1-27-96

## Clean Air Act (CAA) Screening Checklist

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

## CAA Checklist

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

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: PUCKETT SIZEMORE  
HOAGLAND GLANDER

Date: 2-27-96

#### CAA Checklist

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

**TABLE A**

Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
* TEST	NA	NA	Y/N	Y/N	VARIOUS				
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

Source: J. LENTZ

\* Drum characterization & repackaging.

Environmental Appraisal Checklist

Building Name: 23

Appraisers: PUFFETT SIZEMORE  
HAGLAND

Date: 2-27-96

Hazardous Materials (HM) Screening Checklist

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

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.1200(b,f)	All containers of hazardous chemicals shall be labeled as to the identity of the chemical and the appropriate hazard warnings.	Y/N	
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	Y/N	MSDS, ARE CURRENT AND ON SITE IN BLDG
29 CFR 1910.22, 1910.106, 1910.176	All places of employment, passageways, storerooms and service areas shall be kept clean and orderly and in a sanitary manner. Aisles shall be unobstructed. Drums and containers are not leaking and are tightly sealed.	Y/N	
29 CFR 1910.106	Storage cabinets for flammable materials are constantly kept closed, are fire resistant and are labeled "FLAMMABLE - Keep Fire Away". Containers inside should be labeled and closed. No spills inside cabinet.	Y/N	
29 CFR 1910.106(d)(7)	Incompatible chemicals are not stored together.	Y/N	COMBUSTIBLES STORED WITH FLAMMABLES TO BE CORRECTED W/IN 72 HRS.
29 CFR 1910.106(d)(4)	Inside Flammable/combustible storage rooms must meet the following: 4 in. raised sill or trench that drains to a safe area, liquid tight wall/floor joints, self-closing doors, gravity or mechanical exhaust providing 6 room changes/hr., exhaust switch located outside room, at least one 3 ft. aisle; no cracks in secondary containment.	Y/N	THE STORAGE ROOM DOES HAVE EXPLOSIVE LIGHTING.

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett  
Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### HM Checklist

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

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

#### HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	Y/N	
	Does it have proper containment?	Y/N	
	Is there a liquid bulk transfer area?	Y/N	CONTAINMENT TRENCHES
	Is there proper containment?	Y/N	INSTALLED - DECEMBER 1995
	Is there an above ground storage tank? If so, complete Table B.	Y/N	

#### Above Ground Storage Tanks Inventory

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/Contamination	If Empty, Flushed
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett  
Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### Safe Drinking Water Act (SDWA) Screening Checklist

Does this facility have potable water?	Y (N)	If yes, conduct the following survey.
--	-------	---------------------------------------

#### SDWA Checklist

↓ Safety Shower/Eyewash station

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

**TABLE C—Water Fountain Survey**

Building	Location	Model #	Comments / Date of Analysis for Lead
<del> </del>			

Source: \_\_\_\_\_

9.46-17

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

#### RCRA Screening Checklist

Does this facility generate waste or use chemicals?	<input checked="" type="radio"/> Y <input type="radio"/> N	If yes, conduct the following survey.
---	--	---------------------------------------

#### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### RCRA Checklist

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

9.46-20

## Environmental Appraisal Checklist

Building Name: 2.3

Appraisers: John Puckett Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### RCRA Checklist

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

9.46-21

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett, Mary-Louis Hoagland, Mary Sizemore

Date: 2/27/96

#### RCRA Checklist

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

General Comments:



### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

#### Asbestos Screening Checklist

Does this facility contain ACBM?	(Y) N	If yes, conduct the following survey
----------------------------------	-------	--------------------------------------

#### Asbestos Checklist

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

Regulatory Guideline	Question	Response	Comments
<b>ADAPTED FROM TSCA ACBM IN SCHOOLS:</b>			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?  If no for this building or area note this conclusion in the comment section.  Is there any evidence of friable asbestos?  Is the asbestos removal properly managed? (See questions listed below)	(Y) N  Y (N)  Y / N N/A	If there is no asbestos removal, do not complete the following section.
<b>NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:</b>			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACBM during the removal.	Y / N	X
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	Y / N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y / N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y / N	

9.46-23

## Environmental Appraisal Checklist

9.46-24

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

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

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

#### TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?  If the answer is no, note .  If the answer is yes, proceed with next section.	<input checked="" type="radio"/> Y / <input type="radio"/> N	
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated?  If no, note and stop here.  If yes, note the location of the management unit, and the method of management, and proceed.	<input checked="" type="radio"/> Y / <input type="radio"/> N	
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?	<input checked="" type="radio"/> Y / <input type="radio"/> N	WEEKLY
	If yes, are auditable records maintained.	<input checked="" type="radio"/> Y / <input type="radio"/> N	
40 CFR.30 (a) (1) (ix)	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?	<input checked="" type="radio"/> Y / <input type="radio"/> N	
	Are they visually inspected quarterly? If yes, are auditable records maintained?	Y / <input type="radio"/> N	N/A

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

#### TSCA Checklist

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

9.46-25

## Environmental Appraisal Checklist

Building Name: 2.3

Appraisers: John Puckett Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### TSCA Checklist

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

**GENERAL COMMENTS:**

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	(Y) N	If yes, conduct the following survey.
---	-------	---------------------------------------

### Low-Level Waste and Transuranic Waste Checklist

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

9.46-27

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: Mary-Louis Hoagland  
John Puckett Mary Sizemore

Date: 2/27/96

#### Low-Level Waste and Transuranic Waste Checklist

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

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### Low-Level Waste and Transuranic Waste Checklist

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

9.46-29

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

 Mary-Louis Hoagland  
 Mary Sizemore

Date: 2/27/94

### Low-Level Waste and Transuranic Waste Checklist

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

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

#### Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

9.46-31

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

#### Waste Minimization/Pollution Prevention Activities Screening Checklist

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

#### Waste Minimization/Pollution Prevention Activities Checklist

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

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9-46-33

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

 Mary-Louis Hoagland  
 Mary Sizemore

Date: 2/27/96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

### Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

9.46-35

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett

 Mary-Louis Hoagland  
 Mary Sizemore

Date: 2/27/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: John Puckett Mary-Louis Hoagland  
Mary Sizemore

Date: 2/27/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.46-37

**This page intentionally left blank.**

*Weekly inspections were being performed  
and maintained in the operating record*

**BUILDING 23 RADIOACTIVE MIXED WASTE STORAGE UNIT  
WEEKLY INSPECTION LOG  
(Daily when loading/unloading)**

Date: 2/27/96	Time:	Area/Bldg.: Building 23		Inspector's Name (print):
Item (Possible Problems)	Status		Location and Problems Observed	Date and Nature of Corrective Action Taken
	Acc.	Unacc.		
<b>Security:</b>				
• Warning signs (not readable)	✓			
• Doors (not secured, inoperable)	✓			
• Locks (inoperable, missing, not closed)	✓			
<b>Communications:</b>				
• PA system (inoperable, damaged)	✓			
• Telephone (inoperable, damaged)	✓			
• 2-way radio (missing, inoperable, no power)	✓			
<b>Stored Inventory:</b>				
• Container label (not labeled, missing, illegible)	✓			
• Container lid (not closed, missing, damaged)	✓			
• Container condition (damaged, leaking, deterioration)	✓			
• Container location (ignitables/reactives improperly stored, incompatibles not segregated, improper location)	✓			
• Aisle space (blocked, inadequate, spillage)	✓			
<b>Secondary Containment:</b>				
• Containment system (liquids or waste present)	✓			
• Sump (cracked, contains liquid)	✓			
• Structural (cracks, holes, or other deterioration)	✓			
• Sump pump (inoperable, damaged)	✓			
<b>Safety Supplies:</b>				
• Fire extinguisher (missing, empty, not properly charged)	✓			

9-46-39

**BUILDING 23 RADIOACTIVE MIXED WASTE STORAGE UNIT**  
**WEEKLY INSPECTION LOG**  
(Daily when loading/unloading)  
(Continued)

Date: 2/26/96	Time:	Area/Bldg.: Building 23		Inspector's Name (print): JEMP
Item (Possible Problems)	Status		Location and Problems Observed	Date and Nature of Corrective Action Taken
	Acc.	Unacc.		
<b>Safety Supplies (continued):</b>				
• Explosionproof flashlight (missing, inoperable)	✓			
• PPE (inadequate supply)	✓			
<b>Spill Supplies:</b>				
• Spill control kit (missing, empty)	✓			
• Vermiculite (missing, degraded)	✓			
• Booms (missing, degraded)	✓			
• Spark-resistant tools (missing, damaged)	✓			
• Broom (missing, damaged)	✓			
• Emergency clothing (missing, damaged)	✓			
<b>General:</b>				
• Housekeeping (dirty, trash not picked up)	✓			

**Legend:**  
 Acc. = Acceptable (i.e., item inspected is in satisfactory condition).  
 Unacc. = Unacceptable (i.e., item inspected is not in satisfactory condition and follow-up with corrective action is required).

Additional Comments or Observations:

---



---



---

Inspector's Signature:

---

# **Environmental Appraisal of the Mound Plant**

## **9.46.6.2 Building Manager's Questionnaire**

### Building Manager's Questionnaire

Building Name: 23 Building Manager: J.E. LENTZ Phone: 3330 Date: 1-2-96  
Alternate: BILL NAUMANN Phone: 3515

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

RADWORKER II TRAINING  
RCRA TRAINING  
HAZWOPER  
IF FINES COLLECTED

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

DOSIMETER MUST BE WORN  
READ HP POSTING SIGN

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

4. Provide a physical description of the building.

Building is a 3,422-ft<sup>2</sup> structure of reinforced concrete with a BUM roof (asphalt). ~~Building is contaminated with radioactive material.~~  
BUILDING HAS BEEN DIKED TO CONTAIN ANY SPILLS.  
ALSO HAS SUMP

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

5. Provide a drawing of the building.

Attached.

6. What is the current building use?

RCRA PERMITTED STORAGE FACILITY  
Building is used as a warehouse for storing mixed and transuranic mixed waste. ~~Also contains a drum scanning station for gamma radiation detection.~~

Source: Mound Building, 5-9-95

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

ORIGINALLY USED AS A RADIOACTIVE WASTE STAGING FACILITY, PREPARING RAD WASTE FOR SHIPMENT OFFSITE. VOLUME OF MIXED WASTE HAS INCREASED, DISPOSAL OPTIONS EXTREMELY LIMITED, BUILDING NOW DEDICATED ALMOST EXCLUSIVELY TO MIXED WASTE STORAGE.

Source: Mound Buildings, 5-9-95

# Environmental Appraisal of the Mound Plant

Page 2 of 11 of the Building Manager's Questionnaire was not provided.

## Building Manager's Questionnaire

Building Name: 23 Building Manager: T. Mills Phone: \_\_\_\_\_ Date: 12/2/95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

9. In the last six months, have any modifications been made to the building or to processes in the building? Yes (No) *MODIFICATIONS WERE MADE IN SUMMER 1994*
10. Does the building have air emission sources? No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

## Building Manager's Questionnaire

Building Name: 23 Building Manager: BRAD Phone: \_\_\_\_\_ Date: 1/2/95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

13. Does the building have domestic water service? Yes  No  
 Is there bottled water? *No NO EATING OR DRINKING IS PERMITTED IN BLDG*
14. Does the building discharge to the storm sewer? Yes  No *CONTAINMENT TRENCH DO NOT HAVE DRAINS*  
 Where?
15. Does the building discharge to the sanitary sewer? Yes  No  
 Where?
16. Has an asbestos survey been conducted? Yes  
 What are the results? *YES?*

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

## Building Manager's Questionnaire

Building Name: 23 Building Manager: [REDACTED] Phone:                      Date: 12-7-95  
 Alternate:                      Phone:                     

17. Does the building contain transformers or capacitors? ~~YES~~ No

Source: PCB ANNUAL DOCUMENT LOG (LIST ATTACHED)

18. Has the building been identified as containing PCBs? YES

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

ADDITIONAL CHEMICALS USED FOR LABELING  
 OR COVERING OLD LABELS ON DRUMS  
 IN STORAGE ARE:

- 2 - 200ML BOTTLES OF 2-PROPANOL
- 1 CAN OF WD-40
- 22 CANS OF WHITE SPRAY PAINT
- 16 CANS OF YELLOW SPRAY PAINT
- 2 CANS OF BLUE SPRAY PAINT
- 2 CANS OF GRAY SPRAY PAINT
- 1 CAN OF GREEN SPRAY PAINT
- 4 - 1 GALLON CANS OF PARR INC. PARROND
- 1 GALLON SAFETY CAN OF MINERAL SPIRITS - 1/8" TALL
- 2 SPRAY CANS OF RELEASE COMPOUND

9.46-48

## PCB Items In Storage

Description	Identifier(s)	Weight (Kg)	Out of service/ In storage date	Date off-site	Manifest	Disposal facility	USEPA ID #	Disposal date	CD number
Oil vials >500ppm PCB, T-38	#2394-25 (Formerly LP91- 1990)	1.3	07-17-91	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), kerosene, tritium (.37 mC/l) PCB 1248: 23,000ppm	PCB-01 (RCRA D001)	95.9	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), kerosene, tritium (.06mC/l) PCB 1248: 23,000ppm	PCB-02 (RCRA D001)	92.7	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), tritium (2.4mC/l) PCB 1248: 170,000ppm	PCB-04	116.3	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), tritium (2.8mC/l) PCB 1248: 150,000ppm	PCB-05	115.9	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), kerosene, tritium (.03mC/l) PCB 1248: 150,000ppm	PCB-06 (RCRA D001)	95	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), tritium (2.75mC/l) PCB 1248: 150,000ppm	PCB-07	113.6	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), kerosene, tritium (.07mC/l) PCB 1248: 21,000ppm	PCB-08 (RCRA D001)	91.4	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), kerosene, tritium (.0006mC/l) PCB 1248: 300ppm	PCB-09 (RCRA D001)	31.8	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), tritium (3.8mC/l) PCB 1248: 130,000ppm	PCB-10	93.6	05-09-85	In storage Bldg 23					
Hydraul (phosphate ester with PCB additive), tritium (1.7mC/l) PCB 1248: 150,000ppm	PCB-11	117.7	05-09-85	In storage Bldg 23					

LIST WAS NOT VERIFIED

PCB In Storage

Description	Identifier(s)	Weight (Kg)	Out of service/ In storage date	Date off-site	Manifest	Disposal facility	USEPA ID #	Disposal date	CD number
Press/plutonium, crate, 500ppm PCB, Mixed waste	PF085-PRESS	586.8	10-02-85	In storage Bldg 23					
Valves, piping, tritium, drum, 500ppm PCB, Mixed waste	1347	1632	05-09-85	In storage Bldg 23			Note: Drums referenced in 1993 report as 1343, 1344, 1345, 1346, 1413, and 089 were consolidated/compacted into this drum.		
Tags, gloves, tritium, drum, 500ppm PCB, Mixed waste	1412	151.4	05-09-85	In storage Bldg 23			Note: Drums referenced in 1993 report as 1348, 1361, 1362, 1363, 1364, 1365, 1388, 1393, 1410, 1411 were consolidated/compacted into this drum.		
Oil bottles/plutonium, drum, 500ppm PCB, Mixed waste	1084EQ78	109	05-09-85	In storage Bldg 23					
Oil/tritium, drum, 500ppm PCB, Mixed waste	1414	150.5	05-09-85	In storage Bldg 23					
Oil/water/tritium, drum, 500ppm PCB, Mixed waste Legacy waste, unknown origin, formerly RAT-1	2393-25	189.5	01-25-93	In storage Bldg 23					
Oil/water/tritium, drum, 500ppm PCB, Mixed waste Legacy waste, unknown origin, formerly RAT-2	2393-26 (RCRA D006, F002)	245.9	01-25-93	In storage Bldg 23					
Oil sludge/tritium, drum, 500ppm PCB, Mixed waste Legacy waste, unknown origin, formerly RAT-3	2393-27 (RCRA D006, F002)	116.4	01-25-93	In storage Bldg 23					
Oil/tritium, drum, Legacy waste, unknown origin, 816 ppm PCB, Mixed waste	0-85	134.4	02-00-87	In storage Bldg 23					
Oil/tritium, drum, Legacy waste, unknown origin, 24,000 ppm PCB, Mixed waste	0-95	124.4	02-00-87	In storage Bldg 23					
Oil/tritium, drum, Legacy waste, unknown origin, 110 ppm PCB, Mixed waste	0-105	136	02-00-87	In storage Bldg 23					
Oil/tritium, drum, Legacy waste, unknown origin, 1 ppm PCB, Mixed waste	0-69	122	06-03-91	In storage Bldg 23					

## Building Manager's Questionnaire

Building Name: 23 Building Manager: T. [unclear] Phone: \_\_\_\_\_ Date: 10/2/95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures

Source: \_\_\_\_\_

21. Where do waste chemicals go? N/A

22. What janitorial supplies are stored inside or outside of the building? None

23. Where do excess janitorial supplies go? N/A

Source: \_\_\_\_\_

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

Chemical	Amount	Chemical	Amount

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 23 Building Manager: ~~XXXXXXXXXX~~ Phone: \_\_\_\_\_ Date: ~~XXXXXX~~  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

NONE

26. Is there a sump or pit or underground tank in or around the building? Yes  No  Unknown  *EMPTY LEAKAGE FROM MIXED WASTE DRAIN*  
 Is it double-walled?  What does it contain? *EMPTY* How many days per year is it filled? *0*  
 Is there an emergency overflow tank?  Have there been previous overflows? *NO*

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
<i>EPOXY COATED CONCRETE</i>				
<i>Y / (N)</i>	<i>EMPTY</i>	<i>0</i>	<i>Y / (N)</i>	<i>Y / (N)</i>

Source: \_\_\_\_\_

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

Materials	Amount
Oil Waste	173.0
Oil Waste	447.6
Oil Waste, Vacuum Pump Oil	541.9
Oil Waste	557.0
Oil Waste, Vacuum Pump Oil	643.1
Oil Waste, Trace Solvents	498.9
Oil Waste, Petroleum Naphtha	99.8
Oil Waste, Vacuum Pump Oil	284.8
Oil Waste	218.3
Oil Waste, Vacuum Pump Oil	331.6
Oil Waste, Vacuum Pump Oil	492.1
Oil Waste, Trace Solvents	473.2
Oil Waste	445.1
Oil Waste, Trace Solvents	261.5
Oil Waste, Trace Solvents	333.8
Oil Waste, Trace Solvents	281.9
Oil Waste	303.8
Oil Waste	318.3
Oil Waste, Trace Solvents	365.1

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

*CONTAINMENT TRENCHES & SUMP*

*TANK IS AN INCOMPLETE LIST.*

*WASTE MANAGEMENT IS WORKING ON PUTTING THE UPDATED INVENTORY INTO ELECTRONIC FORM.*

## Building Manager's Questionnaire

Building Name: 23 Building Manager: T. [REDACTED] Phone: \_\_\_\_\_ Date: 12-07-05  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

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

30. Has the building been identified as a 90 day waste accumulation area? Yes  No  *IT IS A RCRA PERMITTED STORAGE FACILITY.*

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

32. Is mixed waste generated, stored, or disposed of from the building? Yes  No   
 Where are logs found? *BLDG 91 2/0 BILL NAUMANN 3515*

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

Source: \_\_\_\_\_



## Building Manager's Questionnaire

Building Name: 23 Building Manager: ~~XXXXXXXXXX~~ Phone: \_\_\_\_\_ Date: ~~XXXXXX~~  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

34. Is low-level radioactive waste generated, stored, or disposed of from the building? Yes No  
 Where are logs found? BLDG 91

Process	Waste	Stored	Disposed	Logs
	NON-HAZ SCINTILLATION FLUIDS	<u>Y</u> /N	Y/N	<u>Y</u> /N BLDG 91
	LSA TRASH FROM CHARACTERIZATION DISPOSAL ACTIVITIES	Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

Source: \_\_\_\_\_

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

NONE

## Building Manager's Questionnaire

Building Name: 23 Building Manager: ~~\_\_\_\_\_~~ Phone: \_\_\_\_\_ Date: ~~\_\_\_\_\_~~  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Yes

No

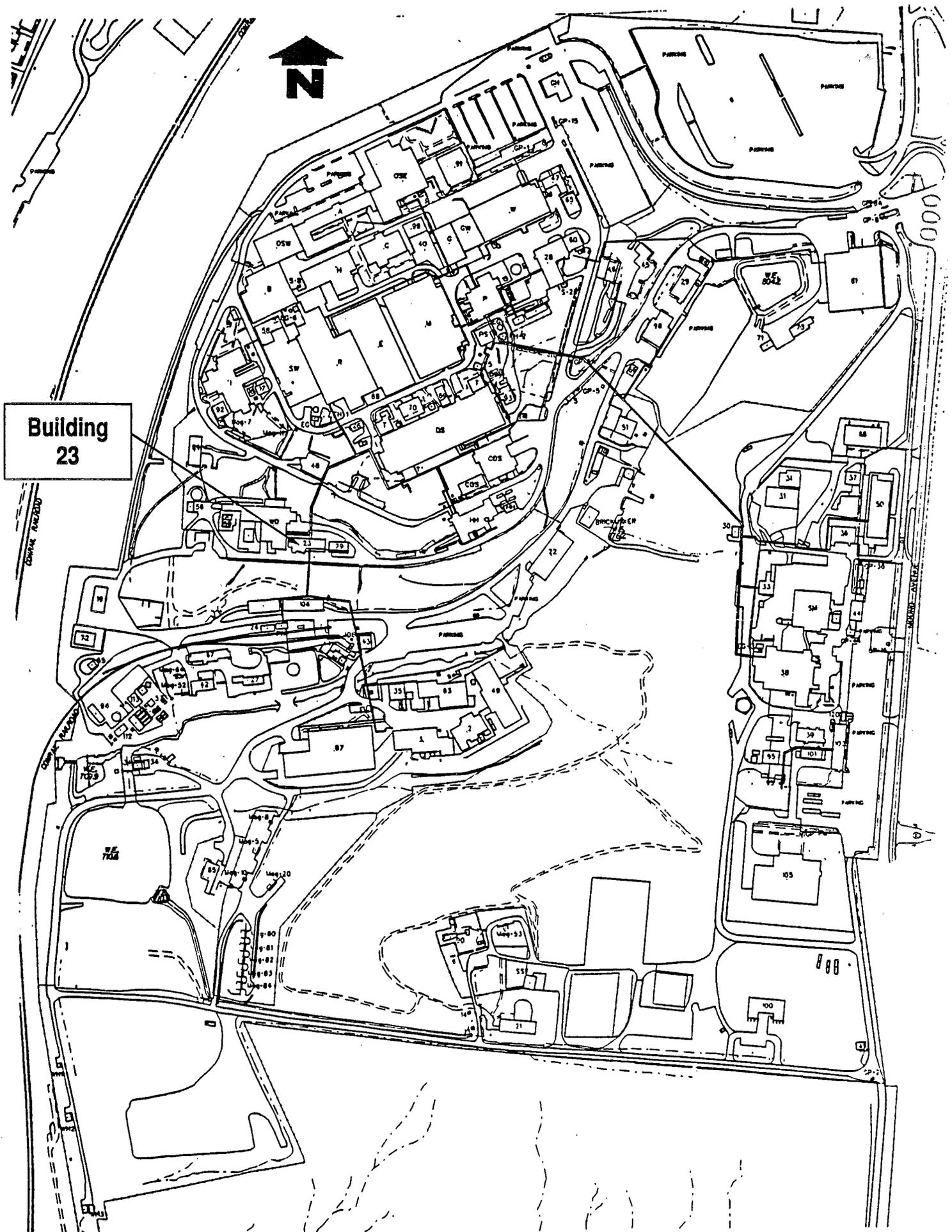
37. Has a pollution prevention program been developed for the building? Yes

No

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.46.6.3 Location of Building 23**



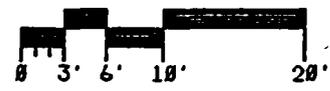
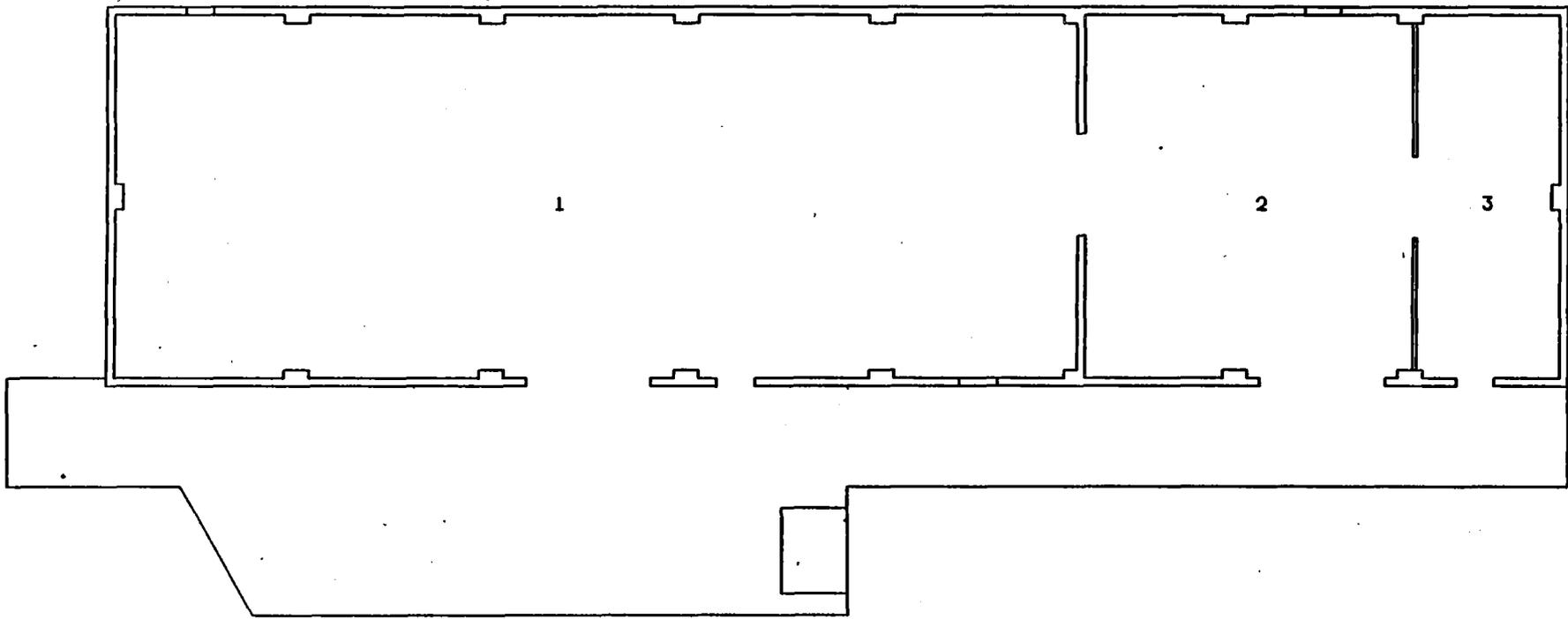
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.46.6.4 Floor Plans for Building 23**

ISS	DATE	REVISION	BY	CHK	DES	APPROV	NO
B	12/12/91	ASBUILT ISSUE		DCW			DVD



**BLDG #23  
FIRST FLOOR  
BLDG CODE:3023**

9.46-63

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
____ NHC ____ TRSIOC ____ TSSOC ____ DWSOC	
TECH. RESP. _____	
DR. MR. _____	
TRSSOC _____	
TSSOC _____	
DWSOC _____	

DESIGN ENG	PROJ MGR	ISSUE	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION	
DCW	DCW	B							BLDG #23		
SP & EC	PLAN NO.	PART CLASSIFICATION						FLOOR PLANS			
DCW		UNCLASSIFIED						C	FSC911235	12335	
APPROV	DATE	ORIGIN CLASSIFICATION	DATE	ORIGIN	JOB NO.	JOB NO.					
		UNCLASSIFIED	12/12/91	DCW	14865	12335					
		BLDG TYPE	SFP	BLDG #	23	CASE	14865	SCALE	AS NOTED	SHEET	1 OF 1
		STATUS	MD-REL-12/12/91	ORIGIN	MD-BR3-V3.J						

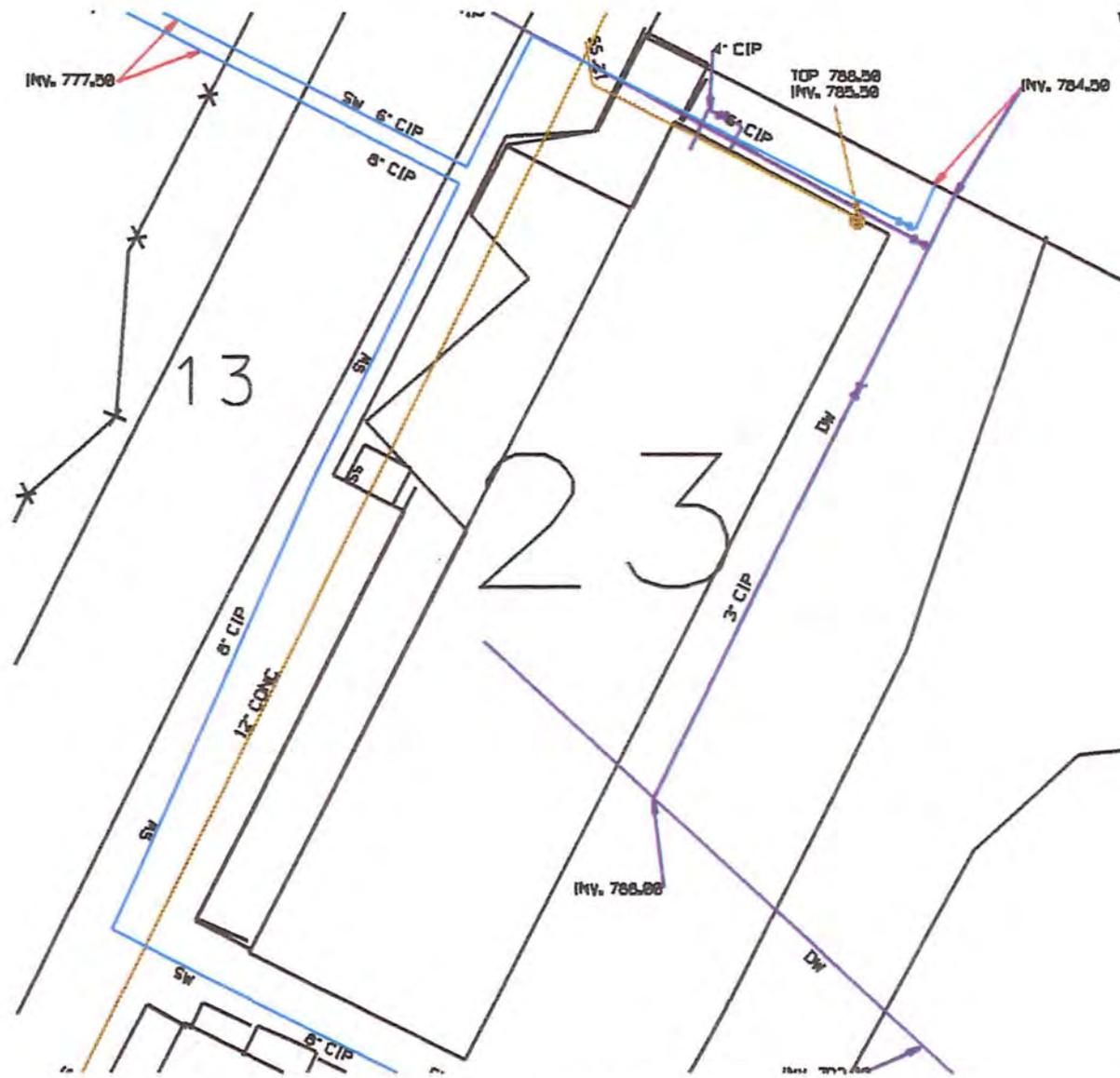
**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.46.6.5 Underground Utility Lines**

# **Environmental Appraisal of the Mound Plant**

## **9.46.6.6 Photographs**



- FIRE
- POTABLE
- RAW
- SANITARY
- STORM
- RADIOLOGICAL



**E.G. & G. - MOUND**  
 UNDERGROUND WATER & WASTE LINES  
 BLDG. 23  
 DATE: 3-6-96

**UNCLASSIFIED**

9.46-67

Mound Plant Building 23

9.46-71



9.47 Building 24

# Environmental Appraisal of the Mound Plant

## 9.47 BUILDING 24

### 9.47.1 Scope of Building 24 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 24 on the morning of January 22, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.47.6.1). The appraisers were accompanied by the building manager. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.47.6.2).

### 9.47.2 Description of Building 24

Building 24 is an 840-square-foot concrete block structure built slab-on-grade. Its location is shown in Attachment 3 (Section 9.47.6.3). The building is bounded by Building PH to the east, the Mound railroad spur of Conrail to the south, the Lower Hill access road to the north and open pavement to the west. Floor plans are presented in Attachment 4 (Section 9.47.6.4). The facility is serviced by 480V, three-phase power.

The facility was constructed in 1966 for the purpose of treating raw well water. The facility contains two large-capacity (100,000-gallon) zeolite softening beds and the chemicals and injection equipment for chlorination and rust inhibition. The facility also contains two high-capacity booster pumps to distribute the treated water. The facility has been used for the same purpose since construction.

### 9.47.3 Summary of Findings

Building 24 is one of two domestic water softening and chlorination facilities. The building appeared to be well-maintained. Bulk chemicals used in the process were found to be properly stored. Three issues of potential environmental concern were noted during the facility walk-through.

### 9.47.4 Observations

#### 9.47.4.1 Air Emissions

There are no fumehoods or air emission sources. There are no fuel-burning units in the facility. There is no evidence of fugitive dust.

## **Environmental Appraisal of the Mound Plant**

### **9.47.4.2 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.

#### **9.47.4.2.1 Sanitary Wastewater**

The facility is not serviced by a sanitary sewer according to a diagram of underground utility lines, presented as Attachment 5 (Section 9.47.6.5).

#### **9.47.4.2.2 Storm Wastewater**

The interior floor drains are serviced by the storm sewer, according to Attachment 5 (Section 9.47.6.5). The drains were not tested to confirm that they connect to the storm sewer system. The softener blowdown is periodically discharged to the storm sewer when the zeolite beds are recharged. There is evidence on some of the interior floor drains that some type of material has been entering them. A precipitate was on the exterior of a valve connected to a water line directly above one of the floor drains.

#### **9.47.4.2.3 Chemicals**

A list of chemicals residing in Building 24 is included in the BMQ. 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 was not attempted as 1995 data were being compiled at the time of the appraisal.

Storage, handling, and disposal of chemicals listed in the BMQ were reviewed to assure conformance to regulations related to 40 CFR 122, 40 CFR 261-265, 40 CFR 268, and 29 CFR 1910. None of the chemicals listed in the BMQ are Clean Water Act priority pollutants. There is no evidence that chemicals stored in the building have entered the wastewater collection system.

Sodium hypochlorite is used to chlorinate the softened water prior to distribution. The hypochlorite is stored in 55-gallon drums and injected directly into the softened water from the

## Environmental Appraisal of the Mound Plant

drum using a small peristaltic pump. There were two drums of hypochlorite in the building. Rust inhibitor is also stored in 55-gallon drums and is injected in a similar manner. Three drums of rust inhibitor were present.

### 9.47.4.3 Potable and Service Water

Building 24 represents the first location of potable water at the Mound facility. There are no cross connections between service water and potable water. Only potable water leaves the building, therefore, backflow preventers are not needed within the facility. Raw well water is supplied to the facility and softened, chlorinated water is distributed for plant use as potable, fire sprinkler and service water. There are no drinking fountains within the facility.

### 9.47.4.4 Chemical Storage and Hazardous Materials

Chemicals for chlorination and rust inhibition are stored in 55-gallon bulk drums. Material Safety Data Sheets (MSDS's) were not available at the time of the inspection. The hypochlorite was stored remotely from the rust inhibitor. There was no secondary containment provided. Empty drums are removed by the vendor, according to the building manager.

A review of the Mound Active Underground Storage Tank Plan and visual inspection showed that there are no underground storage tanks in or around the building. Additionally, visual inspection revealed there are no aboveground storage tanks in or around the facility. There are no sumps, separators or catch basins, in or around the building.

The building has been tested and does not contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95).

There are no capacitors or transformers containing polychlorinated biphenyls (PCB's) located in the building.

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

### 9.47.4.5 Solid, Hazardous, and Radioactive Wastes

There is a limited amount of paper waste, mainly hand towels. Solid wastes are removed by janitorial personnel to a site collection point, then shipped to a landfill by a contractor. The disposal permit is maintained by Waste Management. There is no evidence that hazardous materials or wastes are mixed with this solid waste stream. According to information provided in the BMQ, no hazardous wastes are generated in Building 24.

### 9.47.4.6 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.

## **Environmental Appraisal of the Mound Plant**

There is a very limited amount of waste generated at the facility and little opportunity for waste minimization efforts. Quantities of chemicals are ordered carefully so as to avoid waste.

### **9.47.5 Findings and Recommendations**

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.47.6.6). The environmental appraisal of Building 24 indicates that the following action items, in order of priority order, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

- 24-1 It was noticed during the facility walk-through that there is evidence on some of the interior floor drains that some type of material has been entering them. There was evidence of precipitate on the exterior of a valve connected to a water line directly above one of the floor drains. Because the floor drains discharge to the storm sewer, the nature of the precipitate on the valve should be investigated to determine the material. If appropriate, steps should be taken to stop its entry into drain.
- 24-2 It was noticed during the facility walk-through that the chlorinator and rust inhibitor were both stored in 55-gallon drums on the facility floor with no secondary containment. It is unlikely there would be significant spill of either of these chemicals. However, since the open floor drains are shown to discharge into the storm sewer, either the drains should be capped or secondary containment be provided.
- 24-3 MSDS's should be readily available to anyone in the facility. They were not available at the time of the walk-through.

# **Environmental Appraisal of the Mound Plant**

## **9.47.6.1 Environmental Appraisal Checklist**

# ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name BUILDING 24

Appraisers:

MARCIA VANNET CHEMIST  
Name Discipline

MARK GILLIAT ENGINEER  
Name Discipline

MYRON SMITH ENGINEER  
Name Discipline

\_\_\_\_\_  
Name Discipline

Building Manager:

ALLEN UPSHAW

Process Manager:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: 1/22/96

# ENVIRONMENTAL APPRAISAL CHECKLIST

## Table of Contents

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

## Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list?	<input checked="" type="radio"/> Y <input type="radio"/> N	
	Are they properly contained?	<input checked="" type="radio"/> Y <input type="radio"/> N	
	Is the building in operation? What are the processes and where do they discharge to?	<input checked="" type="radio"/> Y <input type="radio"/> N _____ _____	SOFTENED WATER FOR DISTRIBUTION
	Do the floor drains, sinks & toilets appear to be draining properly?	Y / N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary <input checked="" type="radio"/> Storm	Softner recharge water goes to storm sewer
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	<input checked="" type="radio"/> Y <input type="radio"/> N _____ _____ Y / N Y / N	
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	<input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N	ONE FLOOR DRAIN HAD SOME PRECIPITATE IN & AROUND INDICATING MATERIAL WAS OR HAD ENTERED IT - SOURCE WAS LEAKY VALVE OVER HEAD OF DRAIN

↳ VALVE HAD PRECIPITATE AROUND IT

9.47-9

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Clean Air Act (CAA) Screening Checklist

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

### CAA Checklist

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

**Environmental Appraisal Checklist**

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

CAA Checklist

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

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

*BLANK*

Source: \_\_\_\_\_

9.47-11

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Hazardous Materials (HM) Screening Checklist

9.47-12

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

### HM Checklist

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

### Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

#### HM Checklist

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

9.47-13

## Environmental Appraisal Checklist

Building Name: \_\_\_\_\_

Appraisers: \_\_\_\_\_

Date: \_\_\_\_\_

### HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	(Y) N	
	Does it have proper containment?	Y (N)	ONLY FLOOR DRAINS / NO CONTAINMENT
	Is there a liquid bulk transfer area?	(Y) N	chlorinator injected into process line
	Is there proper containment?	Y (N)	
	Is there an above ground storage tank? If so, complete Table B.	Y (N)	

### Above Ground Storage Tanks Inventory

Also corrosion inhibitor (both from 55 gallon drums)

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
		BLANK		Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

### Safe Drinking Water Act (SDWA) Screening Checklist

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

#### SDWA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 95-02 (A)	Do actual or potential cross-connections exist between potable (light green) and service water (dark green)?	Y <input type="radio"/> <input checked="" type="radio"/> N	NO SERVICE WATER
OAC 3745 95-04 (B)(C)	Are backflow prevention devices installed where cross connections (hoses connected to faucets, hot water tank vented directly to a drain) exist?	Y <input type="radio"/> <input checked="" type="radio"/> N	*
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	Y <input type="radio"/> <input checked="" type="radio"/> N	
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	Y <input type="radio"/> <input checked="" type="radio"/> N	

\* FIRST POINT IN PLANT FOR POTABLE WATER

**TABLE C—Water Fountain Survey**

Building	Location	Model #	Comments / Date of Analysis for Lead
		BLANK	

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### RCRA Screening Checklist

Does this facility generate waste or use chemicals?

Y  N

If yes, conduct the following survey.

### RCRA Checklist

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

\* There are no chemical wastes generated by the softening process; all chemicals ~~softener~~ (chlorinator & rust inhibitor are) are injected into the process line and enter into the water system. Vendor is responsible for empty drums.

## Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

### RCRA Checklist

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

9.47-17

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### RCRA Checklist

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

9.47-18

## Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

### RCRA Checklist

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

9.47-19

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### RCRA Checklist

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

General Comments:

## Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

### Asbestos Screening Checklist

Does this facility contain ACM?	Y/N	If yes, conduct the following survey.
---------------------------------	-----	---------------------------------------

Asbestos Checklist \* BUILDING HAS BEEN ABATED

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

Regulatory Guideline	Question	Response	Comments
<b>ADAPTED FROM TSCA ACM IN SCHOOLS:</b>			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?  If no for this building or area note this conclusion in the comment section.	Y/N	If there is no asbestos removal, do not complete the following section.
	Is there any evidence of friable asbestos?	Y/N	
	Is the asbestos removal properly managed? (See questions listed below)	Y/N	
<b>NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:</b>			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACM during the removal.	Y/N	
40 CFR 61.152(b) (1)	ACM is treated with water in accordance with 40 CFR 152(b)?	Y/N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y/N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y/N	

9.47-21

## Environmental Appraisal Checklist

Building Name: .

Appraisers:

Date:

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

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

#### TSCA Checklist

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

9.47-22

**Environmental Appraisal Checklist**

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

TSCA Checklist

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

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### TSCA Checklist

9.47-24

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

**GENERAL COMMENTS:**

**Environmental Appraisal Checklist**

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

**Low-Level Waste and Transuranic Waste Screening Checklist**

Does this facility contain radioactive waste ?	Y (N)	If yes, conduct the following survey.
--	-------	---------------------------------------

**Low-Level Waste and Transuranic Waste Checklist**

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

9.47-25

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Low-Level Waste and Transuranic Waste Checklist

9.47-26

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

## Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

### Low-Level Waste and Transuranic Waste Checklist

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

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Low-Level Waste and Transuranic Waste Checklist

9.47-28

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

### Environmental Appraisal Checklist

Building Name: **JH**

Appraisers: **TEAM 4**

Date: **1/22/96**

#### Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

9.47-29

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Waste Minimization/Pollution Prevention Activities Screening Checklist

9.47-30

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

### Waste Minimization/Pollution Prevention Activities Checklist

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

\* Facility uses chemicals Page 22 of 27  
 but does not generate waste - all empty drums go back to the vendor

## Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.47-31

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Waste Minimization/Pollution Prevention Activities Checklist

9.47-32

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

## Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.47-33

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Waste Minimization/Pollution Prevention Activities Checklist

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



9.47-34

### Environmental Appraisal Checklist

Building Name: 24

Appraisers: TEAM 4

Date: 1/22/96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.47.6.2 Building Manager's Questionnaire**

## Building Manager's Questionnaire

Building Name: 24 Building Manager: A.W. Upshaw Phone: 865-4894 Date: 12-07-95  
Alternate: F. RAKER Phone: 865-3438

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

NONE

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

SAFETY SHOES & GLASSES

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

4. Provide a physical description of the building.

Building is a concrete block structure with BUM roof (asphalt). It has central steam heat. Total area is 840 ft<sup>2</sup>. The building is not contaminated with any radiological or energetic materials.

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

5. Provide a drawing of the building.

Attached.

6. What is the current building use?

Building is used for treatment of the potable water system. The building houses ~~two 100,000 gal tanks~~ and ~~two 55-gal drums~~ and two booster pumps, <sup>two softener</sup> and <sup>treatment chemicals</sup>.

Source: Mound Buildings, 5-9-95

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

NONE

Source: Mound Buildings, 5-9-95

## Building Manager's Questionnaire

Building Name: 24 Building Manager: A.W. Upshaw Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: Water softening & chlorination

How Wastes Are Generated:

No wastes generated.

Contact:  
Phone #:

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

## Building Manager's Questionnaire

Building Name: 24 Building Manager: A.W. Upshaw Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

10. Does the building have air emission sources? No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

## Building Manager's Questionnaire

Building Name: 24 Building Manager: A.W. Upshaw Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

12. For existing permits are emissions monitored? At what frequency? Where are the records maintained?

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

Source: Air Permits 2/4/95

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

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

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

16. Has an asbestos survey been conducted? Yes  
 What are the results? ~~NO~~ ~~None~~ No (MDH)

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

## Building Manager's Questionnaire

Building Name: 24 Building Manager: A.W. Upshaw Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? **No**

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
<del>NONE</del> ANCOOL 3400 (Carbon Silicate)	LIQUID	
SILICATED (SODIUM HYDROGEN SULFATE)	LIQUID	

Source: Chemical Inventory 1994

## Building Manager's Questionnaire

Building Name: 24 Building Manager: A.W. Upshaw Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures

Source: \_\_\_\_\_

21. Where do waste chemicals go?

N/A

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

N/A

23. Where do excess janitorial supplies go?

N/A

Source: \_\_\_\_\_

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

Chemical	Amount	Chemical	Amount

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 24 Building Manager: A.W. Upshaw Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

REMOVED

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
<del>7782-50-5</del>	<del>Chlorine</del>	<del>01C</del>		Y/N	

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

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y/N			Y/N	Y/N

Source: \_\_\_\_\_

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

NO OIL  
IT 24

Materials	Amount
<del>Oil Waste</del>	<del>173.0</del>
<del>Oil Waste</del>	<del>447.6</del>
<del>Oil Waste, Vacuum Pump Oil</del>	<del>541.9</del>
<del>Oil Waste</del>	<del>557.0</del>
<del>Oil Waste, Vacuum Pump Oil</del>	<del>643.1</del>
<del>Oil Waste, Trace Solvents</del>	<del>498.9</del>
<del>Oil Waste, Petroleum Naphtha</del>	<del>99.8</del>
<del>Oil Waste, Vacuum Pump Oil</del>	<del>284.8</del>
<del>Oil Waste</del>	<del>218.3</del>
<del>Oil Waste, Vacuum Pump Oil</del>	<del>331.6</del>
<del>Oil Waste, Vacuum Pump Oil</del>	<del>492.1</del>
<del>Oil Waste, Trace Solvents</del>	<del>473.2</del>
<del>Oil Waste</del>	<del>445.1</del>
<del>Oil Waste, Trace Solvents</del>	<del>261.5</del>
<del>Oil Waste, Trace Solvents</del>	<del>333.8</del>
<del>Oil Waste, Trace Solvents</del>	<del>281.9</del>
<del>Oil Waste</del>	<del>303.8</del>
<del>Oil Waste</del>	<del>318.3</del>
<del>Oil Waste, Trace Solvents</del>	<del>365.1</del>

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

## Building Manager's Questionnaire

Building Name: 24    Building Manager: A.W. Upshaw    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.?    Yes    No
29. Is waste material stored in or around the building for more than 90 days?    Yes    No
30. Has the building been identified as a 90 day waste accumulation area?    Yes    No
31. Has any area in the building been identified as a satellite accumulation area?    Yes    No
32. Is mixed waste generated, stored, or disposed of from the building? Yes No  
 Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 24    Building Manager: A.W. Upshaw    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes      No

Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 24    Building Manager: A.W. Upshaw    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

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

Source: \_\_\_\_\_

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

## Building Manager's Questionnaire

Building Name: 24 Building Manager: A.W. Upshaw Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Yes

No

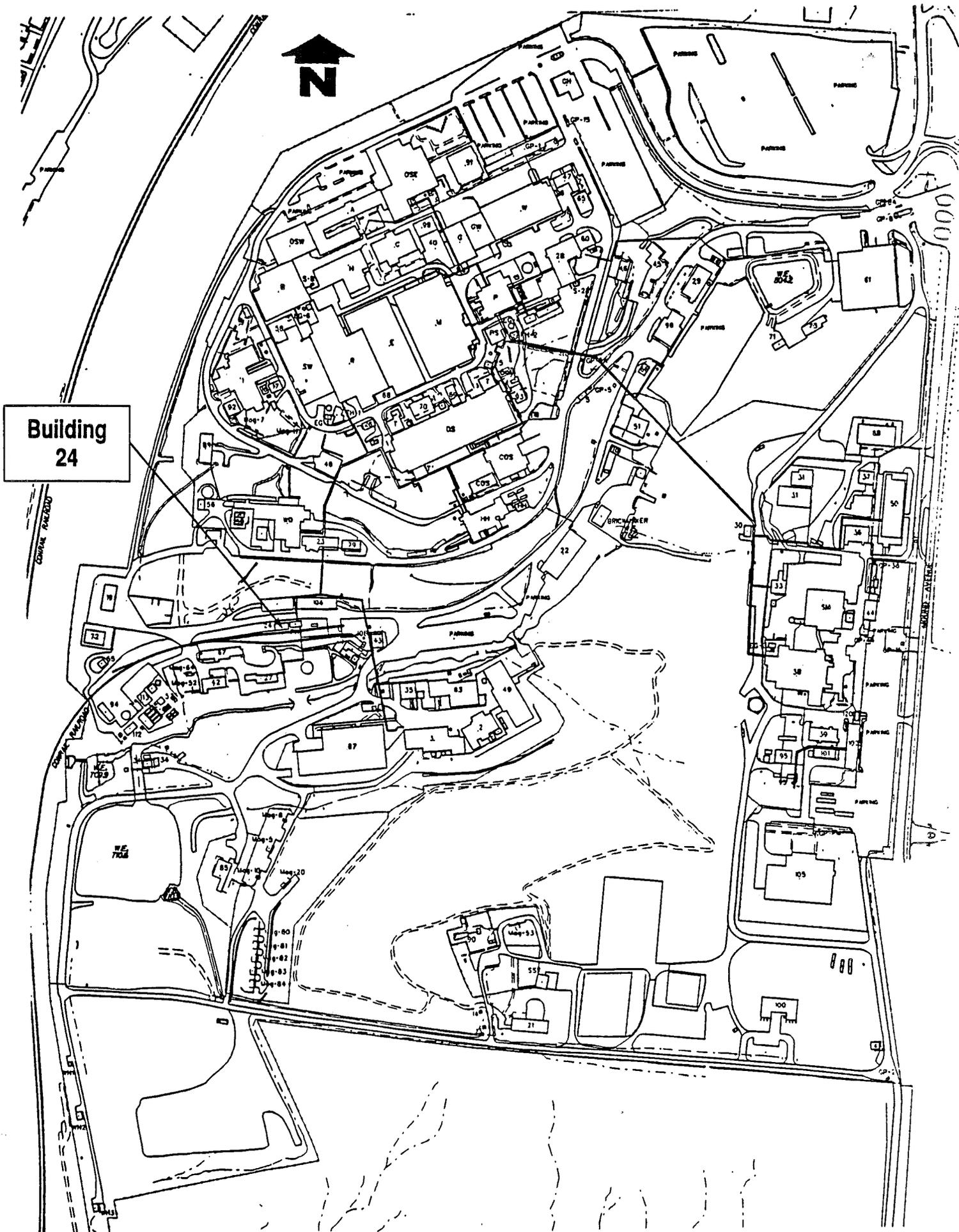
37. Has a pollution prevention program been developed for the building? Yes

No

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.47.6.3 Location of Building 24**



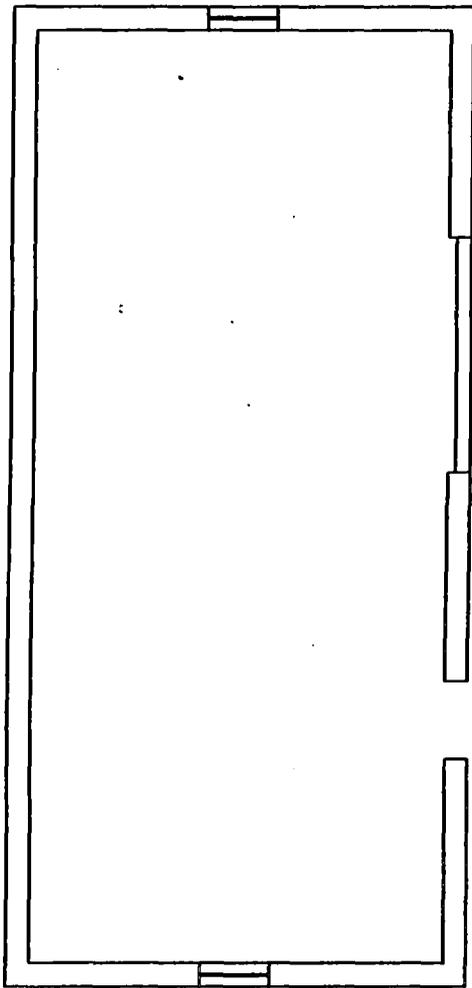
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.47.6.4 Floor Plans for Building 24**

ISS	DATE	REVISION	BY	CHKD	DES	APVD	#
B	12/12/91	ASBUILT ISSUE	DCW				DVD



**BLDG #24**  
**FIRST FLOOR**  
**BLDG CODE:3024**

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
NAME _____ TRSBOC _____ TEGOC _____ DBOC _____	
TECH. RESP. _____	
DR. NBR. _____	
TRSBOC _____	
TEGOC _____	
DBOC _____	

DESIGN DES	PROJ NBR	SHEET	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION			
		g							BLDG #24				
ISSUE	DES SUPP	PART CLASSIFICATION								FLOOR PLANS			
LP & GC	PRGR REV	DRAWING CLASSIFICATION								SIZE (DRAWING NUMBER)	JOB NUMBER		
CONTR		<b>UNCLASSIFIED</b>								C	FSC911236	12335	
APVD	DATE	DWG TYPE SFP								FROM BLDG #24	CASE 14865	SCALE AS NOTED	SHEET 1 OF 1
		STATUS								HD-REL-12/12/91	ORIGIN	HD-BR3-V3.8	

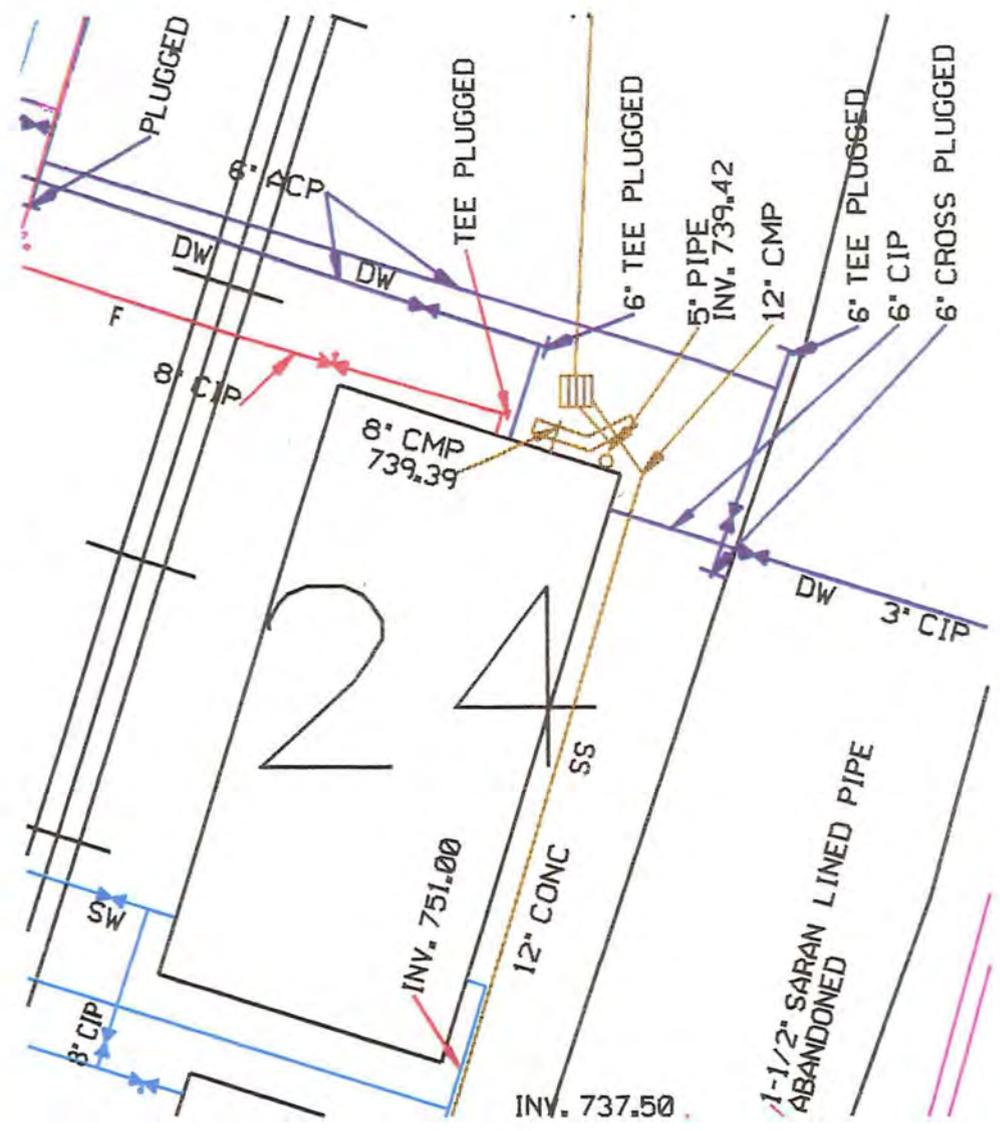
9.47-57

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.47.6.5 Underground Utility Lines**

19-24.6



- FIRE
- POTABLE
- RAR
- SANITARY
- STORM
- RADIOLOGICAL



**E.G. & G. - MOUND**

UNDERGROUND WATER & WASTE LINES  
BLDG. 24

DATE: 2/29/96

**UNCLASSIFIED**

# **Environmental Appraisal of the Mound Plant**

## **9.47.6.6 Photographs**



Mound Plant Building 24

9.47-65



## **Environmental Appraisal of the Mound Plant**

### **9.48 BUILDING 25**

#### **9.48.1 Scope of Building 25 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 25 on January 22, 1996. The EAC (Attachment 1—Section 9.48.6.1) was used to record findings. The process owner escorted the appraisers. Other information was supplied by the building manager and recorded on the BMQ, included as Attachment 2 (Section 9.48.6.2).

#### **9.48.2 Description of Building 25**

Building 25 is a one-story, 430-square-foot concrete block, slab-on-grade structure with brick facing. Location is shown in Attachment 3 (Section 9.48.6.3). Adjacent buildings are Building M to the north, Building 93 to the south, Building PS to the east, and Building 69 to the west. The roof is asphalt and metal built-up membrane. Floor plans are presented as Attachment 4 (Section 9.48.6.4). The building is serviced by central steam for heat and chilled water, and electrical service of 240V (Mound Facility Physical Characterization, 12-1-93).

Building 25 was constructed in 1966. The building has been used for the same purpose since construction. The building is not known to be contaminated with radiological or energetic material (Mound Facility Physical Characterization, 12-1-93).

#### **9.48.3 Summary of Findings**

Building 25 houses instrumentation that is used to collect meteorological information. Computers in the building receive data from two onsite weather-monitoring towers. These computers are connected to computers at Lawrence Livermore Laboratory; there the information is used to predict dispersion patterns in the event of any airborne releases. The building also houses telephone switching equipment and office space. The meteorological station contains processes conventional to weather data collection. The building is well-maintained, with no issues of environmental concern identified during the walk-through or during review of reference materials.

#### **9.48.4 Observations**

##### **9.48.4.1 Air Emissions**

There are no processes that create air emissions. There are no fuel-burning units in the building. There is no evidence of fugitive dust. No air emission permit applications have been submitted to Ohio EPA for activities in the building.

## **Environmental Appraisal of the Mound Plant**

### **9.48.4.2 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.

#### **9.48.4.2.1 Sanitary Wastewater**

The building does not have sanitary services. According to a diagram of underground lines, presented as Attachment 5 (Section 9.48.6.5), the building is not serviced by a sanitary line.

#### **9.48.4.2.2 Storm Wastewater**

The building is serviced by a storm drain, as shown in Attachment 5 (Section 9.48.6.5). There are no exterior grates. Exterior drains were not tested to confirm that they connect to the storm drainage system. Inspection of the surrounding area 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.

#### **9.48.4.2.3 Chemicals**

No chemicals are stored or used in the meteorological station, according to data provided in the BMQ. The information was gathered as part of the chemical inventory which is conducted annually. The inventory information dates to 1994, as 1995 data was not yet available when the appraisal was conducted. Confirmation of the 1994 inventory by the appraisal team was not yet attempted, as; that was in progress. There is no evidence that chemicals enter the storm or sanitary drains. There are no floor drains in the building. There is no evidence that chemicals which spill could enter the storm drains. There have been no reported spills from Building 25.

#### **9.48.4.3 Potable and Service Water**

There is no water service supplied to the building.

#### **9.48.4.4 Chemical Storage and Hazardous Materials**

There are no chemicals or hazardous materials used or stored in Building 25.

## **Environmental Appraisal of the Mound Plant**

The building is equipped with appropriate emergency response equipment, fire extinguisher. The building has an emergency evacuation plan, and signs were posted in work areas.

There is an aboveground argon storage tank of approximately 6,000-gallon capacity located north of the building, midway between Building 25 and Building PS. There are no sumps, separators, or catch basins, in or around the building. There are no underground storage tanks associated with this building.

The building has been tested and does contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There is no evidence of friable asbestos.

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

### **9.48.4.5 Solid, Hazardous, and Radioactive Waste**

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 service contract is maintained by Waste Management. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

There are no hazardous wastes generated in the meteorological data collection process. (Characterization of Mound's Hazardous, Radioactive, and Mixed Waste, 8-16-90).

### **9.48.4.6 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 white paper and aluminum can recycling.

### **9.48.5 Findings and Recommendations**

The environmental appraisal of Building 25 indicates that there are no action items required. Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.48.6.6).

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.48.6.1 Environmental Appraisal Checklist**

# ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 25

Appraisers:

JOHN PUCKETT AIR ENGINEER  
Name Discipline

\_\_\_\_\_  
Name Discipline

Mark Jensen \_\_\_\_\_  
Name Discipline

\_\_\_\_\_  
Name Discipline

Building Manager: JEFF BOSTON JJ Boston 2/22/96

Process Manager: LARRY ROUSH

Date: 1-22-96

**ENVIRONMENTAL APPRAISAL  
CHECKLIST**

**Table of Contents**

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

## Environmental Appraisal Checklist

Building Name: 75

Appraisers: J. Puckett

Date: 1-22-96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	Y/N Y/N	NA
	Is the building in operation? What are the processes and where do they discharge to?	Y/N _____ _____	office; collection of meteorological info from 2 weather towers onsite; telephone switching equipment - rm. 2.
	Do the floor drains, sinks & toilets appear to be draining properly?	Y/N	NA
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary Storm	NA
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	Y/N _____ _____ Y/N Y/N	
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	Y/N Y/N Y/N	roof drain - to ground

9.48-9

9.48-10

### Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Puckett

Date: 1-22-96

#### Clean Air Act (CAA) Screening Checklist

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

#### CAA Checklist

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

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Puckett

Date: 1-22-96

### CAA Checklist

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

**TABLE A**

Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
NR			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

Source: \_\_\_\_\_

### Environmental Appraisal Checklist

Building Name: 75

Appraisers: J. Puckett

Date: 1-22-96

#### Hazardous Materials (HM) Screening Checklist

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

#### HM Checklist

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

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Duckett

Date: 1-22-96

### HM Checklist

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

**Environmental Appraisal Checklist**

Building Name: 25

Appraisers: J. Puckett

Date: 1-22-96

HM Checklist

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

**Above Ground Storage Tanks Inventory**

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
outside -		Helium	NK	(Y)/N	Y/N	Y/(N)	<del>Y/N</del>
Ltwn. 25	4, PS			Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Puckett

Date: 1-22-94

### Safe Drinking Water Act (SDWA) Screening Checklist

Does this facility have potable water?	Y / (N)	If yes, conduct the following survey
--	---------	--------------------------------------

#### SDWA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 95-02 (A)	Do actual or potential cross-connections exist between potable (light green) and service water (dark green)?	Y / N	NA
OAC 3745 95-04 (B)(C)	Are backflow prevention devices installed where cross connections (hoses connected to faucets, hot water tank vented directly to a drain) exist?	Y / N	<div style="border-left: 1px solid black; border-right: 1px solid black; height: 100px; margin: 0 auto;"></div>
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	Y / N	
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	Y / N	

**TABLE C—Water Fountain Survey**

Building	Location	Model #	Comments / Date of Analysis for Lead
NA			

Source: \_\_\_\_\_

9.48-16

### Environmental Appraisal Checklist

Building Name: 25

Appraisers: J Puckett

Date: 1-22-96

#### RCRA Screening Checklist

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

#### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J Puckett

Date: 1-22-96

### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J Puckett

Date: 1-22-96

RCRA Checklist

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

## Environmental Approval Checklist

Building Name: 25

Appraisers: J. Buckett

Date: 1-22-96

### RCRA Checklist

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

9.48-19

### Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Luckett

Date: 1-22-96

#### RCRA Checklist

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

General Comments:

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Luckitt

Date: 1-22-96

### Asbestos Screening Checklist

Does this facility contain ACBM?	(Y) / N	If yes, conduct the following survey.
----------------------------------	---------	---------------------------------------

### Asbestos Checklist

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

Regulatory Guideline	Question	Response	Comments
<b>ADAPTED FROM TSCA ACBM IN SCHOOLS:</b>			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?  If no for this building or area note this conclusion in the comment section.  Is there any evidence of friable asbestos?  Is the asbestos removal properly managed? (See questions listed below)	(Y) / N  Y / (N)  Y / N	If there is no asbestos removal, do not complete the following section. NA
<b>NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:</b>			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACBM during the removal.	Y / N	NA
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	Y / N	↓
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y / N	↓
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y / N	↓

9.48-21

**Environmental Appraisal Checklist**

Building Name: 75

Appraisers: J. Pulvert

Date: 1-22-96

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

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

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	<p>Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?</p> <p>If the answer is no, note .</p> <p>If the answer is yes, proceed with next section.</p>	Y / N	NA
40 CFR 761.65 (c) (5)	<p>Based on an inspection, are any of the materials or equipment potentially PCB contaminated?</p> <p>If no, note and stop here.</p> <p>If yes, note the location of the management unit, and the method of management, and proceed.</p>	Y / N	
	<p>Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?</p>	Y / N	
	<p>If yes, are auditable records maintained.</p>	Y / N	
40 CFR.30 (a) (1) (ix)	<p>Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?</p>	Y / N	
	<p>Are they visually inspected quarterly? If yes, are auditable records maintained?</p>	Y / N	

## Environmental Appraisal Checklist

Building Name: 75

Appraisers: J. Buckitt

Date: 1-22-96

### TSCA Checklist

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

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Rickett

Date: 1-22-96

TSCA Checklist

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

**GENERAL COMMENTS:**

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Rickett

Date: 1-22-96

### Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste ?	Y / (N)	If yes, conduct the following survey.
--	---------	---------------------------------------

### Low-Level Waste and Transuranic Waste Checklist

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

9.48-25

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Luckett

Date: 1-22-96

Low-Level Waste and Transuranic Waste Checklist

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

**Environmental Appraisal Checklist**

Building Name: 25

Appraisers: J. Luckett

Date: 1-22-96

Low-Level Waste and Transuranic Waste Checklist

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

### Environmental Appraisal Checklist

Building Name: 75

Appraisers: J. Luckett

Date: 1-22-96

#### Low-Level Waste and Transuranic Waste Checklist

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

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Pickett

Date: 1-22-96

### Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

### Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Pickett

Date: 1-22-96

#### Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals?	<input checked="" type="radio"/> Y / <input type="radio"/> N	If yes, conduct the following survey.
---	--	---------------------------------------

#### Waste Minimization/Pollution Prevention Activities Checklist

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

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Puckett

Date: 1-22-96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.48-31

9.48-32

### Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Puckett

Date: 1-22-96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

## Environmental Appraisal Checklist

Building Name: 25

Appraisers: J. Lockett

Date: 1-22-96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9-48-33

### Environmental Appraisal Checklist

Building Name: 75

Appraisers: J. Puckett

Date: 1-22-96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

### Environmental Appraisal Checklist

Building Name: 75

Appraisers: J. Puckett

Date: 1-22-96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.48.6.2 Building Manager's Questionnaire**

## Building Manager's Questionnaire

Building Name: 25 Building Manager: J.L. Boston Phone: 3262 Date: 12-07-95  
Alternate: H. R. Boston Phone: 3524

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

SUP DATA

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

NA

3. Are there any restricted areas? Yes  No

Where are they?

4. Provide a physical description of the building.

This reinforced concrete building contains 430 ft<sup>2</sup>. It has a BUM roof (asphalt), central steam heating and window air conditioning. The building contains asbestos but there is not contamination from radioactive or energetic materials.

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

5. Provide a drawing of the building.

Attached

6. What is the current building use?

Building is used to collect information on local weather conditions. Computers in the building receive data from two weather-monitoring towers onsite. This information is forwarded to Lawrence Livermore National Laboratory for prediction of dispersion patterns in the event of any airborne releases. Some telephone switching equipment is also present.

Source: Mound Buildings, 5-9-95

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

UNKNOWN

Source: Mound Buildings, 5-9-95

## Building Manager's Questionnaire

Building Name: 25 Building Manager: J.L. Boston Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: Meteorological station

How Wastes Are Generated:

No wastes generated.

Contact:

Phone #:

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

## Building Manager's Questionnaire

Building Name: 25      Building Manager: J.L. Boston      Phone: \_\_\_\_\_      Date: 12-07-95  
 Alternate: \_\_\_\_\_      Phone: \_\_\_\_\_

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

10. Does the building have air emission sources?    No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

## Building Manager's Questionnaire

Building Name: 25 Building Manager: J.L. Boston Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

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

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

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

16. Has an asbestos survey been conducted? Yes  
 What are the results? Yes

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

### Building Manager's Questionnaire

Building Name: 25 Building Manager: J.L. Boston Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? No

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994



## Building Manager's Questionnaire

Building Name: 25    Building Manager: J.L. Boston    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

NONE

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / N			Y / N	Y / N

Source: \_\_\_\_\_

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

Materials	Amount

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 25 Building Manager: J.L. Boston Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.? Yes  No
29. Is waste material stored in or around the building for more than 90 days? Yes  No
30. Has the building been identified as a 90 day waste accumulation area? Yes  No
31. Has any area in the building been identified as a satellite accumulation area? Yes  No
32. Is mixed waste generated, stored, or disposed of from the building? Yes  No   
 Where are logs found?

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

Source: \_\_\_\_\_



## Building Manager's Questionnaire

Building Name: 25    Building Manager: J.L. Boston    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

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

Source: \_\_\_\_\_

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

*None*

## Building Manager's Questionnaire

Building Name: 25 Building Manager: J.L. Boston Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

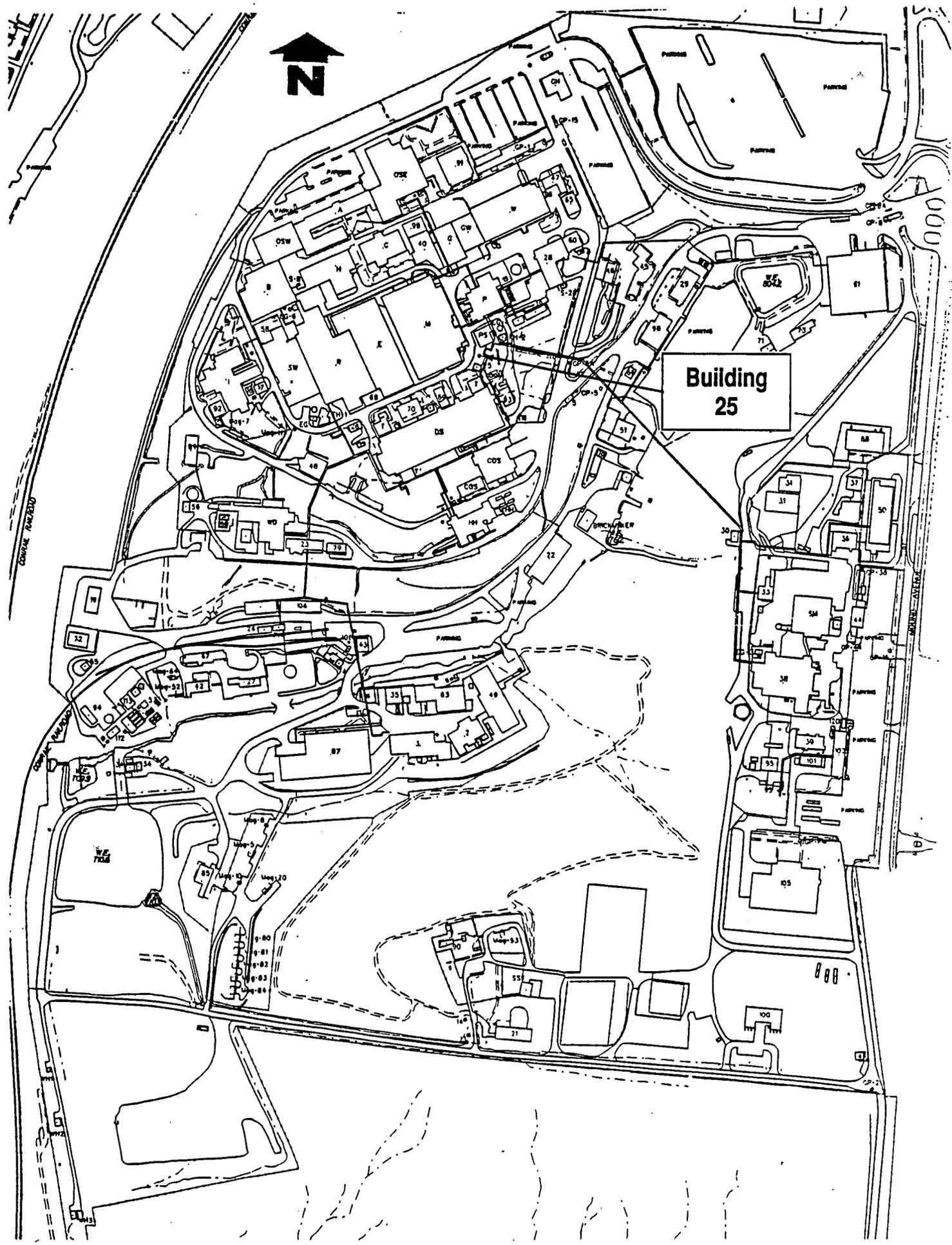
36. Is there a waste minimization program in the building? Yes  No   
Discuss your ideas about how to minimize waste.

37. Has a pollution prevention program been developed for the building? Yes  No

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.48.6.3 Location of Building 25**



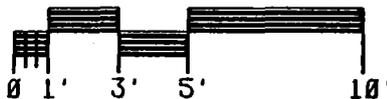
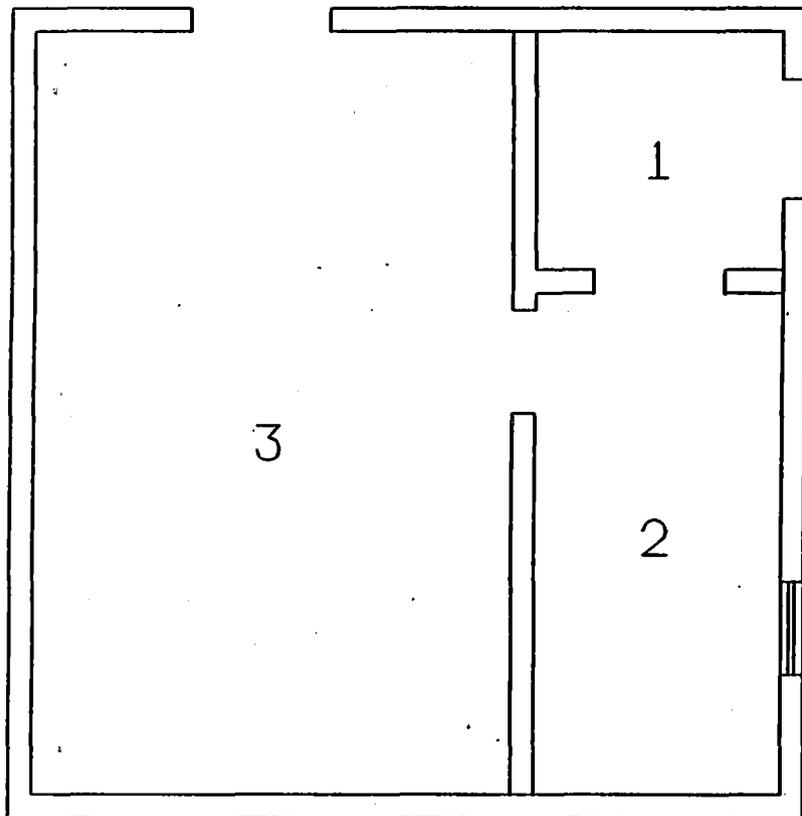
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.48.6.4 Floor Plans for Building 25**

ISS	DATE	REVISION	BY	CHK	APP	DATE	BY
0	12/12/91	ASBUILT ISSUE					



**BLDG #25  
FIRST FLOOR  
BLDG CODE:3025**

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
____ NONE ____ TERCOC ____ TERC ____ DWOC	
TECH. REP. _____	
DR. NO. _____	
TERCOC _____	
TERC _____	
DWOC _____	

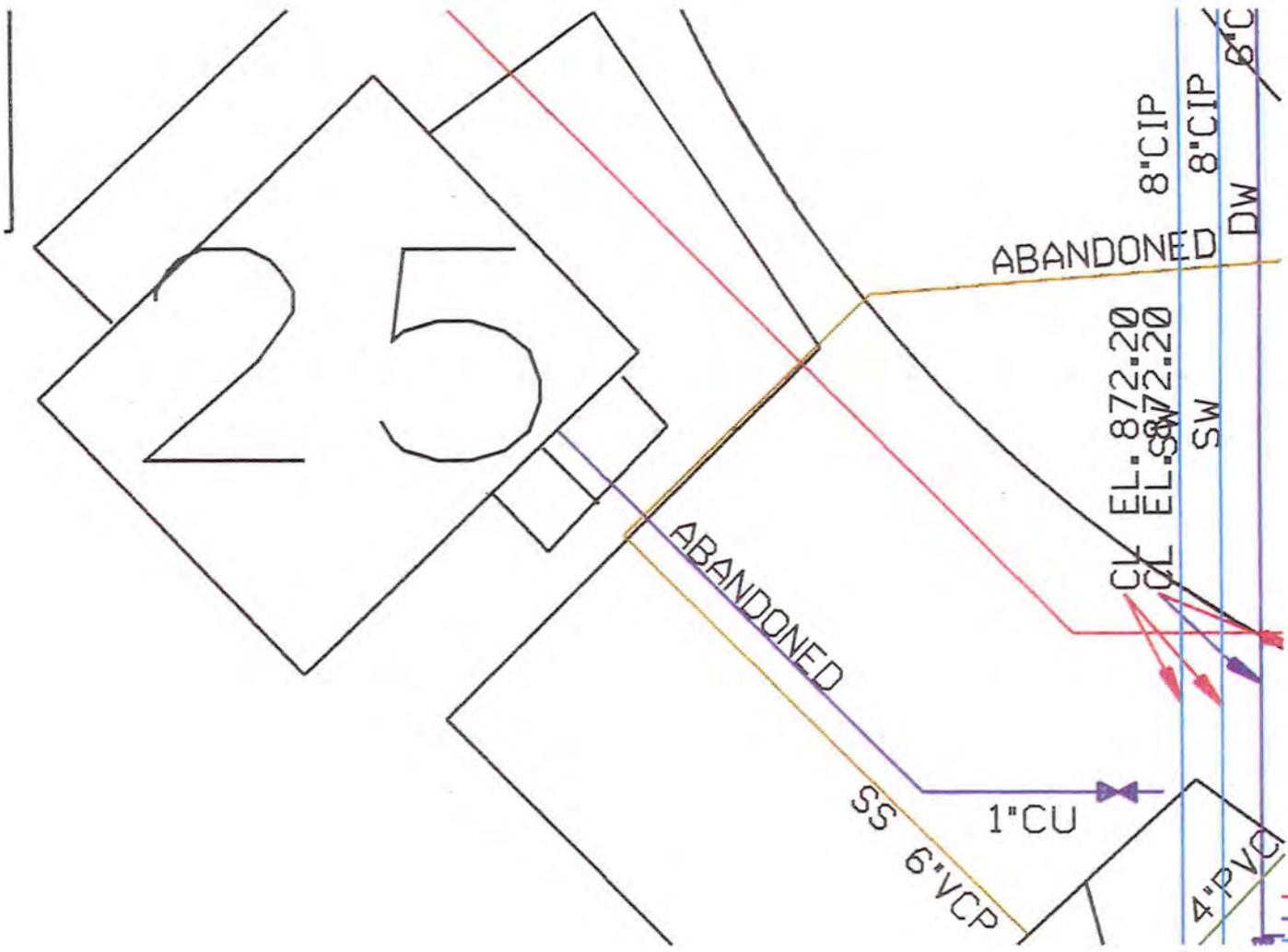
SECTION	NO.	DATE	REVISION	TITLE	(U) TITLE CLASSIFICATION
SECTION 001	1	12/12/91	ASBUILT ISSUE	BLDG #25 FLOOR PLANS	
SECTION 002	2				
SECTION 003	3				
SECTION 004	4				
SECTION 005	5				
SECTION 006	6				
SECTION 007	7				
SECTION 008	8				
SECTION 009	9				
SECTION 010	10				
SECTION 011	11				
SECTION 012	12				
SECTION 013	13				
SECTION 014	14				
SECTION 015	15				
SECTION 016	16				
SECTION 017	17				
SECTION 018	18				
SECTION 019	19				
SECTION 020	20				
SECTION 021	21				
SECTION 022	22				
SECTION 023	23				
SECTION 024	24				
SECTION 025	25				
SECTION 026	26				
SECTION 027	27				
SECTION 028	28				
SECTION 029	29				
SECTION 030	30				
SECTION 031	31				
SECTION 032	32				
SECTION 033	33				
SECTION 034	34				
SECTION 035	35				
SECTION 036	36				
SECTION 037	37				
SECTION 038	38				
SECTION 039	39				
SECTION 040	40				
SECTION 041	41				
SECTION 042	42				
SECTION 043	43				
SECTION 044	44				
SECTION 045	45				
SECTION 046	46				
SECTION 047	47				
SECTION 048	48				
SECTION 049	49				
SECTION 050	50				
SECTION 051	51				
SECTION 052	52				
SECTION 053	53				
SECTION 054	54				
SECTION 055	55				
SECTION 056	56				
SECTION 057	57				
SECTION 058	58				
SECTION 059	59				
SECTION 060	60				
SECTION 061	61				
SECTION 062	62				
SECTION 063	63				
SECTION 064	64				
SECTION 065	65				
SECTION 066	66				
SECTION 067	67				
SECTION 068	68				
SECTION 069	69				
SECTION 070	70				
SECTION 071	71				
SECTION 072	72				
SECTION 073	73				
SECTION 074	74				
SECTION 075	75				
SECTION 076	76				
SECTION 077	77				
SECTION 078	78				
SECTION 079	79				
SECTION 080	80				
SECTION 081	81				
SECTION 082	82				
SECTION 083	83				
SECTION 084	84				
SECTION 085	85				
SECTION 086	86				
SECTION 087	87				
SECTION 088	88				
SECTION 089	89				
SECTION 090	90				
SECTION 091	91				
SECTION 092	92				
SECTION 093	93				
SECTION 094	94				
SECTION 095	95				
SECTION 096	96				
SECTION 097	97				
SECTION 098	98				
SECTION 099	99				
SECTION 100	100				

9.48-57

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.48.6.5 Underground Utility Lines**



- FIRE
- POTABLE
- RAW
- SANITARY
- STORM
- RADIOLOGICAL



**UNCLASSIFIED**

**E.G. & G. - MOUND**  
 UNDERGROUND WATER & WASTE LINES  
 BLDG. 25  
 DATE: 3-6-96

# **Environmental Appraisal of the Mound Plant**

## **9.48.6.6 Photographs**



Mound Plant Building 25

9.48-63



## Environmental Appraisal of the Mound Plant

### 9.49 BUILDING 26

#### 9.49.1 Scope of Building 26 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.

A team of environmental professionals did not perform an environmental appraisal on Building 26 because it was a sold building.

#### 9.49.2 Description of Building 26

Building 26 was a one-story, 800-square foot steel frame, metal building with a metal roof. The building was bordered by Building R to the north, Building DS to the south, Building 48 to the west, and Building 70 to the east. The location is shown in Attachment 1 (Section 9.49.4.1).

Building 26 was constructed in 1965. The building was originally used for a welding shop, storage, and office areas. It was emptied and dismantled in 1996. The building was used for the same purpose since construction. The building was not contaminated with radiological or energetic material (*Mound Facilities Physical Characterization*, 12-1-93).

#### 9.49.3 Summary of Findings

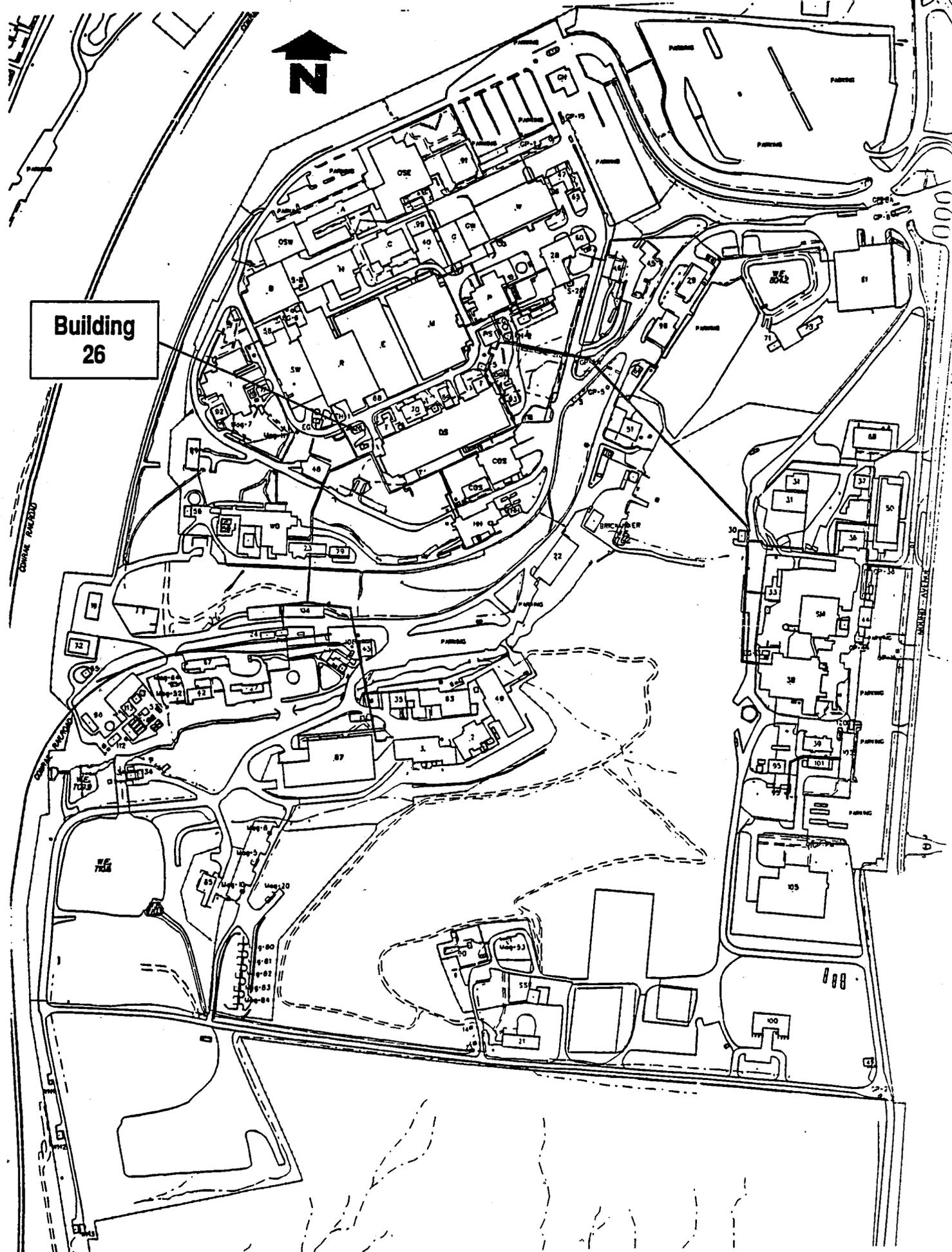
Building 26 has undergone Safe Shutdown which includes removal of wastes, materials, and equipment. A Health Physics safety determination and a liabilities assessment were made. An ESA (ASTM E 1527-94 or ASTM E 1528-93) was not conducted. The building has been sold and removed from Mound.

Since the building has been sold, an Environmental Appraisal Checklist (EAC) was not prepared and no further action was taken concerning this building.

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.49.4.1 Location of Building 26**



This page intentionally left blank.



## **Environmental Appraisal of the Mound Plant**

### **9.50 BUILDING 27**

#### **9.50.1 Scope of Building 27 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 prepared to perform a walk-through of Building 27 on the morning of January 29, 1996; however, it was confirmed by the building manager that the building had been leased to the City of Miamisburg. Therefore, an environmental appraisal was not conducted. No Building Manager's Questionnaire (BMQ) was available and the Environmental Appraisal Checklist (EAC) was not completed since the magazine was leased.

#### **9.50.2 Description of Building 27**

Building 27, the explosive materials laboratory and testing, is a two-story, 5,300-square-foot, reinforced concrete, slab-on-grade structure with a built-up membrane (asphalt) roof. The south wall has frangible panels. The location is shown in Attachment 1 (Section 9.50.4.1). The building is bounded by a roadway to the north, the Mound Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) drum storage area to the east, a store water canal to the south and Building 42 to the west. The second floor contains a lavatory and a locker room. The first floor contains laboratories, an office, storage, and explosive bays. The building is serviced by sanitary and storm water service lines, a fire sprinkler water main, and electric service of 480V (*Mound Facility Physical Characterization*, 12-1-93).

Building 27 was constructed in 1969 (*Capital Assets Management Process, CAMP Report, FY96*). The building has been used for the same purpose since construction. Research and testing activities using energetic materials have occurred in the building. Research, development and testing activities using radioactive materials have not occurred (*Mound Facility Physical Characterization*, 12-1-93).

#### **9.50.3 Summary of Findings**

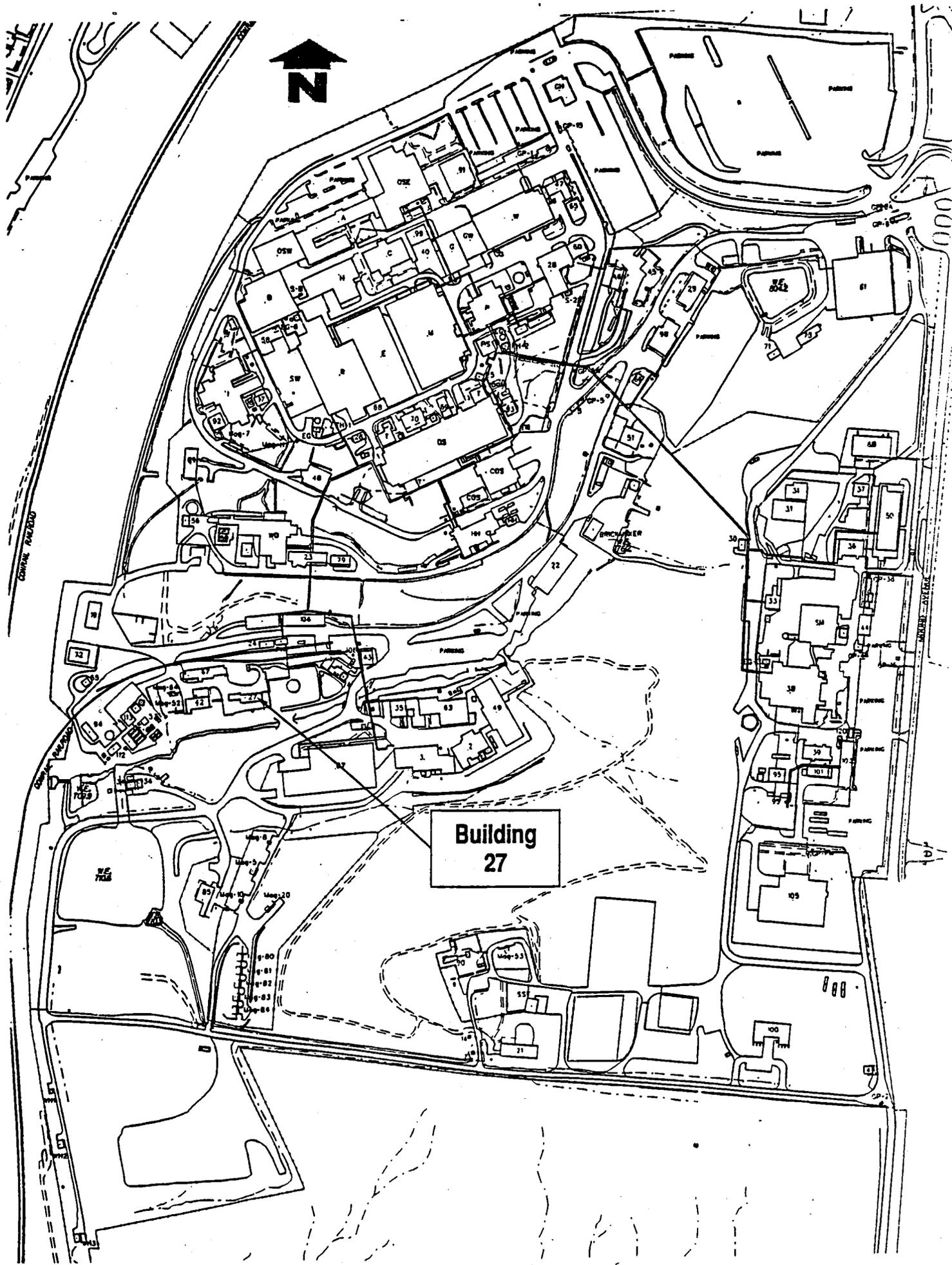
Building 27 has undergone Safe Shutdown which includes removal of wastes and other materials plus equipment which cannot be released. A health physics safety determination and a liabilities assessment were made. An Environmental Site Assessment (ASTM E 1527-94 or ASTM E 1528-93) was not conducted. The building has been leased by the Department of Energy (DOE) to the City of Miamisburg which accepted the liabilities assessment. The General Purpose Lease between the DOE and the City of Miamisburg requires the sub-lessee to obtain and comply with regulatory agency permits.

## **Environmental Appraisal of the Mound Plant**

A Photograph was taken to document the building. It is included as Attachment 2 (Section 9.50.4.2). Since the building has been leased, an EAC was not prepared and no further action was taken concerning this building.

# **Environmental Appraisal of the Mound Plant**

## **9.50.4.1 Location of Building 27**



SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.50.4.2 Photographs**



Mound Plant Building 27

9.50-9



## Environmental Appraisal of the Mound Plant

### 9.51 BUILDING 28

#### 9.51.1 Scope of Building 28 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.

A team of environmental professionals did not perform an environmental appraisal on Building 28 because it was a leased building.

#### 9.51.2 Description of Building 28

Building 28 was a one-story, 11,329-square-foot structure. It was bordered by Building W to the north, a roadway to the south, Building P to the west, and Building 60 to the east. The location is shown in Attachment 1 (Section 9.51.4.1).

Building 28 was constructed in 1966. The building was used for ceramics development and production. The building is now leased. The building was not contaminated with radiological or energetic material (*Mound Facilities Physical Characterization*, 12-1-93).

#### 9.51.3 Summary of Findings

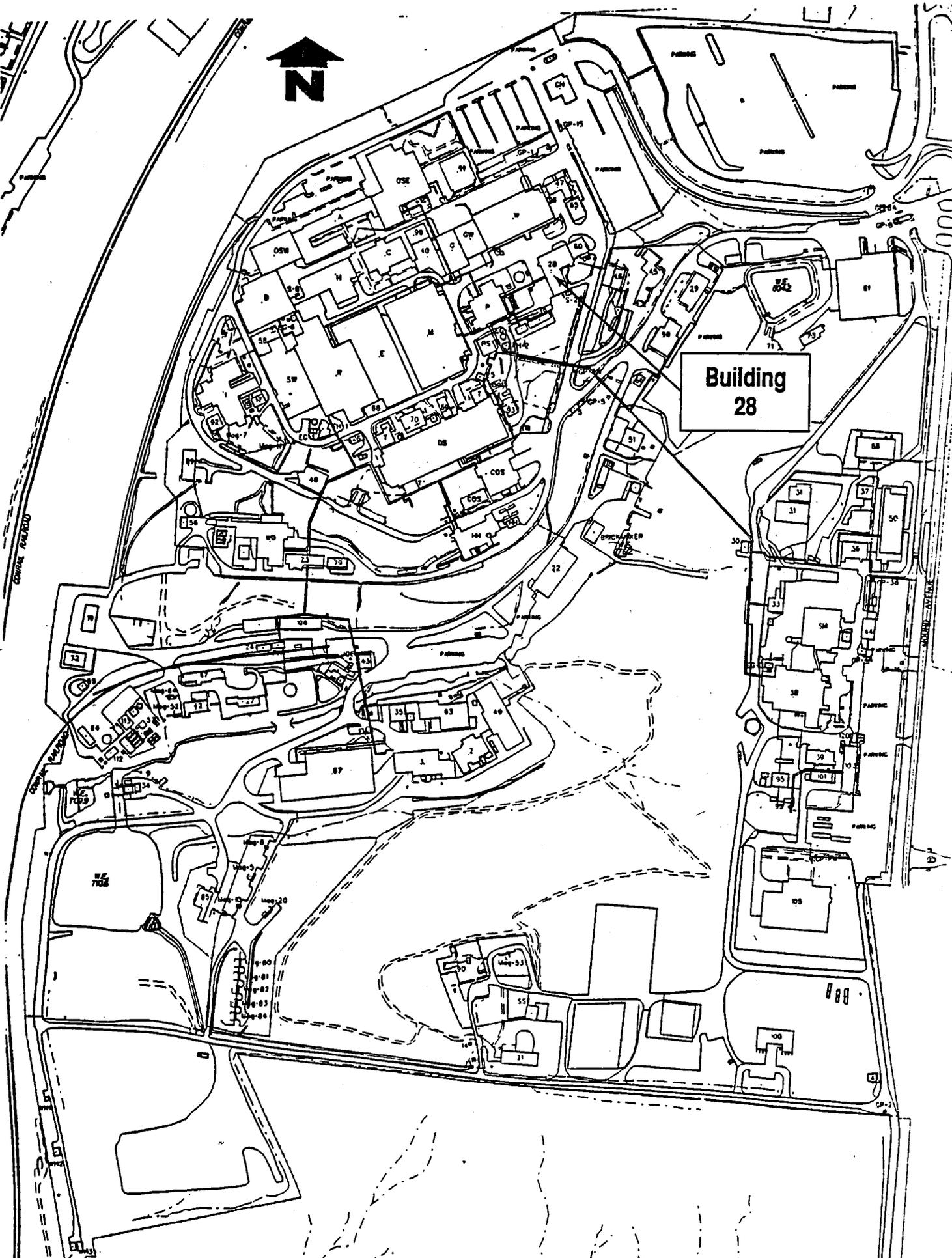
Building 28 has undergone Safe Shutdown which includes removal of wastes and other materials plus equipment which cannot be released. A Health Physics safety determination and a liabilities assessment were made. ESAs (ASTM E 1527-94 or ASTM E 1528-93) were not conducted. The building has been leased by the Department of Energy (DOE) to the City of Miamisburg, which accepted the liabilities assessment. The General Purpose Lease between the DOE and the City of Miamisburg requires the sub-lessee to obtain and comply with regulatory agency permits.

Since the building has been leased, an Environmental Appraisal Checklist (EAC) was not prepared and no further action was taken concerning this building.

A photograph of the building is shown as Attachment 2 (Section 9.51.4.2).

# **Environmental Appraisal of the Mound Plant**

## **9.51.4.1 Location of Building 28**



**Building  
28**

This page intentionally left blank.

# **Environmental Appraisal of the Mound Plant**

## **9.51.4.2 Photographs**

Mound Plant Building 28

9.51-9





## **Environmental Appraisal of the Mound Plant**

### **9.52 BUILDING 29**

#### **9.52.1 Scope of Building 29 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 29 on the morning of February 27, 1996. The EAC (Attachment 1—Section 9.52.6.1) was used to record findings. The appraisers were not accompanied by either the building manager or the process managers (Safe Shutdown). A subsequent meeting was held with the process manager to review shutdown records and to discuss various aspects of the shutdown procedures being conducted in the building. Other information was supplied by the building manager and recorded on the BMQ, included as Attachment 2 (Section 9.52.6.2).

#### **9.52.2 Description of Building 29**

Building 29 was used for plastics formulation and manufacturing. It is a 6,601-square-foot, one-story structure, with a 325-square-foot mezzanine with a steel grate floor above Room 6, and an internal 1,200-square-foot (steel floor) penthouse. Constructed of concrete/concrete blocks with a built-up membrane roof (coal tar), Building 29 sits on a slab-below-grade foundation. Location is shown in Attachment 3 (Section 9.52.6.3). The building is bounded by Building 98 to the west, a parking lot to the south, a roadway to the north and Building 45 across the roadway up a hill. Floor plans are presented as Attachment 4 (Section 9.52.6.4). The main floor contains a mechanical room, refrigeration storage unit, plastic test room, roll mill room, mixer room, solvent supply room, dry plastic process room and office support including toilets, locker, janitorial, storage, and office. The mezzanine supports the asbestos slurry kettle and the penthouse equipment, including two varnish kettles, a Malta mixer, acetone pumps, and the building air exhaust filter system. A lean-to on the northeast side of the building held two tank containers for contaminated acetone. A lean-to on the opposite side of the building provided shelter for containers of new acetone.

The building operation has been out-of-service since 1987; it is now undergoing Safe Shutdown. The building is serviced by HVAC systems providing central heat (steam), chilled water, a fire sprinkler system, potable water, and electric service of 480V (Mound Facility Physical Characterization, 12-1-93). Service water is distributed within the building and within the fire sprinkler system.

Building 29 was constructed in 1965 (MD-10391, *Asbestos Program Manual*, 9-14-95). The building was used for the same purpose since construction.

## **Environmental Appraisal of the Mound Plant**

### **9.52.3 Summary of Findings**

Building 29 is undergoing Safe Shutdown and is no longer occupied. All processes have been secured. Acetone lines, storage tanks, and pumps have been disconnected (acetone removed). Numerous pieces of equipment have been disconnected, their exteriors cleaned (asbestos wipe), wrapped in plastic, and labeled "asbestos-containing-materials" or "suspected-asbestos-containing-materials." Office furnishings have been tested for radioactivity and cleaned. Hand tools have also been tested, cleaned, and wrapped in plastic. Chemicals (lubricants, hydraulic fluid, etc.) have been removed from all but one item of installed equipment. There were two issues of environmental concern identified during the walk-through and during review of reference materials.

### **9.52.4 Observations**

#### **9.52.4.1 Air Emissions**

The building has a central exhaust, with filtration. The air handling system processed air from rooms where potential fugitive asbestos dust and evaporating acetone were generated (mixers and press). Process production ceased in 1987 and EG&G MAT notified the RAPCA in 1992 that a permit application would not be submitted since the process operations had been terminated and there was no intention to reactivate. The exhaust system is not included in the air emissions database. There are no fumehoods. There are no fuel-burning units in the building. There is no evidence of fugitive dust or fugitive asbestos; however, the central exhaust system is presumed to contain asbestos. It is not scheduled for cleaning until final disposition of the building is determined by DOE.

#### **9.52.4.1 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.

## **Environmental Appraisal of the Mound Plant**

### **9.52.4.2.1 Sanitary**

The building has sanitary services. According to a diagram of underground utility lines (Attachment 5—Section 9.52.6.5), the building is serviced by a sanitary line. Confirmation of drainage of sanitary waste into sanitary conveyance lines was not within the scope of this effort; therefore, dye tests or smoke tests were not conducted.

Sanitary effluent is conveyed to the onsite tertiary wastewater treatment facility, and subsequently discharged to the Great Miami River. There is no monitoring of building effluent. Based upon discussions with the former process operations personnel, effluent from Building 29 did not deviate from that expected by the sanitary treatment plant manager.

### **9.52.4.2.2 Storm Wastewater**

The exterior of the building and all floor drains (except Rooms 5, 6, and 7) are serviced by storm drains. Exterior grates and drains were not tested to confirm that they connect to the storm drainage system. Inspection showed no sign of odors or scarring. There were signs of colored discharges (asbestos dye) which would indicate that materials other than storm water could have entered the storm drainage system when the processes were in operation.

### **9.52.4.2.3 Chemicals**

A review of the procedures and requirements contained in MD-10431, Safe Shutdown Standards Operating Procedures, and the Safe Shutdown Process Managers' records indicate that once Phase II Activities (i.e., commencement of Safe Shutdown) begin, all chemicals within the building are inventoried. Chemicals contained in idle equipment are handled separately). Chemicals which can be reused at Mound or transferred to the City of Miamisburg, subject to age and condition, are identified and processed separately.

Subsequently, all the remaining chemicals are containerized, characterized, and transferred to Waste Management for disposition. A copy of the inventory, chemical profile of each container, and Waste Management's acceptance becomes a permanent part of the Mound Safe Shutdown Plan for the specific building. As chemicals are transferred to Waste Management, a central chemical database in the Program Manager's Office is updated monthly to reflect the disposition. All activities are conducted in accordance with MD-70523, 40 CFR 265, and OAC 3745.52. As hazardous waste generators, all Safe Shutdown Process Managers have received training in accordance with 40 CFR 265.16. There was evidence that chemicals entered the storm drains, but not into sanitary drains. It should be noted that the process equipment remained idle from 1987 until the Safe Shutdown process began in 1994.

During the visual inspection of Building 29 the appraisal team could not determine whether or not all chemicals have been removed from the idle equipment. The acetone storage tanks, lines, pumps, and mixers had been disconnected and are free of chemicals. A subsequent discussion with the process manager and a review of the Safe Shutdown records for the building indicated

## **Environmental Appraisal of the Mound Plant**

that chemicals in all idle equipment have been removed, including the compressor noted to be leaking in Room 8 during the appraisal site visit.

### **9.52.4.3 Potable and Service Water**

Potable water is supplied to the building. Backflow prevention devices are installed at all visible points of potential cross connection in the mechanical and janitorial rooms. The fountain which supplies drinking water has not been tested for lead. According to EPA protocol, annual sampling criteria do not require testing of the fountain. There is service water supplied to the building; it is distributed in the fire sprinkler system.

### **9.52.4.4 Chemical Storage and Hazardous Materials**

As discussed in Section 9.52.4.2.3 of this report, chemicals, including those in idle equipment, were removed from the building. The building is equipped with appropriate fire extinguishers (charged). Each extinguisher is bar-coded. The inspection date database is maintained in the Fire Station (Building 98). There is an Emergency Evacuation Plan, and signs were posted.

There are no aboveground storage tanks in or around the building and no underground storage tanks are associated with this building. There are no separators, or catch basins, in or around the building. One concrete sump located in Room 6 provides containment for the plastic/asbestos mixer. It has no drain or overflow outlet. According to the process manager, the sump had been half full of heavy oil. The oil had been removed, tested, characterized and removed by Waste Management prior to the appraisal visit.

The building had been tested and contains asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). Because of the process conducted in Building 29, the air exhaust system, as well as most of the process equipment and equipment appurtenances, are presumed to contain friable asbestos.

There are no capacitors or transformers containing PCB's located in the building. The adjacent electrical substation (northeast) does contain PCB; it is properly labeled. The replacement transformer unit is positioned nearby. Verification of records indicated that the PCB from the transformer and the transformer core have been contracted for removal by a licensed vendor.

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

### **9.52.5 Solid, Hazardous, and Radioactive Waste**

During the Safe Shutdown process, hazardous materials and/or mixed wastes are generated in the process of cleaning idle equipment, furnishings, and personal property; removing tanks, cylinders, and process piping; and cleaning sumps and pits; etc. A review of procedures and requirements contained in MD-10431, Safe Shutdown Standard Operating Procedures, and the Safe Shutdown Process Manager's records indicate that the wastes are containerized, characterized (including

## **Environmental Appraisal of the Mound Plant**

testing for radionuclides), and then transferred to Waste Management for disposition. A copy of the inventory, chemical profile of each container, and Waste Management's acceptance become a permanent part of the Mound Safe Shutdown Plan for the specific building. All activities are conducted in accordance with MD-70523, 40 CFR 265, and OAC 3745.52. As hazardous waste generators, all Safe Shutdown Process Managers have received training in accordance with 40 CFR 265.16. There is no evidence that hazardous waste entered either the storm or sanitary systems.

Room 8 contains an installed air compressor and a small quantity of compressor oil is leaking onto the concrete floor. The oil, by visual inspection, has not entered the floor drain nor the storm water collection system. The compressor should be handled as idle equipment, along with other equipment in Building 29. According to the process manager, it was the last item to be cleaned. It was cleaned and the oil removed by Waste Management within 72 hours of the visual inspection.

In addition, idle equipment and equipment appurtenances are believed to contain asbestos materials. Exteriors of this equipment have been cleaned and small items wrapped, sealed and labeled accordingly. The NESHAPS, 40 CFR 61, 29 CFR 1910.1001, 29 CFR 1926.1101, and OSHA regulations become pertinent when cleanup efforts begin and continue in effect through disposal. In a discussion with the Safe Shutdown process manager, packaging of the equipment and equipment appurtenances which contain, or may contain asbestos, is the only identified, written planned action. A process (plan) to cleanup/dispose of the asbestos from the air exhaust system and equipment has not been identified, using MD-10391 as a guide.

### **9.52.4.6 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.

As part of the Safe Shutdown process, equipment and supplies were evaluated for reuse. They were handled in several ways: reused at Mound; sent to other DOE facilities; claimed by the City of Miamisburg; sold at auction; sold to recycle; or disposed.

### **9.52.5 Findings and Recommendations**

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.52.6.6).

The environmental appraisal of Building 29 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.

29-1. RCRA regulations require that waste be removed from idled manufacturing process and waste producing equipment within 90 days (40 CFR 261.4). ("Idle" is defined as occurring either from the cessation of production or idled between production runs).

## **Environmental Appraisal of the Mound Plant**

Equipment in Building 29 remained idle from 1987 until 1994-96. Excessive delays in processing idle equipment in other buildings should be reviewed and a plan of action identified to preclude further delays in noncompliance with 40 CFR 261.4.

- 29-2. As long as the equipment containing asbestos materials remains packaged and labeled, EG&G MAT is not in violation of any federal or state regulation. The NESHAPS, 40 CFR 61, and OSHA regulations become pertinent at that point in time where cleanup operations begin (protection of personnel) and disposal of waste occurs. Consideration should be given to developing a specific plan (characterizing equipment, identifying waste expected, decontamination procedures, identifying health and safety issues, and disposal methodology) prior to implementing cleanup operations. Developing such a plan would occur in close coordination with Industrial Hygiene personnel, following MD-10391.

# **Environmental Appraisal of the Mound Plant**

## **9.52.6.1 Environmental Appraisal Checklist**

# ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 29 PLASTIC FORMULATION

Appraisers:

TEAM #4

MARK GILLIAT ENGINEER  
Name Discipline

MARCIA VANNET CHEMIST  
Name Discipline

MYRON SMITH, D. ENGINEER  
Name Discipline

- -  
Name Discipline

Building Manager: Bob Ward (x-3821)

Process Manager: Mark Tibbs (x-4734)

Date: 27 FEBRUARY 1996

**ENVIRONMENTAL APPRAISAL  
CHECKLIST**

**Table of Contents**

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

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team # 4

Date: 2-27-96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list?	Y / N	MOST CHEMICALS ON ATTACHED LIST REMOVED UNDER SAFE SHUTDOWN REMAINING ARE BEING USED BY SAFE SHUTDOWN
	Are they properly contained?	Y / N	
	Is the building in operation? What are the processes and where do they discharge to?	Y / <del>N</del>	
	Do the floor drains, sinks & toilets appear to be draining properly?	<del>Y</del> / N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	<del>Sanitary</del> <del>Storm</del>	
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	<del>Y</del> / N  Y / N Y / N	Room 6.
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	<del>Y</del> / N  <del>Y</del> / N <del>Y</del> / N	IN SECOND FLOOR & MECHANICAL ROOM 1 RED ASBESTOS DYE STAINING - NOT USED SINCE 1987. BECAUSE OF PROCESS ALMOST ANY ROOM WITH FLOOR DRAINS

9.52-11

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: TEAM # 4

Date: 2-27-96

### Clean Air Act (CAA) Screening Checklist

Regulatory Guideline	Question	Response	Comments
	Are there any rooms that have air emissions sources that vent to the outside of the building, e.g., fumehoods, equipment? If so, note the rooms.	(Y) N	AIR SAFETY EXHAUST SYSTEM W/ FILTER SYSTEM IN REAR. COLLECTS AROUND 4 FUMES ASSISTERS - ROOMS 5, 6, 7, 8, 9 & 2ND FLOOR
OAC 3745-35	Using the air emissions inventory reference for this building, are there any sources in the building that are not documented?	(Y) N	IN 1992 AIR EMISSIONS PERMIT APPLICABLE TO CFC'S INDICATED NOT INCLUDING AIR SYSTEM BECAUSE PROCESS DISCONTINUED
	Is there evidence of fugitive dust emissions inside or outside of the building?	Y (N)	PROCESS NOT DONE - NO EVIDENCE FROM SDC SHUTDOWN ACTIVITIES

### CAA Checklist

Regulatory Guideline	Question	Response	Comments
	Are there existing air permits or applications applicable to the building?	Y (N)	
OAC 3745-31,35	If yes, are the terms and conditions of the permit or the information included on the application (see air emissions database) being followed? Note any differences and update the air emissions database.	Y / N	
OAC 3745-31	Are there any sources that are not included in the air emissions database? If so, note the room, hood number, active or not, POC, and applicable air emission database information on Table B.	(Y) / N	INACTIVE Room 5, 6, 7, 8 & 2ND FLOOR Air Collection Systems
OAC 3745-31-03	Are there sources which are lab equipment of lab fumeheads used exclusively for chemical or physical analyses and bench scale lab equipment? These sources do not require a permit. However, the air emissions database should be updated.	Y / (N)	
	Has there been any release of air contaminants from this building?	Y (N)	NOT SINCE 1987

# Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-94

## CAA Checklist

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

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

Blank

Source: \_\_\_\_\_

9.52-13

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-96

### Hazardous Materials (HM) Screening Checklist

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

### HM Checklist

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

9.52-14

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team # 4

Date: 3-29-96

### HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	(Y) N	
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	(Y) N	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	Y / N	REMOVED
CGA P-1 3.5.3	Full and empty containers should be stored separately with the storage layout planned so that containers comprising of old stock can be removed first with a minimum handling of other containers.	Y / N	N/A
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	Y / N	NONE IN BLDG
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y / N	N/A
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y / N	N/A
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y / N	N/A
	Is there a sign posted in each work area regarding emergency egress and emergency response action?	(Y) N	
	Is there an emergency response plan available?	(Y) N	

9.52-15

### Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-96

#### HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	(Y)/N	
	Does it have proper containment?	(Y)/N	EXCEPT FOR FLOOR DRAINS RM 842 <sup>ND</sup> FLOOR
	Is there a liquid bulk transfer area?	(Y)/N	ACETONE OUTSIDE (2 LOCATIONS)
	Is there proper containment?	Y/(N)	NO LONGER REQUIRED Process & Chemicals
	Is there an above ground storage tank? If so, complete Table B.	Y/(N)	

Removed

#### Above Ground Storage Tanks Inventory

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/Contamination	If Empty, Flushed
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
		<i>Blank</i>		Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_

9.52-16



## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-96

### Safe Drinking Water Act (SDWA) Screening Checklist

Does this facility have potable water?	(Y) / N	If yes, conduct the following survey.
--	---------	---------------------------------------

#### SDWA Checklist

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

**TABLE C—Water Fountain Survey**

Building	Location	Model #	Comments / Date of Analysis for Lead
			<i>Blank</i>

Source: \_\_\_\_\_

9.52-17

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team # 4

Date: 2-27-96

### RCRA Screening Checklist

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

### RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	Has any material generated been characterized RCRA hazardous? Was characterization by analysis or by process knowledge? Are lab results or documentation of process knowledge readily available? Note any uncharacterized material in comment section. Is it waste?  If yes, proceed with next section.	(Y) / N  analysis / process  Y / N  Y / N	Formerly Used     NONE
OAC 3745 52-11	Are any of the materials noted RCRA hazardous waste?  If no, note and stop here.  If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.	(Y) / N	ACETONE (USED & REMOVED) RECORDS INDICATE PROPER DISPOSAL THROUGH WM  ASBESTOS NOT RCRA

9.52-18

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: TEAM # 4

Date: 2-27-96

### RCRA Checklist

Regulatory Guideline	Question	Response	Comments
<b>I. HAZARDOUS WASTE STORED IN CONTAINERS</b>			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	(Y)/N Y/N	FORMER OUTSIDE ATTACHED STORAGE SHED - USED/CONTAMINATED ACTIONS - Soup in TR 8 - Heavy Oil - removed
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas?  If no, proceed to the next section.  If yes, answer the following.	Y/(N)	
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y/N	No longer Applicable
	Are the containers in good condition?	Y/N	
	Are the waste compatible with the containers?	Y/N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the plant site boundary?	<del>3 days</del> Y/N	
	Are containers kept closed and locked except during filling?	Y/N	
	Are containers moved within 3 days of being filled?	Y/N	

9.52-19

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-96

### RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745-52-11 (A)	If a Satellite accumulation area has been abandoned and/or if waste left in place, and the containers may be subject to the 90-day-storage exclusion.  If this exclusion does not apply, go to the next section. If the containers have been in storage under this exclusion, answer the following:		IDLE EQUIPMENT REMAINED w/o CLEANING 1987 To 1995 WORK COMPLETED IN FEB '96
	Are the containers in good condition?	(Y) N	ONE USED OIL/CONTAMINATED HOPE REMAIN
	Are the waste compatible with the containers?	(Y) N	
	Are the containers kept closed except during filling?	(Y) N	
	Are the containers managed in such a way, that they are not ruptured, or leaks caused?	(Y) N	
	Is the area inspected at least once weekly?	(Y) N	
	Is the inspection recorded? Where is the log?	(Y) N	WITH BLDG PROCESS MGR.
	Is it properly completed, dated, and signed?	Y / N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the facility boundary?	Y / N	N/A
	Are incompatible wastes managed in such a way that they will not react with another incompatible waste?	Y / N	N/A
OAC 3745-52-34(B)	Has any of the waste (except in Building 23, Building 72 and the Burn Area) been managed in excess of 90-days?	Y / N	TOWNSHIP AS COLLECTED FM EQUIPMENT/SUMP
	If no go to next section.		
	If yes, note.		
	For Building 23, Building 72 & Burn Area use special checklist.		

\* Removed w/ 72 hrs



9.52-20

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: Team #4

Date: 2-29-96

### RCRA Checklist

Regulatory Guideline	Question	Response	Comments
<b>II. HAZARDOUS WASTE STORED IN TANKS</b>			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	(Y)/N.	From 1987 until 3000 SHUTDOWN STARTED 1994 COMPLETED 2/29/96
	If the answer was no, then proceed with the following:	Y/N	
	Has the tank or piece of equipment had an integrity assessment?	Y/N	
	Is there a sump?	Y/N	
	Is it dry?	Y/N	
	Does the tank or equipment have secondary containment?	Y/N	<i>Blank</i>
	Does the tank or equipment have leak detection device(s)?	Y/N	
	Has spill control prevention been enacted?	Y/N	
	Has any hazardous waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y/N	
	If the answer was no, then proceed with the following:		
	Has the tank or piece of equipment had an integrity assessment?	Y/N	
	Does the tank or equipment have secondary containment?	Y/N	
	Does the tank or equipment have leak detection device(s)?	Y/N	
	Has spill control prevention been enacted?	Y/N	
	Is there a closure plan?	Y/N	
If yes, then note.			
OAC 3745-67	Has any of the waste been managed in a surface impoundment? If yes, then note. Go to the next section.	Y/N	

9.52-21

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: TEAM # 4

Date: 2-27-96

### RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745-68	Has any of the waste been managed in a Landfill? If yes, then note. Go to the next section.	Y / (N)	
OAC 3745-68	Has any of the waste been managed in an Incinerator (other than Burn area units)? If yes, then note. Go to the next section.	Y / N	<i>Blank</i>
OAC 3745-68	Has any of the waste been managed in a Thermal treatment Unit (other than Burn area units)? If yes, then note. Go to the next section	Y / N	
OAC 3745-69	Has any of the waste been managed in a Miscellaneous Treatment Unit (other than Burn area units)? If yes, then not. Go to the next section.	Y / N	
OAC 3745-56	Has any of the waste been managed in a Waste Pile? If yes, then note. Go to the next section.	Y / N	

General Comments:

9.52-22



## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team # 4

Date: 2-27-96

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

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

### TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's?  If the answer is no, note .  If the answer is yes, proceed with next section.	Y / N	NONE INSIDE BUILDING
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated?  If no, note and stop here.  If yes, note the location of the management unit, and the method of management, and proceed.	<input checked="" type="radio"/> Y / <input type="radio"/> N	SUBSTATION
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?  If yes, are auditable records maintained.	<input checked="" type="radio"/> Y / <input type="radio"/> N	BY ELECTRICAL MAINTENANCE
	Are PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?  Are they visually inspected quarterly? If yes, are auditable records maintained?	<input checked="" type="radio"/> Y / <input type="radio"/> N	BLDG W
40 CFR.30 (a) (1) (ix)	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?  Are they visually inspected quarterly? If yes, are auditable records maintained?	<input checked="" type="radio"/> Y / <input type="radio"/> N	CONTRACT TO REPLACE NEW SUBSTATION AT SITE

9.52-24

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team # 4

Date: 2-27-96

### TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.30 (a) 1,viii	Are all combustible materials (i.e., paints, solvents, plastics, paper, sawn wood, etc.) cleared from areas containing PCB transformers to a distance of five meters?	(Y) / N	
40 CFR 761.65 (b) (8)	Are all PCB articles and containers labeled with the date they were placed in storage?	Y / N	N/A
	Are labeled PCB articles and containers stored so that the labels can be referenced?	(Y) / N	
40 CFR 761.65 (a)	Are all PCB's and PCB contaminated items at concentrations above 50 PPM, that are stored for disposal, stored no longer than one year from the date they were placed in storage?	Y / N	NONE
40 CFR 761.62 (b) (1) (i)	Do all PCB storage areas have an adequate roof and walls to prevent rainwater from reaching the stored items?	Y / N	NONE
40 CFR 761.62 (b) (1) (iv)	Are storage area floors curbed and constructed of continuous smooth and impervious materials?	Y / N	NONE
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y / N	NONE
40 CFR 761.62 (b) (1) (iii)	No drains are allowed in storage areas. Are there drains in the storage areas?	Y / N	N/A

9.52-25

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #7

Date: 2-27-96

### TSCA Checklist

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

**GENERAL COMMENTS:**

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team 4

Date: 2-27-96

### Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	Y (N)	If yes, conduct the following survey.
---	-------	---------------------------------------

### Low-Level Waste and Transuranic Waste Checklist

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

9.52-27

*urniture, Bldg & Equipment tested prior to*

*ASBESTOS CLEANING.*

### Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-96

#### Low-Level Waste and Transuranic Waste Checklist

9.52-28

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

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team # 4

Date: 2-27-96

### Low-Level Waste and Transuranic Waste Checklist

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

9.52-29

### Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team # 4

Date: 2-27-96

#### Low-Level Waste and Transuranic Waste Checklist

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

9.52-30

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-96

### Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

9.52-31

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-96

### Waste Minimization/Pollution Prevention Activities Screening Checklist

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

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.52-32

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team #4

Date: 2-27-96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.52-33

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: Team # 4

Date: 2-27-96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.52-34

## Environmental Assessment Checklist

Building Name: 29

Appraisers: TEAM #4

Date: 2-27-96

### Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are cleaned parts drained on the sink to minimize solvent spills?	Y/N	<i>Blank</i>
	Are drip tanks used to capture losses?	Y/N	
	Is a solvent sink used for mineral solvents rather than a dunk bucket or dip tank?	Y/N	
	Does a waste hauler collect solvent waste for recycling or treatment?	Y/N	
<b><u>OILS</u></b>			
	What kind of oils are used?		
	Hydraulic oil?	(Y)/N	<i>Safe Shutdown Collection</i>
	Transformer oil?	Y/(N)	
	Metal working fluids?	Y/(N)	
	Spent lubricating oils?	(Y)/N	<i>Safe shutdown collection</i>
	Can the process be modified or changed to use water-based fluids?	Y/N	
	Are these good housekeeping and operation practices used to minimize oil waste production?		
	Use oils not contaminated with other liquids?	Y/(N)	
	Oil spills prevented?	(Y)/N	<i>one compressor tank, RA 8*</i>
	Drip pans installed?	Y/N	
	Oil soaked rags laundered?	Y/N	
	Rags and absorbants used to their limit?	Y/N	

\* Equipment cleaned within 72 hrs of visit

9.52-35

## Environmental Appraisal Checklist

Building Name: 23

Appraisers: Team # 4

Date: 2-27-96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.52-36

## Environmental Appraisal Checklist

Building Name: 29

Appraisers: TEAM #4

Date: 2-27-96

### Waste Minimization/Pollution Prevention Activities Checklist

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

*Blank*

9.52-37

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.52.6.2 Building Manager's Questionnaire**

## Building Manager's Questionnaire

Building Name: 29

Building Manager: R.L. Ward

Phone: 3821

Date: 12-07-95

Alternate: K. KOEHLER

Phone: 4896

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

*NONE*

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

*NONE*

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

4. Provide a physical description of the building.

Building is one-story of concrete block construction with a BUM roof (coal tar and metal). Total area is 6,601 ft<sup>2</sup>. Some equipment in the building is contaminated with asbestos. HVAC systems are of central steam and chilled water.

*MEZZANINE WITH STEEL DECK EQUIPMENT  
INCLUDES ACETONE PUMPS.*

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

5. Provide a drawing of the building.

Attached

6. What is the current building use?

Shut down.

Source: Mound Buildings, 5-9-95

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

Used as a plastics formulation and manufacturing facility.

Source: Mound Buildings, 5-9-95

## Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: Blending of plastic powders

How Wastes Are Generated:

In this building DAP powder is blended with a fiber. In one current process DAP is blended with fiberglass. In another it is blended with Orlon. In the past, it has been blended with asbestos. (Asbestos is being phased out.) Acetone is the medium in which the fiber and powder are mixed. The mixture is dried by allowing the acetone to evaporate. Drying is facilitated by squeezing acetone out of the mixture using rollers. Acetone that is squeezed out also evaporates.

After a "batch" of powder/fiber mixture is processed, the equipment is cleaned with acetone. Acetone used in cleaning, along with any fibers that might be suspended in it, is put in a waste drum for pickup by Waste Management.

Occasionally some DAP mixture cannot be used and is packaged for pickup by Waste Management.

When lubricating oil from the equipment is changed, it is left for Waste Management.

Contact:  
Phone #:

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

## Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

*EQUIPMENT REMOVAL OR DISCONNECTED*

10. Does the building have air emission sources? No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

*SAFETY Air collection SYSTEM  
 WITH FILTERS. ORIGINALLY  
 USED TO COLLECT ASBESTOS PARTICULATES  
 & ACETONE FUMES.*

## Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

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

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

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

16. Has an asbestos survey been conducted? Yes  
 What are the results? Yes

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

## Building Manager's Questionnaire

Building Name: 29    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? **YES**  
Transformer, Inerteen, SN:YAR-95581:In Service

Source: PCB ANNUAL DOCUMENT LOG/

18. Has the building been identified as containing PCBs? **YES**

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

*Sub station  
 DOES CONTAIN  
 PCB LABELED.  
 REPLACEMENT AT SITE*

## Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures

Source: \_\_\_\_\_

21. Where do waste chemicals go?

*CHEMICALS REMOVED*

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

*SHUT DOWN*

23. Where do excess janitorial supplies go?

Source: \_\_\_\_\_

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

Chemical	Amount	Chemical	Amount

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 29 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

NONE

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / N			Y / N	Y / N

Source: \_\_\_\_\_

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

Materials	Amount
100ZZ	38.0
Acetone	0.2
Acetone Waste	115.0
Acetone Waste	382.0
Acetone Waste	383.0
Acetone Waste	382.0
Acetone Waste	312.0
Acetone Waste	385.0
Acetone Waste	280.0
Asbestos Waste	90.6
Asbestos Waste, Debris (208 Bags)	3060.0
Asbestos, Dap Fiberglass	100.0
Asbestos, Dap Fiberglass	200.0
ASP	4.1
Bldg 29 Pit Sample, 94-997	2.0
Bontone Brown	50.0
Butyl (T) Peroxy Benzoate	9.9
Butyl (T) Phosphonate	0.1
Calcium Carbonate	5.5
Calcium Metasilicate	26.0
Calcium Stearate	18.8
Celogen	5.0
Citaton Red	17.0
DAP Fiberglass	253.0
DAP Fiberglass	362.0
Dapon 35	0.1
Diallyl Phthallate	7.3
Dianelle Orange	25.0
Dispal	2.8
EpoxyLite 8822 Part A	6.4

WHEN IN OPERATION BLDG SHUT DOWN

## Building Manager's Questionnaire

Building Name: 29 Building Manager: R.L. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

Materials	Amount
EpoxyLite 8822 Part B	2.4
Flux	1.0
Gasoil	0.5
Green Dye	8.5
Hydroquinone	1.7
III Solution	4.5
Kermid	10.0
Lexan	20.0
Lexan	17.0
Lithium Carbonate	51.7
Low Odor 410	33.5
Lucite	19.0
Lucite	53.0
Mercury	14.7
Mercury	0.1
NI-410-A	5.6
NI-410-B	6.5
No Drip	4.0
Oil Waste	191.7
Oil Waste	450.5
Orlon Waste Shavings	110.3
Orlon Waste Shavings	105.7
Orlon Waste Shavings	106.2
Orlon Waste Shavings	106.2
Orlon Waste Shavings	110.7
Orlon Waste Shavings	107.0
Orlon Waste Shavings	110.6
Orlon Waste Shavings	69.6
Orlon Waste Shavings	106.2
Orlon Waste Shavings	105.7
Orlon Waste Shavings	105.5
Orlon Waste Shavings	106.4
Orlon Waste Shavings	106.2
Orlon Waste Shavings	105.4
Orlon Waste Shavings	105.9
Orlon Waste Shavings	110.9
Orlon Waste Shavings	104.5
Orlon Waste Shavings	106.0
Orlon Waste Shavings	111.2
Orlon Waste Shavings	104.4
Orlon Waste Shavings	110.9
Orlon Waste Shavings	110.9
Orlon Waste Shavings	105.7
Orlon, Fiberglass, Graphite, Carbon	256.0
Peek	163.0
Peek	55.0
Flexiglass	50.0
Poly Acrylonitrile	6.4
Polyether Sulfone	55.0
Polyether Sulfone	6.6

## Building Manager's Questionnaire

Building Name: 29 Building Manager: R.L. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.?  Yes  No
29. Is waste material stored in or around the building for more than 90 days?  Yes  No
30. Has the building been identified as a 90 day waste accumulation area?  Yes  No
31. Has the building been identified as a satellite accumulation area?  Yes  No
32. Is mixed waste generated, stored, or disposed of from the building? Yes  No  
 Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 29    Building Manager: R.L. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes                      No

Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 29    Building Manager: R.L. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

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

Source: \_\_\_\_\_

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

---

---

---

---

---

---

---

---

---

---

## Building Manager's Questionnaire

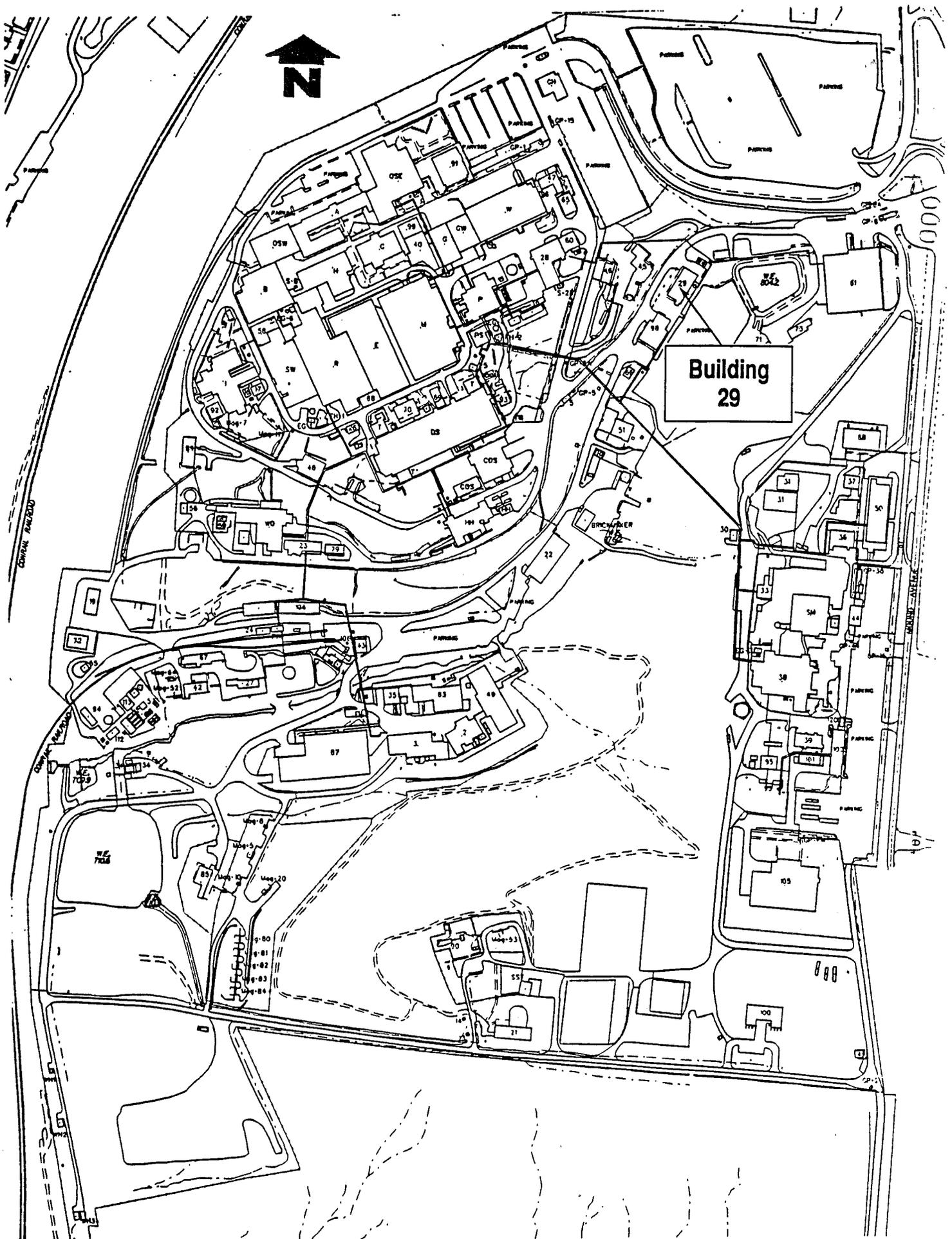
Building Name: 29 Building Manager: R.L. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

36. Is there a waste minimization program in the building? Yes  No   
Discuss your ideas about how to minimize waste.

37. Has a pollution prevention program been developed for the building? Yes  No

# **Environmental Appraisal of the Mound Plant**

## **9.52.6.3 Location of Building 29**



SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92



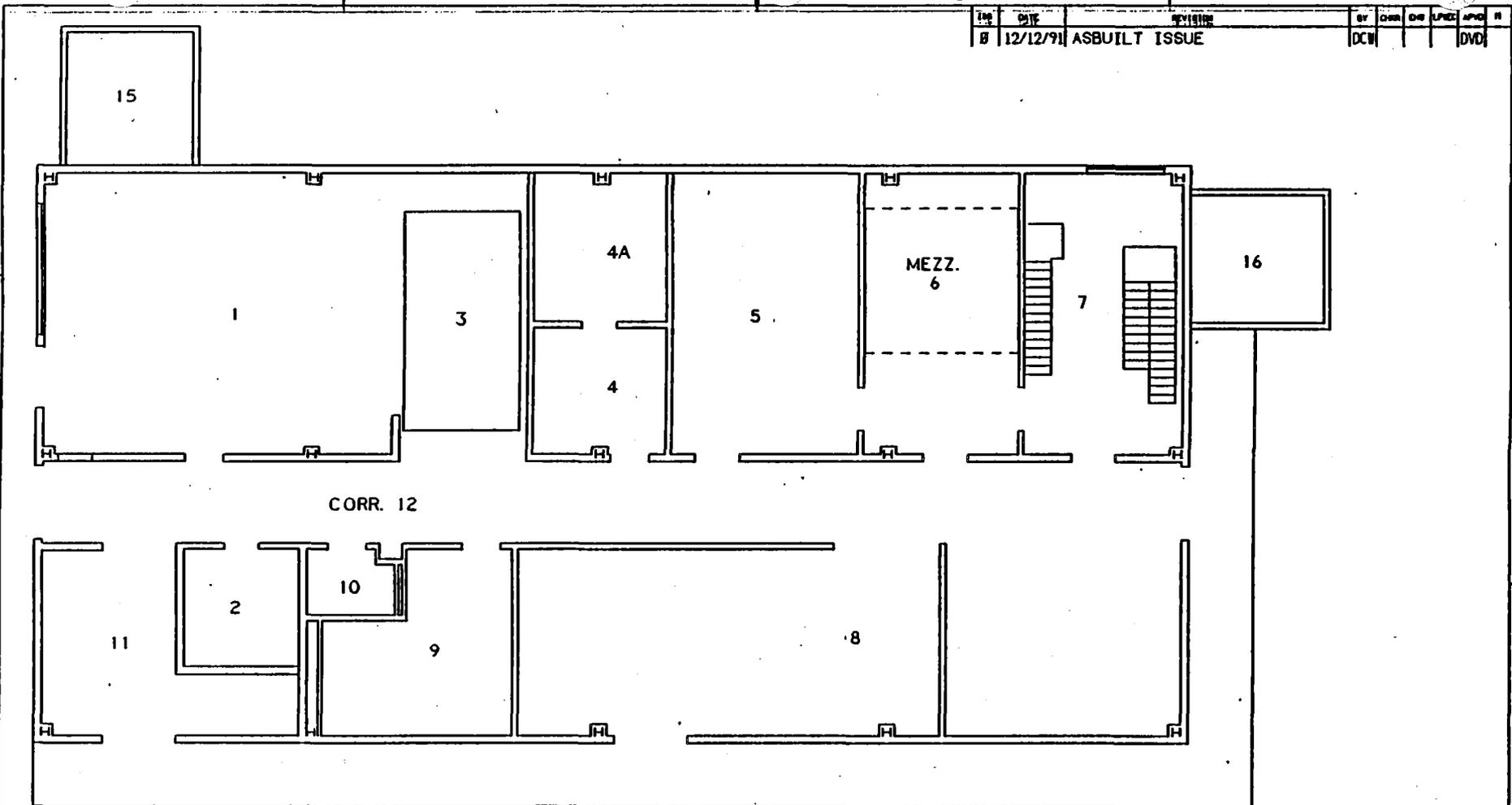
**This page intentionally left blank.**



# **Environmental Appraisal of the Mound Plant**

## **9.52.6.4 Floor Plans for Building 29**

REV	DATE	REVISION	BY	CHKD	DATE	APPD	DATE
B	12/12/91	ASBUILT ISSUE	DCW				



DERIVATIVE CLASSIFIER

*R. Myers*  
 Sr. Class. Anal. 2/10/96  
 (Title)



**BLDG #29**  
**FIRST FLOOR**  
**BLDG CODE:3029**

APPROVALS:	DATE:
SAFETY COMMITTEE REVIEWED:	
NAME _____	TRACOC _____
TECH. REP. _____	TEACOC _____
DR. NUM. _____	
TRACOC _____	
TEACOC _____	
DRACOC _____	

**NOT FOR PUBLIC DISSEMINATION**

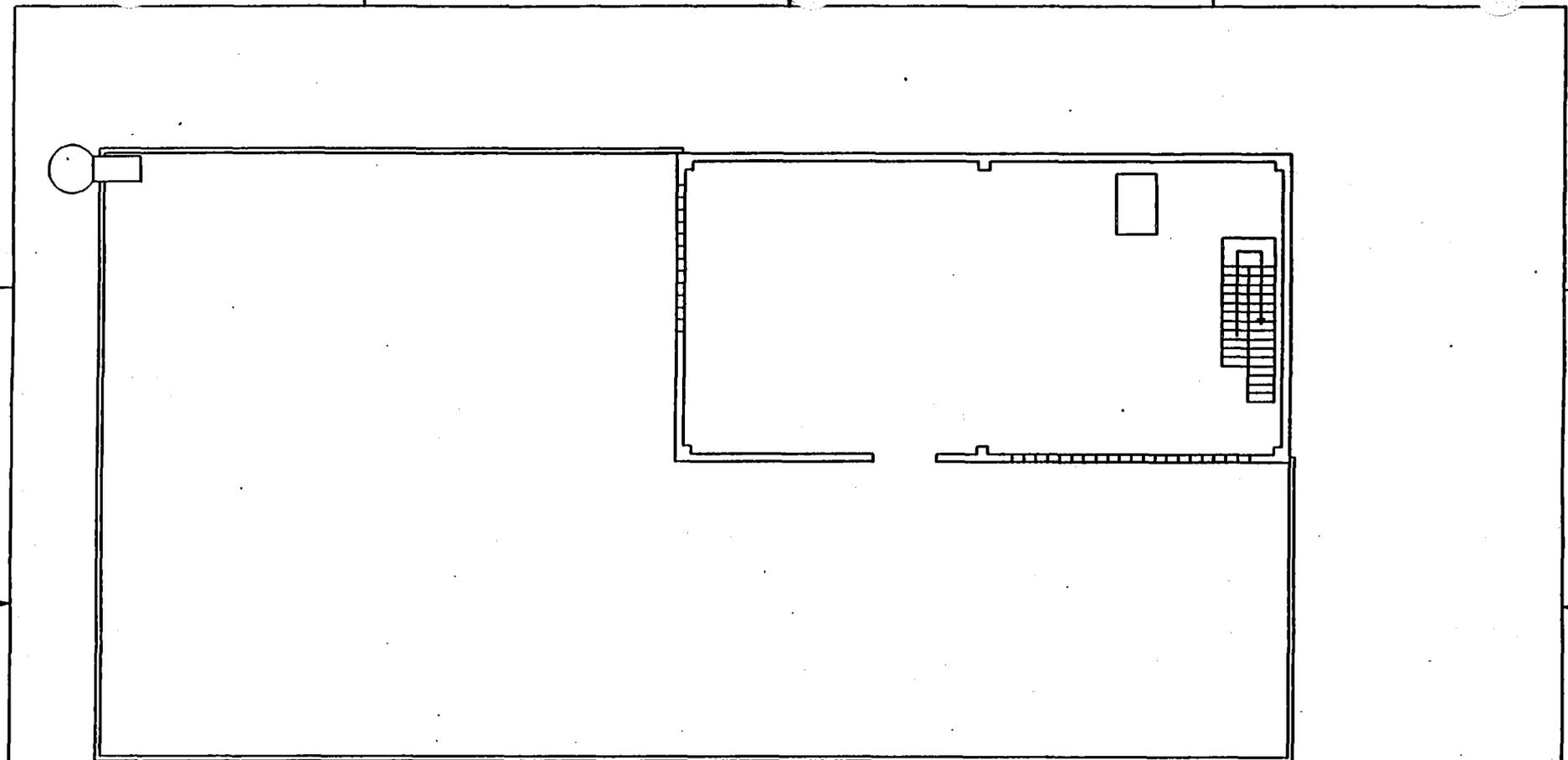
MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.

DESIGN DR	PROJ DR
WORK	ENR REV
CP & EC	FIELD REV
CONTR	
APPRO	DATE

SHEET	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION
TABLE	B	B					BLDG #29 FLOOR PLANS	
PART CLASSIFICATION							GRADING CLASSIFICATION	SIZE
							UCNI	BLDG #29
DRG TYPE							SFP	FROM BLDG #29
STATUS							MD-REL-12/12/91	ORIGIN MD-BR3-V3.3

9.52-59

**This page intentionally left blank.**



DERIVATIVE CLASSIFIER

*[Signature]*  
 Sr. Class. Anal. 2/26/96  
 (Title) (Date)



**BLDG #29  
 PENTHOUSE  
 BLDG CODE:3029**

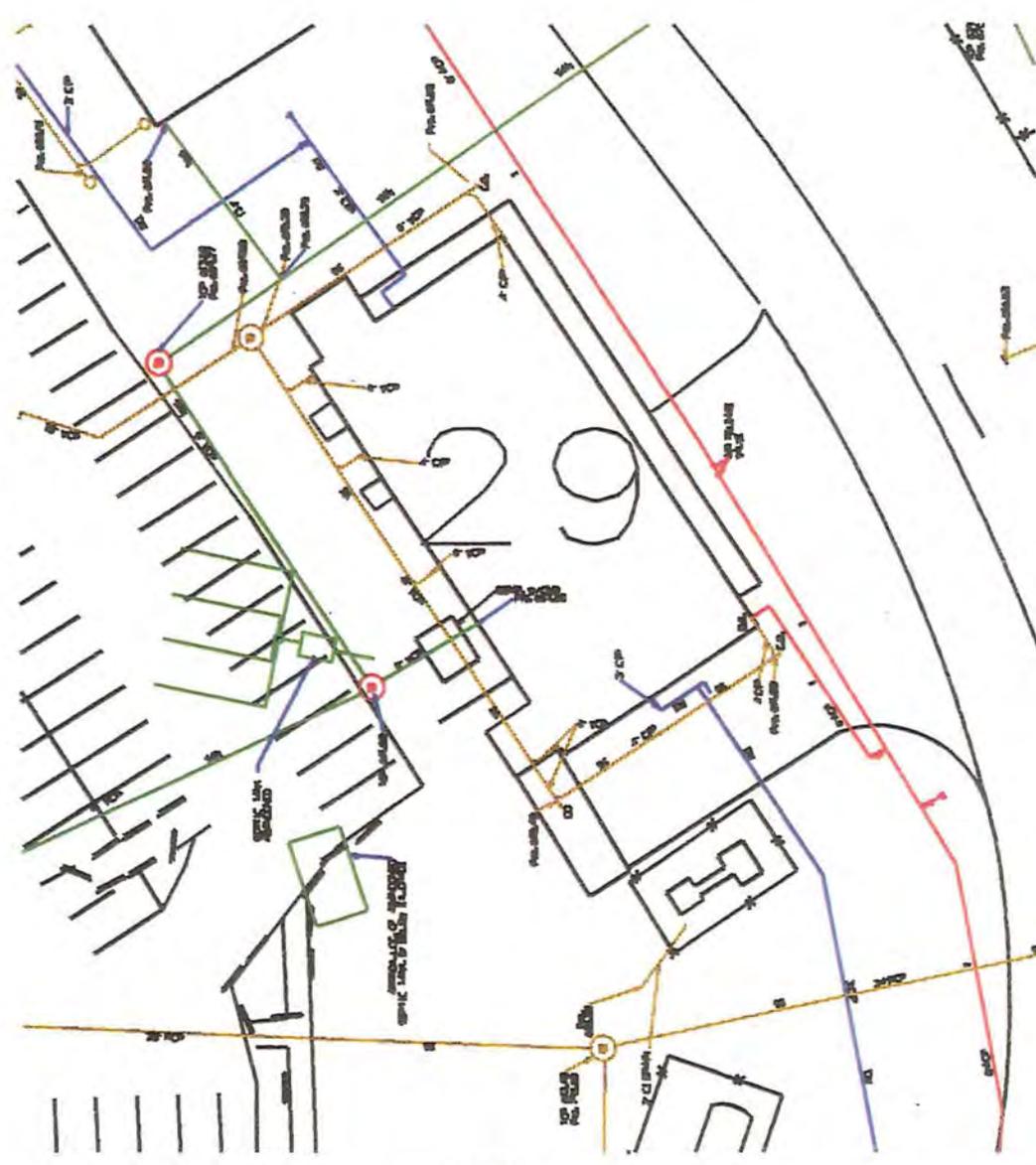
NOT FOR PUBLIC DISSEMINATION		<small>DRAWING NUMBER</small> <b>FSC911241</b>	<small>JOB NUMBER</small> <b>12335</b>
MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.		<small>CLASSIFICATION</small> <b>UCNI</b>	
		<small>SIZE</small> <b>C</b>	<small>SCALE AS NOTED</small> SHEET 2 OF 2
<small>STATUS</small> MD-REL-12/12/91			

9.52-61

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.52.6.5 Underground Utility Lines**



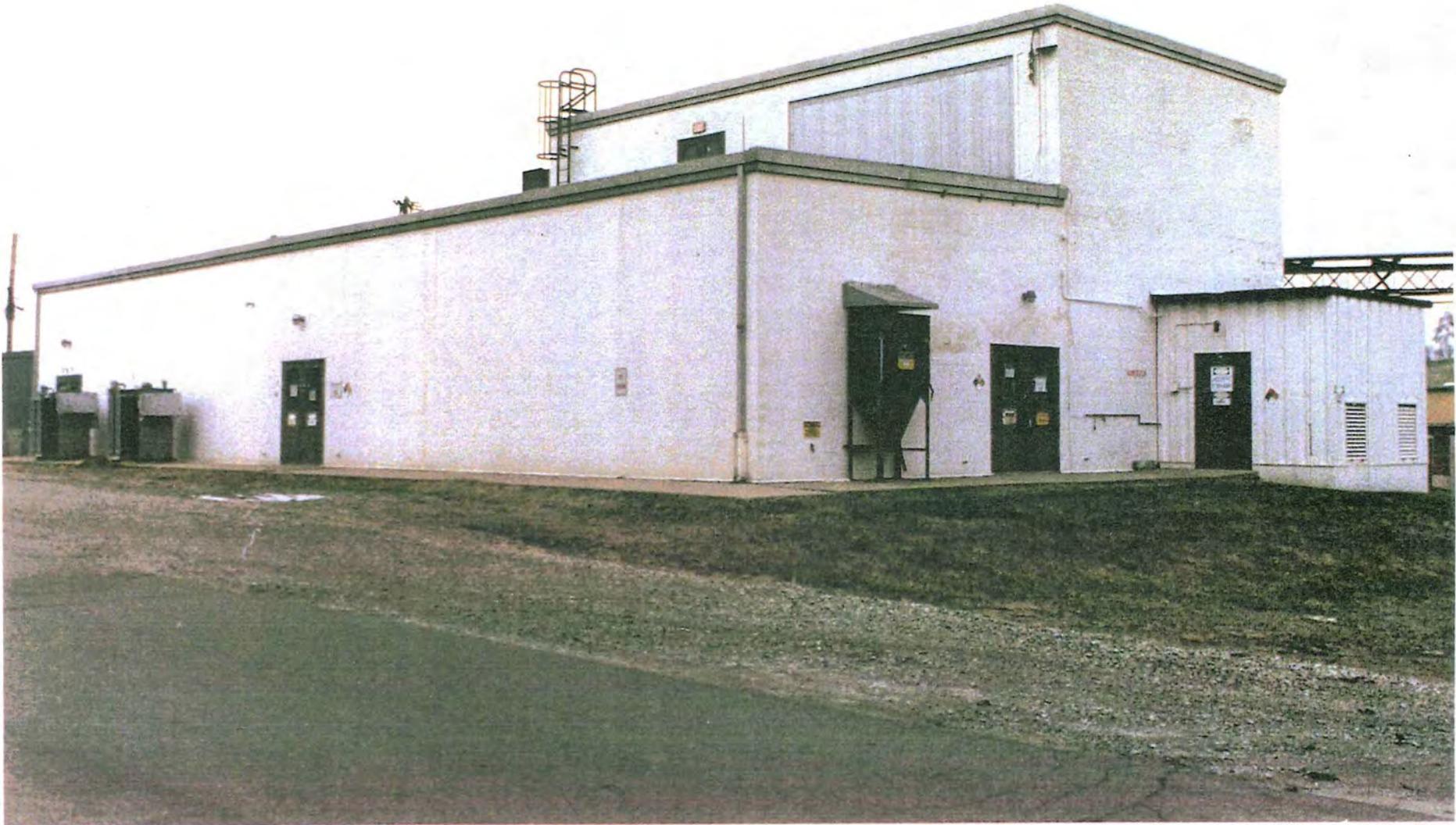
**UNCLASSIFIED**

**E.G. & G. - MOUND**  
 UNDERGROUND WATER & WASTE LINES  
 BLDG. 29  
 DATE: 2/29/96

# **Environmental Appraisal of the Mound Plant**

## **9.52.6.6 Photographs**

Mound Plant Building 29



9.52-69



Outside Building 29 replacements for substations containing PCB's are ready for installation.



## **Environmental Appraisal of the Mound Plant**

### **9.53 BUILDING 30**

#### **9.53.1 Scope of Building 30 Report**

A team of environmental professionals performed a walk-through of Building 30 on the morning of January 29, 1996. The Environmental Appraisal Checklist (Attachment 1—Section 9.53.6.1) was used to record findings. Escorting the appraisers was the building manager, and other knowledgeable personnel such as the process manager. Information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.53.6.2).

#### **9.53.2 Description of Building 30**

Building 30 houses a radiological counting laboratory. Liquid scintillation counting is used to count paper smear samples for the detection of tritium, and gross alpha/beta activity. Several years ago Building 30 was converted from use as an office/storage area to a counting lab. The building also housed a gamma scan facility for drums and boxes at some time in the past.

Building 30 is located on the edge of the SM/PP hill, southwest of Building 31, as shown in the site plan presented as Attachment 3 (Section 9.53.6.3). Constructed in 1965, it is a 740-square-foot concrete block structure with a built-up membrane roof. There is electrical service of 240V.

Currently, one-third of the building is used for laboratory analysis; it is a radiological buffer area. The remaining area, a controlled area, is used for storage of supplies used in the lab. The floor plan is presented in Attachment 4 (Section 9.53.6.4).

#### **9.53.3 Summary of Findings**

There appears to have been no renovation when Building 30 was converted from an office/storage facility to a lab. For example, there is no fume hood for ventilation, and no lab sink or work bench.

Several issues of environmental concern were identified during the walk-through, during subsequent conversations with waste management professionals, and by review of reference materials. Of primary concern were waste characterization, handling, storage, and disposal practices. These and other compliance-related issues were discussed with the building manager, process manager, waste management professionals, and EG&G MAT managers. Also, several suggestions were made related to improvement of management practices.

The process manager was debriefed at the conclusion of the walk-through. The building manager was not present for the walk-through, but was subsequently provided with a copy of the environmental appraisal checklist and draft building report. Open action items were resolved or are being actively investigated by the appraisal team, process manager, building manager, waste management professionals, and EG&G MAT managers.

## Environmental Appraisal of the Mound Plant

### 9.53.4 Observations

#### 9.53.4.1 Air Emissions

There is no fume hood in the building, and there is no stack. Potential sources of emissions are limited to small quantities of chemicals used in the lab, including isopropyl alcohol Ultima Gold, (blend of alkyl naphthalene with scintillators PPO and bis-MSB and emulsifiers), and window wash, as well as process contaminants. Documentation was not available from the building manager, the process manager or the environmental monitoring group to indicate that potential emissions have been calculated, although it has been assumed by the environmental monitoring group that emissions are *de minimis*. There is no data to support this determination, as is required under Ohio Administrative Code (OAC) 3745-31 and OAC 3745-35-02. No permit application has been submitted for the building, as emissions are considered *de minimis*. There are no fuel-burning units in the building. There is no evidence of fugitive dust.

#### 9.53.4.2 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.

##### 9.53.4.2.1 Sanitary Wastewater

The building has sanitary service. According to the diagram of underground lines, presented as Attachment 5 (Section 9.53.6.5), the building is serviced by a sanitary line. There is no sink in the buffer area. Building occupants report that there is no laboratory-related waste placed into the sanitary system.

##### 9.53.4.2.2 Storm Wastewater

According to drawings presented in Attachment 5 (Section 9.53.6.5), the building is serviced by storm drains. Inspection shows no sign of odors, colored discharges, or scarring which would indicate that any materials other than storm water had entered the storm drainage system.

## **Environmental Appraisal of the Mound Plant**

Building occupants report that an occasional odor of sewer gas permeates the building. According to occupants, a septic tank and leach field were located near the building, next to the low specific activity (LSA) storage pad. They suspect it to be a source of odors. The septic system is no longer in use, and building occupants are unaware of its current status. Occupants call upon Industrial Hygiene for testing of indoor air when odors are present. There has been no work stoppage due to the odors.

### **9.53.4.3 Potable and Service Water**

Potable and service water are supplied to the building. Sources are properly posted. Backflow prevention devices are in place, in accordance with OAC 3745-95-04. There is a water cooler which supplies drinking water; it has not been tested for lead. According to EPA protocol, annual sampling criteria do require testing of each fountain.

### **9.53.4.4 Chemical Storage and Hazardous Materials**

A limited number and amounts of chemicals are stored in the building. A list is included in the BMQ, Attachment 2 (Section 9.53.6.2). They include chemicals used in the process as well as janitorial supplies. Storage and handling procedures conform to those described in 29 CFR 1910. Although 29 CFR 1910 calls for flammable materials stored in quantities of 5 gallons or more to be in a safety can or flammables cabinet, due to the configuration of the lab and life safety concerns, it was recommended that a 1-gallon plastic jug of alcohol stored in the lab be kept in a clearly labeled safety can. The process manager obtained a can for storage.

The building is equipped with appropriate emergency response equipment such as a chemical spill containment kit, eyewash, safety shower, and fire extinguisher. Inspection tags were present and current. There is an emergency evacuation plan, and signs were posted in work areas.

There are no aboveground storage tanks in or around the building. There are no sumps, separators, or catch basins, in or around the building. There are no underground storage tanks associated with this building.

According to the *Mound Facilities Physical Characterization* (12-1-93), the building is slightly contaminated with radioactive materials (plutonium-238). The building was tested and does contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There is no evidence of friable asbestos material. Pipe lagging is in good condition, and pipes are well-marked.

### **9.53.4.5 Solid, Hazardous, and Radioactive Waste**

Wastes generated in the Building 30 radiological buffer area include paper smears, scintillation vials containing, lab wipes used to clean equipment and vials, and assorted paper and packaging materials.

## **Environmental Appraisal of the Mound Plant**

According to the process manager, some of the wastes have low-level contamination. Wastes were segregated into two groups, those with tritium activity greater than 100,000 dpm, and those with less than 100,000 dpm. Because the lab had no process or procedure to segregate low level alpha and beta activity of waste samples, the process manager considered all the waste to be LSA waste.

The appraisal team observed a package of scintillation vials deposited in a clear plastic bag, labeled with black marker as less than 100,000 dpm. The only disposal receptacle in the buffer area was a yellow can containing a yellow plastic bag.

A waste generator's profile sheet was available and resided with the process manager. Information on the sheet documented the waste characterization as LSA wastes by process knowledge and documented waste quantities. The profile sheet was different from the one described by Mound Procedure MD-81240, *Issue 8, Low Level Waste Management Procedures*. It was also different than the one described by Mound Procedure MD-81071, *Waste Acceptance Criteria Manual*. In Building 30, the process manager was also the waste generator.

According to the process manager, Building 30 wastes were deposited in plastic bags, and were transported weekly by "decon technicians" for subsequent disposal offsite. It was the generator's belief that the wastes were being handled and disposed of as LSA waste.

The appraisal team asked for the name of the technician collecting waste. The name provided by Building 30 employees was that of a non-rad technician working in the hazardous waste group. The appraisal team explained that it is Mound practice that this waste stream is transported to Building 72, and together with scintillation vials from other labs, is disposed of offsite by incineration under a DOE-recognized exemption for scintillation fluid containing less than 100,000 dpm tritium per gram fluid.

The process manager was unclear about the disposal process, and waste categorization as LSA waste versus LSA exempt waste. He had obtained no Resource Conservation and Recovery Act (RCRA) training or low-level waste generator's training. He was advised of his responsibility related to "cradle-to-grave" handling of the waste, and it was suggested that he contact waste management professionals to resolve any questions or concerns. A call was placed and a message left with Waste Management by the appraisal team before leaving the building. Subsequent contacts were made by both the appraisal team and the process team with waste management professionals and EG&G MAT managers to resolve questions raised during the appraisal and to initiate corrective action.

### **9.53.4.6 Waste Minimization and Pollution Prevention**

There is an active program to minimize waste streams, in accordance with state and federal regulations. Lab supplies are removed from packaging outside of the buffer area to minimize potential contamination of packaging materials. This significantly reduces the waste stream from the buffer area.

## Environmental Appraisal of the Mound Plant

### 9.53.5 Findings and Recommendations

As the purposes of this evaluation are to assess existing environmental conditions and to improve the environmental management of the site, the findings herein encompass areas of best management practices as well as regulatory requirements. Photographs which were taken to document inspection findings are included as Attachment 6 (Section 9.53.6.6).

- 30-1. Waste generated in Building 30 was not characterized in accordance with DOE Order 5820, 40 CFR 265, or OAC 3745-52-11. Waste was not managed in accordance with the waste characterization that was performed.

The process manager and waste management professionals must review the waste generator's profile and other documentation to determine and confirm the nature of the waste generated in Building 30. Waste management and disposal procedures and practices should be reviewed. Upon determination of the character of the waste, it should be managed and disposed of appropriately. If the waste is LSA, hazardous or mixed, EG&G MAT and DOE reporting procedures related to any improper disposal of Building 30 wastes should be followed.

- 30-2. The generator's waste characterization profile did not conform to that required by Mound procedure. Documentation related to characterization of LSA waste, as described in Mound Procedure MD-81240, *Issue 8, Low Level Waste Management Procedures*, was not available with the generator.

Generator's documents should be reviewed on a routine basis to confirm that the waste stream is correctly described and characterized, that proper procedures are followed, and that documentation of waste determination is retained.

- 30-3. The process manager/waste generator should have sufficient training to provide knowledge of which regulations apply to his waste streams and to initiate correct waste management practices and disposal, such as LSA waste generator training and RCRA generator training.

The process manager/waste generator should complete LSA and RCRA waste generator training as required by NVO 325 Training Matrix and OAC 3745-65-16. Training sufficient to ensure proper characterization, emergency response, waste management and disposal should be completed by waste generators. Other areas of required training were not, but should be, reviewed. Applicable training should be completed.

- 30-4. Line management did not ensure that relevant waste generator training was completed by the process manager/waste generator in Building 30. In accordance with OAC 3745-65-16, relevant training must be provided to enable facility personnel to perform their duties in a way that ensures the facility's compliance with regulations. Employees must complete applicable training within 6 months of the date of employment or transfer to a new position at the facility and must participate in an annual review.

## Environmental Appraisal of the Mound Plant

At Mound, the waste management organization provides guidance for training requirements based on materials handled; central training provides training, as well as on-line records of attendance; line management develops training plans to assure that generators are trained and reviews training records to ensure that training is current and adequate for the job performed. Given the recent and ongoing transition of personnel at Mound, this system should be reviewed to determine if a deficiency exists and if adequate safeguards are present. It should be noted that the Tiger Team Assessment, December 1989, found the hazardous waste training program to be deficient; it was noted as corrected.

- 30-5. EG&G MAT did not perform routine field surveillance to identify potential waste characterization, storage, handling, or disposal problems, or assure that the Building 30 process manager/waste generator was correctly managing waste streams.

Although some waste generators receive RCRA training, and have process knowledge of waste streams, they may lack an understanding of the intricacies of RCRA waste determination guidelines. While it is the responsibility of generators and their line management to properly manage waste streams, there must be a mechanism whereby trained professionals routinely provide field assistance and monitor performance.

- 30-6. There is no documentation available to determine if air emissions from Building 30 have been reviewed or determined to be *de minimis*, as required by OAC 3745-15-05. Such documentation should be in place to support management determinations.
- 30-7. The color coding convention for plastic bags used for radioactive materials, set forth in Mound Procedure MD-10019 (12-04-95), Radiological Control Manual, was not followed in Building 30. Some LSA wastes generated in Building 30 were deposited in a yellow can lined with a yellow plastic bag. Scintillation vials were deposited in a clear plastic bag.

The mandated procedure calls for radioactive material to be placed in yellow bags. Mound Procedure MD-81240, *Issue 8, Low Level Waste Management Procedures*, calls for placement of LSA waste in bags which are properly marked, but states no color distinction. Since radioactive waste is a subset of radioactive material, it appears that MD-81240 should conform to procedures set forth in MD-10019.

# **Environmental Appraisal of the Mound Plant**

## **9.53.6.1 Environmental Appraisal Checklist**

# ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 30

Appraisers:

Nancy H Vyas  
Name Discipline

John Hausfeld  
Name Discipline

\_\_\_\_\_  
Name Discipline

\_\_\_\_\_  
Name Discipline

Building Manager:

Kathy Koehler

Process Manager:

J. J. Johnson, process manager

Mike Ball, counting room Master Tech.

\_\_\_\_\_  
\_\_\_\_\_

Date:

1-29-96 am

**ENVIRONMENTAL APPRAISAL  
CHECKLIST**

**Table of Contents**

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

**Environmental Assessment Checklist**

Building Name: *30*

Appraisers: *Vyas/Hausfeld*

Date: *1-29-96 am*

**Clean Water Act (CWA) Screening Checklist**

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

*discharges to storm per site drawings*

**CWA Checklist**

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> Y <input checked="" type="radio"/> N	<i>alcohol &lt; 1 gal stored in labeled plastic jug.</i>
	Is the building in operation? What are the processes and where do they discharge to?	<input checked="" type="radio"/> Y <input type="radio"/> N _____ _____	<i>health care physics lab</i>
	Do the floor drains, sinks & toilets appear to be draining properly?	Y / N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	<del>Sanitary</del> Storm	<i>per site drawing</i>
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	Y <input checked="" type="radio"/> N _____ _____ Y / N Y / N	<i>per M. Ball abandoned septic tank &amp; field next to LSA waste storage pad.</i>
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	Y <input checked="" type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N	<i>odor of "sewage". Called IH to test indoor air. No work stoppage.</i>

*chemicals used: isopropyl alcohol  
ultima gold  
window wash  
Anitrol supplies*

9.53-11

**Environmental Appraisal Checklist**

Building Name: 30

Appraisers: Vyas/Hausfeld

Date: 1-29-96 am

Clean Air Act (CAA) Screening Checklist

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

CAA Checklist

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

*There is no stack or hood to vent from bldg. Are there emissions from lab activities? Consult*

**Environmental Appraisal Checklist**

Building Name: 30

Appraisers: Vyas/Hausfeld

Date: 1-29-96 am

N/A

CAA Checklist

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

**TABLE A**

Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

Source: \_\_\_\_\_

9.53-13

# Environmental Appraisal Checklist

Building Name: *30*

Appraisers: *Vegas/Hausfeld*

Date: *1-29-96 am*

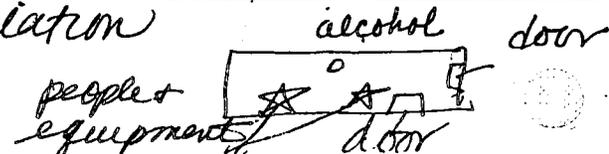
## Hazardous Materials (HM) Screening Checklist

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

### HM Checklist

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

*Lab function in a storage bldg. No Ventilation*  
*Employees uncomfortable in summer*



**Environmental Appraisal Checklist**

Building Name: 30

Appraisers: *Vegas/Hausfeld*  
HM Checklist

Date: 1-29-96 am

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	(Y) N	
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	(Y) N	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	(Y) N	
CGA P-1 3.5.3	Full and empty containers should be stored separately with the storage layout planned so that containers comprising of old stock can be removed first with a minimum handling of other containers.	Y/N <i>none</i>	
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	(Y) N <i>IDENTITY</i>	
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y/N <i>none</i>	
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y/N <i>none</i>	
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y/N	
	Is there a sign posted in each work area regarding emergency egress and emergency response action?	(Y) N	
	Is there an emergency response plan available?	(Y) N	

*Piping is well marked*

*tank methane 10%  
air 90%*

9.53-15

Building Name: 30

Appraisers: *Vyas/Hausfeld*  
HM Checklist

Date: 1-29-96 am

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

**Above Ground Storage Tanks Inventory**

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
		<i>None</i>		<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>
				<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>
				<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>
				<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>
				<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>
				<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>
				<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vyas/Hausfeld

Date: 1-29-96 am

### Safe Drinking Water Act (SDWA) Screening Checklist

Does this facility have potable water?	Y/N	If yes, conduct the following survey.
--	-----	---------------------------------------

#### SDWA Checklist

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

#### TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
30	Rm 3	OASIS	8525-130365 to be checked by Mmond.

Source: \_\_\_\_\_

# Environmental Appraisal Checklist

Building Name: *30*

Appraisers: *Vegas/Hausfeld*

Date: *1-29-96*

## RCRA Screening Checklist

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

### RCRA Checklist

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

*J. Johnson, process manager & generator, described waste as potential LSA so it should be handled as such.*

*Waste stream: liquid scintillation vials, scint. fluid, assays smear samples, lab count paper, wipes.*

*alcohol wipes - air dry ; not mixed waste  
discussed tactics to avoid creating mixed waste*

## Environmental Appraisal Checklist

Building Name: 30

Appraisers: *Vegas / Hausfeld*

Date: *1-29-96 am*

*NA*

### RCRA Checklist

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

**Environmental Appraisal Checklist**

Building Name: 30

Appraisers: *Vegas/Hausfeld*

Date: *1-29-96 am*

*N/A*

RCRA Checklist

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

**Environmental Appraisal Checklist**

Building Name: 30

Appraisers: *Vigus/Hausfeld*

Date: 1-29-96 am

NA

**RCRA Checklist**

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

9.53-21

## Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vyas/Hausfeld

Date: 1-20-96 am

N/A

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745-68	Has any of the waste been managed in a Landfill? If yes, then note. Go to the next section.	Y / N	
OAC 3745-68	Has any of the waste been managed in an Incinerator (other than Burn area units)? If yes, then note. Go to the next section.	Y / N	
OAC 3745-68	Has any of the waste been managed in a Thermal treatment Unit (other than Burn area units)? If yes, then note. Go to the next section	Y / N	
OAC 3745-69	Has any of the waste been managed in a Miscellaneous Treatment Unit (other than Burn area units)? If yes, then not. Go to the next section.	Y / N	
OAC 3745-56	Has any of the waste been managed in a Waste Pile? If yes, then note. Go to the next section.	Y / N	

General Comments:



9.53-24

### Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vys/Hausfeld

Date: 1-29-96am

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

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

### TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	<p>Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?</p> <p>If the answer is no, note .</p> <p>If the answer is yes, proceed with next section.</p>	Y/N	<i>per PCB Annual Document Log PCBs removed in past.</i>
	<p>Based on an inspection, are any of the materials or equipment potentially PCB contaminated?</p> <p>If no, note and stop here.</p> <p>If yes, note the location of the management unit, and the method of management, and proceed.</p>	Y/N	
40 CFR 761.65 (c) (5)	<p>Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?</p> <p>If yes, are auditable records maintained.</p>	Y/N	
40 CFR.30 (a) (1) (ix)	<p>Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?</p>	Y/N	
	<p>Are they visually inspected quarterly? If yes, are auditable records maintained?</p>	Y/N	

*No evidence of PCB transformers or capacitors.*

Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vyas/Hausfeld

Date: 1-29-96am

NA

TSCA Checklist

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

## Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vegas/Hausfeld

Date: 1-29-96 am.

TSCA Checklist

NA

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

## GENERAL COMMENTS:

**Environmental Assessment Checklist**

Building Name: *30*

Appraisers: *Vyas/Hausfeld*

Date: *1-29-96 am*

**Low-Level Waste and Transuranic Waste Screening Checklist**

Does this facility contain radioactive waste?	<i>Y/N</i>	If yes, conduct the following survey.
---	------------	---------------------------------------

**Low-Level Waste and Transuranic Waste Checklist**

Regulatory Guideline	Question	Response	Comments
<b>Low-Level Waste</b>			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW?  If the answer is no, note.  If the answer is yes, proceed with next section.	<i>Y/N</i> <i>process characterization</i>	<i>Rad activity due to survey smears. Generator elected to categorize as LSA because waste cannot be tested for <math>\alpha</math> &amp; <math>\beta</math> activity</i>
DOE Order 5820.2A Chapter III.	Are any of the materials noted by inspection LLW?  If no, The audit would stop here, because there are no LLW.  If yes, note the location of the management unit, and the method of management, and proceed with the section below.	<i>Y/N</i>	<i>generator's form reviewed. Form different from High Waste + LSA Waste documents. CHECK!</i>
DOE Order 5820.2A Chapter III, 3.a.	Have the storage configurations in use in this area been taken into account for keeping external exposures to the general public below 25 mrem/yr?  Is the waste stored in a configuration that protects ground-water resources?	<i>Y/N</i>  <i>Y/N</i>	<i>No sign of monitoring Contact H.P.</i>
DOE Order 5820.2A Chapter III, 3.b.	Has monitoring been conducted in this area in accordance with DOE Order 5820.2A in order to evaluate the area against the performance standard?  Based on field data, does the monitoring conducted in this area conform to the performance standard?	<i>Y/N</i>  <i>Y/N</i>	<i>Not known. Contact H.P.</i>

9.53-27

*Two LSA Waste areas: storage pad outside contains white boxes. LSA waste parent vials in plastic bags outside.*

*Vials stored in lab + picked up weekly by DECON. Picked up by Steve King.*

*Check with Health Physics re monitoring for exposures. Contact Steve Young, Ray Martin.*

*Confusion with LSA + 100K contact Waste Man*

## Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vegas/Hausfeld

Date: 1-29-96 am

## Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A Chapter III, 3.d.	Based on field data, is the characterization of the materials in this area sufficient to assure proper segregation to assure proper segregation, treatment, storage, and disposal?	Y/N	Confusion w DOE LSA waste exemption. Recommend Johnson attend training.
	Based on field data does the characterization as documented at the time of generation of the waste ensure that the actual physical and chemical characteristics, and major radionuclide content of this material are recorded and known at all stages of the waste management process?	Y/N	No training to date for LSA or RCRA. Came from commercial nuclear industry
	Do characterization data include the following:		
	Physical and chemical characteristics of the waste?	Y/N	Generator receives no
	Volume of the waste (including solidification and absorbent material)?	Y/N	copies of any documents
	Weight of the waste (including solidification and absorbent material)?	Y/N	after waste leaves bags
	Major radionuclides and their concentrations?	Y/N	NO BAG or BOX monitor
	Packaging date, package weight, external volume?	Y/N	to evaluate waste. ∴ cannot
	How were the concentration of radionuclides determined? Direct methods?		be treated as "clean trash",
How were the concentrations of radionuclides determined? Indirect methods?		αβ activity known from scint. analysis can't measure	
DOE Order 5820.2A Chapter III, 3.h	Is the storage configuration in long term storage sufficient to meet the performance standard?	Y/N	INVESTIGATE W LSA GP.
	Are records maintained at the facility enabling this waste to be traced from its origin?	Y/N	INVESTIGATE W HAZ WASTE

Waste deposited in yellow can with yellow liner.

Scint. vials stored in clear plastic bag with no.

rad label.

What is <sup>110</sup>around LSA waste rule? Are yellow bags

Rev. 0. (1-5-96)

Page 27

Rec'd?

Contact ISper - relayed Johnson's responsible cradle to grave. He must check paperwork. This responsibility to get copies to assure proper handling.

# Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vyas/Hausfeld

Date: 1-29-96-am

## Low-Level Waste and Transuranic Waste Checklist

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

### Environmental Appraisal Checklist

Building Name: 30

Appraisers: *Vyas/Hausfeld*

Date: *1-29-96cm*

*NA*

#### Low-Level Waste and Transuranic Waste Checklist

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

**Environmental Assessment Checklist**

Building Name: 30

Appraisers: Vyas / Hausfeld

Date: 1-29-96 AM

NA

Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

### Environmental Appraisal Checklist

Building Name: 30

Appraisers: *Vyas/Hausfeld*

Date: 1-29-96am

#### Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals?	<input checked="" type="radio"/> Y <input type="radio"/> N	If yes, conduct the following survey.
---	--	---------------------------------------

#### Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.).  If yes, list candidate areas in the comment section.	<input checked="" type="radio"/> Y <input type="radio"/> N	<i>Keeps cardboard containers outside of buffer area, so they won't be contaminated. Brings ultima gold empty containers back + disposes</i>
	Are there solvent wastes?	Y/N	<i>Of them as non-rad</i>
	Is vehicle maintenance performed?	Y/N	
	Are oils used?	Y/N	
	Are these corrosive wastes?	Y/N	
	Are there sludges?	Y/N	
	Are there halogenated organic (nonsolvent) wastes?	Y/N	
	Are metals recovered from wastewater?	Y/N	
	Is waste sludge generated?	Y/N	
	Are any waste minimization practices used that reduce the generation of sludge?	Y/N	
	Ion exchange process?	Y/N	
	Lead in gasoline lowered to reduce tank sludge toxicity?	Y/N	
	Storage tank agitators installed?	Y/N	
	Corrosive resistant materials used?	Y/N	
	Prevention of crude oil oxidation?	Y/N	
	Drying?	Y/N	

**Environmental Appraisal Checklist**

Building Name: 30

Appraisers: Vyas/Hausfeld

Date: 1-29-96 am

NA

Waste Minimization/Pollution Prevention Activities Checklist

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

9.53-33

### Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vyas/Krausfeld

Date: 1-29-96 am

NA

#### Waste Minimization/Pollution Prevention Activities Checklist

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

## Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vyes/Hausfeld

Date: 1-29-96 am

NA

### Waste Minimization/Pollution Prevention Activities Checklist

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

## Environmental Appraisal Checklist

Building Name: 30

Appraisers: Vyas / Hausfeld

Date: 1-29-96 am

NA

Waste Minimization/Pollution Prevention Activities Checklist

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

**Environmental Appraisal Checklist**

Building Name: 30

Appraisers: Vyas! Hausfeld

Date: 1-29-96 am

NA

Waste Minimization/Pollution Prevention Activities Checklist

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

9.53-37

**This page intentionally left blank.**

M o u n d

Electronic Message/AOS

From :JOHN JOHNSON  
JOHNJJ3  
Dept. :Administration  
Tel. No :  
Date :01-Feb-1996 04:54pm EST  
Subject :building 30 review

John,

This E-mail provides a response to the areas of concern identified in building 30 and addressed in your E-mail to Katherine Koehler dated January 29, 1996.

The following are in response to the concerns identified in building 30:

1. The absence of a MSDS folder in the building - An MSDS binder has been established in building 30 for the chemicals and gas utilized by the Count Lab Technicians (e.g., isopropal alcohol, window cleaner, Ultima-Gold scintillation fluid, P-10 gas). MSDS sheets for cleaning supplies are to be supplied by Ray Martin (reference E-mail J.J.Johnson to Ray Martin dated 1/21/96 with cc to yourself).
2. The absence of a waste generator record for the Ultima-Gold waste - Although Ultima-Gold in itself is not considered a hazardous material or a candidate for mixed waste when containing low levels of radioactivity an inventory sheet has been developed and placed in building 30. This sheet will be used for the documentation of used Ultima-Gold liquid scintillation fluid/vials.
3. (the need for) a small flammable cabinet for the isopropyl alcohol that is used - Occupational Safety and Health Administration 29CFR1910.106(e)(2)(ii)(b) and 29CFR1910.106(e)(2)(ii)(b)(1) provides guidance for the "Incidental storage or use of flammable and combustible liquids." This guidance states that "The quantity of liquid that may be located outside of an inside storage room or storage cabinet in a building or in any one fire area of a building shall not exceed...25 gallons of Class IA liquids in containers." Additionally, the Mound Safety and Hygiene Manual MD-10286 for "Storage and handling of Flammable Liquids" further limits the maximum capacities and container types in section 4.4. This section states "Maximum capacities and container types of flammable liquids allowed to sit out in the open (such as in laboratory work areas) shall be as follows:

Glass	1 pint
Metal or approved plastic	1 gallon
Safety Cans	2 gallons

Use of one gallon or less of isopropyl alcohol (Class IA liquid) in an approved plastic container exceed the OSHA requirements and meet the Mound Safety and Hygiene Manual general requirements. No further action required.

4. The exit door from the RWP area to the outside needs to be labeled as such - Building manager, Katherine Koehler, has addressed this concern through the

initiation of an MSR to install said exit sign (reference E-mail from K.Koehler to John Johnson/Michael Ball dated 1/31/96 re Action Items from Building 30 Environmental Audit).

If you have any questions, please contact me at 4421.

Thanks,

John J. Johnson  
Radiological Control

Distribution:

TO: John Hausfeld ( HAUSJR )  
CC: Ted Quale ( QUALTJ )  
CC: Terry Vaughn ( VAUGTL )  
CC: Eunice Warmoth ( WARMEM )  
CC: Katherine Koehler ( KOEHKG )  
CC: JOHN JOHNSON ( JOHNJJ3 )

**This page intentionally left blank.**

Electronic Message/AOS

From :Katherine Koehler  
KOEHKG  
Dept. :ENGINEERING  
Tel. No :865-4886  
Date :13-Dec-1995 10:51am EST  
Subject :Building Survey Support

*JCC*

) :Terry Vaughn ( VAUGTL )  
) :JOHN JOHNSON ( JOHNJJ3 )  
C :W. B. Clark ( CLARWB )

Terry and JJ,

This morning I will drop off a copy (in Terry's office) of the Building 30 Building Managers questionnaire for the Environmental Audit currently taking place. I need your support in completing the questionnaire. Your timely cooperation would be appreciated.

Please return to me as soon as you can.

Thanks,  
Kathy Koehler

**This page intentionally left blank.**

## I N T E R O F F I C E M E M O R A N D U M

Date: 30-Jan-1996 04:00pm EST  
From: John Hausfeld  
HAUSJR  
Dept: ES&H  
Tel No: 4216

TO: See Below

Subject: Building 30 review

Kathy,

Nancy and I walked through building 30 on January 29, 1996, at 9:00 a.m. I apologize if you did not receive the phone mail message that I left on your phone last Thursday, 1/25/96, prior to yesterday morning.

We spoke with J.J. Johnson and Mike Ball. Our main concerns were 1) the absence of a MSDS folder in the building, 2) the absence of a Waste Generator Record for the Ultima Gold waste, 3) a small flammable cabinet for the Isopropyl Alcohol that is used, and 4) the exit door from the RWP area to the outside needs to be labeled as such.

Nancy is still in the process of attempting to find out the handling of the waste that is generated from building 30.

I'll get in touch with you tomorrow concerning the schedule for next week that involves your buildings.

Thanks,

John  
Distribution:

TO: Katherine Koehler ( KOEHKG )  
CC: Eunice Warmoth ( WARMEM )  
CC: JOHN JOHNSON ( JOHNJJ3 )

**This page intentionally left blank.**

l o u n d

Electronic Message/AOS

From :Katherine Koehler  
KOEHKG  
Dept. :ENGINEERING  
Tel. No :865-4886  
Date :21-Feb-1996 01:33pm EST  
Subject :Review of Draft Building 30 Assessment Report

TO :Eunice Warmoth (for Nancy Vias) ( WARMEM )  
CC :W. B. Clark ( CLARWB )  
Linda Bauer ( BAUELR )  
John Hausfeld ( HAUSJR )  
Dave B. Armstrong ( ARMSDB )

Nancy,

You requested a critical review of your Building 30 Environmental Assessment report but did not allot sufficient time to do one. Please do not take these comments in the wrong way. I've did not give the review the time I would like to have committed but the following is a list of concerns I noted on a quick read through.

1.) Page 1, last paragraph which states: "Of primary concern was waste characterization, handling, storage, and disposal practices. This and other compliance issues (What other issues?) were discussed with the building manager, process manager, waste management professionals, and EG&G management."

Correction request: Remove "building manager." The attachment was the original briefing I received from the Environmental Assessment. A 5 minute subsequent discussion with Nancy Vias on 2/8/96 at approximately 8:15 was not a general compliance issue discussion. If there is any other compliance issues other than those related to the improper disposal of Counting Lab wastes at a hazardous incineration facility over a five year period, please let me know.

*See AOS*

2.) Page 2, second paragraph which states: The building manager was not present at the walk through but was subsequently debriefed." should be changed to "The building manager was not present at the walk through."

Reasoning: The extent of the building managers debriefing is documented on the attachment and in a 5 minute conversation held with Nancy, John, and myself held on 2/8/96. I was never debriefed on building 30's disposal practices by the Environmental auditors. Waste management and radiation controls personnel brief me on the occurrence. I think this reference with respect to "debriefing" is misleading.

If "debriefing" is replaced with "given a copy of the draft

Building 30 assessment report on 2/20/96" that would be accurate.

Page 2, third paragraph: What does the MEC abbreviation stand for? Mound Emission Controls?

3.) FYI-Separate issue: Building and Utility Drawings are not in "AS-BUILT" condition. As upgrades and renovations were made to utilities and buildings, the revised conditions may not have been documented on the drawings. This write up seems to assume that the drawings supplied are accurate. You might consider clarifying that this is the best available information the plant has to date.

4.) Discrepancy between the building 30 report, John Hausfelds AOS memo (attached), and critique meeting discussions concerning the waste generation forms:

The AOS states that there was a concern associated with the absence of a Waste Generator record for the Ultima Gold waste.

The environmental assessment report states that the waste generator filled one out as "LSA waste". The report did not state whether this form was given to waste management representatives or not or given to the process manager or not.

In the critique, waste management referred to a waste generators form that was filled out years ago when the it was determined that the scintillation waste could be disposed of utilizing the tritium exemption criteria and disposed of a hazardous waste due to EPA's concerns over bioaccumulation is river species

5.) Page 5, Paragraph 3: The primary finding was associated with non-characterization in accordance with DOE Order 5820, 40CFR265, and OAC 3745-52. Why didn't you reference the particular applicable sections.?

DOE has stated that compliance with all DOE orders is no longer necessary but to my knowledge have not provided a list of those orders or portions or orders which must still be complied with. Where is the listing of DOE orders that the M&O contractor is required to comply with? Does the funding match the resources required to ensure that the order is complied with?

6.) Environmental Check list,

page 1 of 27 - Is there a 40CFR122 code exemption for small quantities of flammables (alcohol) which do not require storage in a an flammable storage cabinet.

Page 8 of 27 - Why was process circled (No explanation)? Why are three questions left unanswered?

I could not read the handwriting on the xeroxed copy received. I did not review illegible handwritten notes.

**Kathy**

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.53.6.2 Building Manager's Questionnaire**

COMPLETED BY J.J. JOHNSON & TED QUALE - BLDG  
Building Manager's Questionnaire

MGR DID NOT HAVE  
TIME TO CONFIRM  
OR REVIEW.

Building Name: 30 Building Manager: K.G. Koehler Phone: \_\_\_\_\_  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

Date: 12-07-95

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

GET level II, dosimetry, read & sign the RWP.

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

None

3. Are there any restricted areas?  Yes  No

Where are they?

Posted area - Posted as "Inactive Material Area"

4. Provide a physical description of the building.

This 740-ft<sup>2</sup>, concrete block building has a BUM roof (coal tar). The building is slightly contaminated with radioactive material (plutonium-238), and the building contains asbestos.

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

5. Provide a drawing of the building.

Attached

6. What is the current building use?

Building serves as an office and storage area supporting the Environmental, Safety, and Health Department. Some flammable chemicals are stored. Used as a Radiological Count Lab.

Source: Mound Buildings, 5-9-95

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

Believe at one time the building was used as a gamma scan facility for drums & boxes.

Source: Mound Buildings, 5-9-95

## Building Manager's Questionnaire

Building Name: 30 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: Soil screening, HP counting

How Wastes Are Generated:

Soils in sealed EPA dishes are screened in a gamma counter to determine how much, if any, plutonium or thorium is present. The sealed dishes are not opened and are discarded in an LSA container outside.

HP samples are counted in a Tri-Carb 1000 liquid scintillation counter. The scintillation fluid is ~~Atomlight~~ Ultima Gold (Packard). Vials containing the scintillation fluid are put in a container which is picked up by Waste Management.

Isopropyl alcohol is used in small quantities to clean the HP equipment. The alcohol evaporates and no wastes are generated.

Window wash is used in small quantities to clean the equipment. No liquid waste is generated.

Contact: J. J. Johnson  
Phone #: 4421

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

## Building Manager's Questionnaire

Building Name: 30    Building Manager: K.G. Koehler    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

10. Does the building have air emission sources? No - Unknown -

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

## Building Manager's Questionnaire

Building Name: 30    Building Manager: K.G. Koehler    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

Process Source	Permit	Log	Permit Condition & Frequency of Monitoring
		Y / N	
		Y / N	
		Y / N	
		Y / N	
		Y / N	

Source: Air Permits 2/4/95

13. Does the building have potable water?  Yes    No

14. Does the building discharge to the storm sewer?    Yes    No    *Unknown*

15. Does the building discharge to the sanitary sewer?  Yes    No

16. Has an asbestos survey been conducted?    Yes  
 What are the results?    Yes

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



## Building Manager's Questionnaire

Building Name: 30    Building Manager: K.G. Koehler    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures
<u>Unknown</u>		

Source: \_\_\_\_\_

21. Where do waste chemicals go?  
Ultima Gold vials are picked up by Waste management

22. What janitorial supplies are stored inside or outside of the building?  
bowl cleaner -  
mops & buckets -

23. Where do excess janitorial supplies go?  
Janitorial work is performed by the Decon Group of the building PP building Area. Excess supplies are controlled and maintained by this group.

Source: \_\_\_\_\_

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

Chemical	Amount	Chemical	Amount

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 30 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
	Argon	1500 Gal		Y / N	
				Y / N	

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

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / N			Y / N	Y / N

Source: \_\_\_\_\_

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

Materials	Amount
Nonhaz Scintillation Vials	159.4
Nonhaz Scintillation Vials	247.8
Nonhaz Scintillation Vials	261.8
Nonhaz Scintillation Vials	255.3
Nonhaz Acintillation Vials	202.4
Nonhaz Scintillation Vials	258.0
Nonhaz Scintillation Vials	272.3
Nonhaz Scintillation Vials	228.8

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

## Building Manager's Questionnaire

Building Name: 30 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

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

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

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

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

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 30    Building Manager: K.G. Koehler    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes

No

Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 30    Building Manager: K.G. Koehler    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

Where are logs found? *Trash is picked up by Waste Management (Decon Group). The Radiological Control Count Lab does not maintain a log.*

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

Source: \_\_\_\_\_

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

*Unknown*

## Building Manager's Questionnaire

Building Name: 30 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

36. Is there a waste minimization program in the building? Yes No  
Discuss your ideas about how to minimize waste.

*Boxes, containers, and packaging material are disposed and handled as regular trash.*

37. Has a pollution prevention program been developed for the building? Yes No

*Unknown*

**This page intentionally left blank.**



## SECTION 4 - REACTIVITY HAZARD DATA

**STABILITY** Stable  
 UnstableConditions  
To Avoid

Keep away from heat or ignition sources

**Incompatibility**

Materials to Avoid) Oxidizing agents, such as acetyl chloride, nitric acid and hydrogen peroxide

**Hazardous**Decomposition Products\* CO<sub>2</sub> is formed during combustion**HAZARDOUS POLYMERIZATION** May Occur  
 Will Not OccurConditions  
To Avoid

## SECTION 5 - HEALTH HAZARD DATA

**PRIMARY ROUTES  
OF ENTRY** Inhalation  
 Skin Absorption Ingestion  
 Not Hazardous**CARCINOGEN  
LISTED IN** NTP  
 IARC Monograph OSHA.  
 Not Listed**HEALTH HAZARDS**

Acute

Irritation of the eyes, nose and throat, headache

Chronic

Drowsiness and lassitude, loss of appetite and inability to concentrate

**Signs and Symptoms  
of Exposure****Medical Conditions**

Generally Aggravated by Exposure Unknown

**EMERGENCY FIRST AID PROCEDURES** - Seek medical assistance for further treatment, observation and support if necessary.**Eye Contact**

Irrigate eyes with water

**Skin Contact**

Flush with water

**Inhalation**

If excessive, notify proper authority for instruction

**Ingestion**

Gastric lavage, followed by saline catharsis, get medical care

## SECTION 6 - CONTROL AND PROTECTIVE MEASURES

**Respiratory Protection  
(Specify Type)**

Activated carbon respirator

**Protective Gloves**

Not required if no skin contact

**Eye Protection**

Safety eyewear with splash guards

**VENTILATION  
TO BE USED** Local Exhaust sufficient to keep concentration below 1000 p.p.m. Mechanical (general) Special Other (specify)**Other Protective  
Clothing and Equipment**

If permissible exposure limit is exceeded, use NIOSH approved respirator

**Hygienic Work  
Practices**

## SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

**Steps to be Taken if Material  
Is Spilled Or Released**

Keep heat or ignition sources away; ventilate area; dilution with water will decrease the risk of a fire hazard.

**Waste Disposal  
Methods**

Small amounts may be flushed with water. Large amounts may be contained &amp; collected for incineration.

**Precautions to be Taken  
in Handling and Storage**

Store away from oxidizing agents; keep away from heat or ignition sources; use adequate ventilation

**Other Precautions and/or Special Hazards**

Keep containers closed. Ground containers when emptying.

NFPA Rating\* Health \_\_\_ Flammability \_\_\_ Reactivity \_\_\_ Special \_\_\_ HMIS Rating\* Health \_\_\_ Flammability \_\_\_ Reactivity \_\_\_ Personal Protection \_\_\_

Optional 9. 53-66

© Copyright 1986. Science Related Materials, Inc. All Rights Reserved.

Revised May 1987



# MATERIAL SAFETY DATA SHEET

<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>REACTIVITY</b>	<b>1</b>
<b>PERSONAL PROTECTION</b>	<b>B</b>

PPO CAS.RN 92-71-7  
 bis-MSB CAS.RN 13280-61-0

PACKARD INSTRUMENT CO., INC. • 2200 WARRENVILLE ROAD • DOWNERS GROVE, IL 60515

PREPARER: J.W. van der Weele      DATE: 12/01/90      REVISION #: D  
 CHEMICAL NAME: Blend of alkylnaphthalene with scintillators PPO and bis-MSB  
 and emulsifiers  
 SYNONYMS: None      CHEMICAL FAMILY: N.A.  
 FORMULA: N.A.      MOLECULAR WEIGHT: N.A.

TRADE NAME AND SYNONYMS: ULTIMA-GOLD

### PHYSICAL DATA

BOILING POINT, 760 mm, Hg	554-570°F/290-299°C	FREEZING POINT	-22°F/-30 °C
SP. GRAVITY (H <sub>2</sub> O = 1)@20°C	0.960	VAPOR PRESSURE AT 20°C	2.8 mm Hg
EVAPORATION RATE (BUTYL ACETATE = 1)	N.D.	SOLUBILITY IN WATER, % by wt. at 20°C	Very slight .01
% VOLATILES BY VOLUME	<1	VAPOR DENSITY (AIR = 1)	N.D.
APPEARANCE AND ODOR	Clear blue-violet fluorescent liquid with mild odor.		

### HAZARDOUS INGREDIENTS

MATERIAL	%	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDATIONS
None				

### FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (test method)	306°F/152 °C      Tag closed cup	AUTOIGNITION TEMPERATURE	≈932°F/≈500 °C
FLAMMABLE LIMITS IN AIR, % by volume	LOWER	N.D.	UPPER      N.D.

EXTINGUISHING MEDIA	Dry chemical, carbon dioxide or foam
SPECIAL FIRE FIGHTING PROCEDURES	None
UNUSUAL FIRE AND EXPLOSION HAZARDS	None

### EMERGENCY PHONE NUMBERS

DAY: 1-800-445-7426  
 24 HOUR EMERGENCY CONTACT: CHEMTREC 1-800-424-9300

**HEALTH HAZARD DATA**

EFFECTS OF OVEREXPOSURE (ACUTE AND CHRONIC)	Prolonged contact may cause slight irritation of eyes, skin and mucous membranes. May cause nausea, diarrhea or vomiting if ingested. No chronic effects are known.
---	---

ROUTE(S) OF ENTRY	INHALATION <input type="checkbox"/> SKIN <input checked="" type="checkbox"/> INGESTION <input checked="" type="checkbox"/>
-------------------	--

EMERGENCY AND FIRST AID PROCEDURES	Remove to fresh air. Wash affected areas with soapy water. Flush eyes with running water for 15 minutes and seek medical attention if irritation persists.
------------------------------------	--

CARCINOGENICITY	N.T.P. <input type="checkbox"/> I.A.R.C. MONOGRAPHS <input type="checkbox"/> OSHA <input type="checkbox"/>
-----------------	--

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE	None
---	------

**REACTIVITY DATA**

STABILITY	CONDITIONS TO AVOID	
UNSTABLE <input type="checkbox"/> STABLE <input checked="" type="checkbox"/>		None

INCOMPATIBILITY (materials to avoid)	Strong oxidizers
--------------------------------------	------------------

HAZARDOUS DECOMPOSITION PRODUCTS	None
----------------------------------	------

HAZARDOUS POLYMERIZATION	CONDITIONS TO AVOID	
May Occur <input type="checkbox"/> Will not Occur <input checked="" type="checkbox"/>		None

**SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	Remove ignition sources, ventilate area. Absorb small spills with paper, diatomaceous earth or equivalent, with evaporation in a fume hood.
--	---

WASTE DISPOSAL METHOD	Sanitary sewer or incinerate in accordance with government regulations.
-----------------------	---

**SPECIAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION (specify type)	None required
---------------------------------------	---------------

VENTILATION	LOCAL EXHAUST	None	SPECIAL	None
	MECHANICAL (general)	Satisfactory	OTHER	None

PROTECTIVE GLOVES	Chemical proof	EYE PROTECTION	Splash proof safety goggles
-------------------	----------------	----------------	-----------------------------

OTHER PROTECTIVE EQUIPMENT	None
----------------------------	------

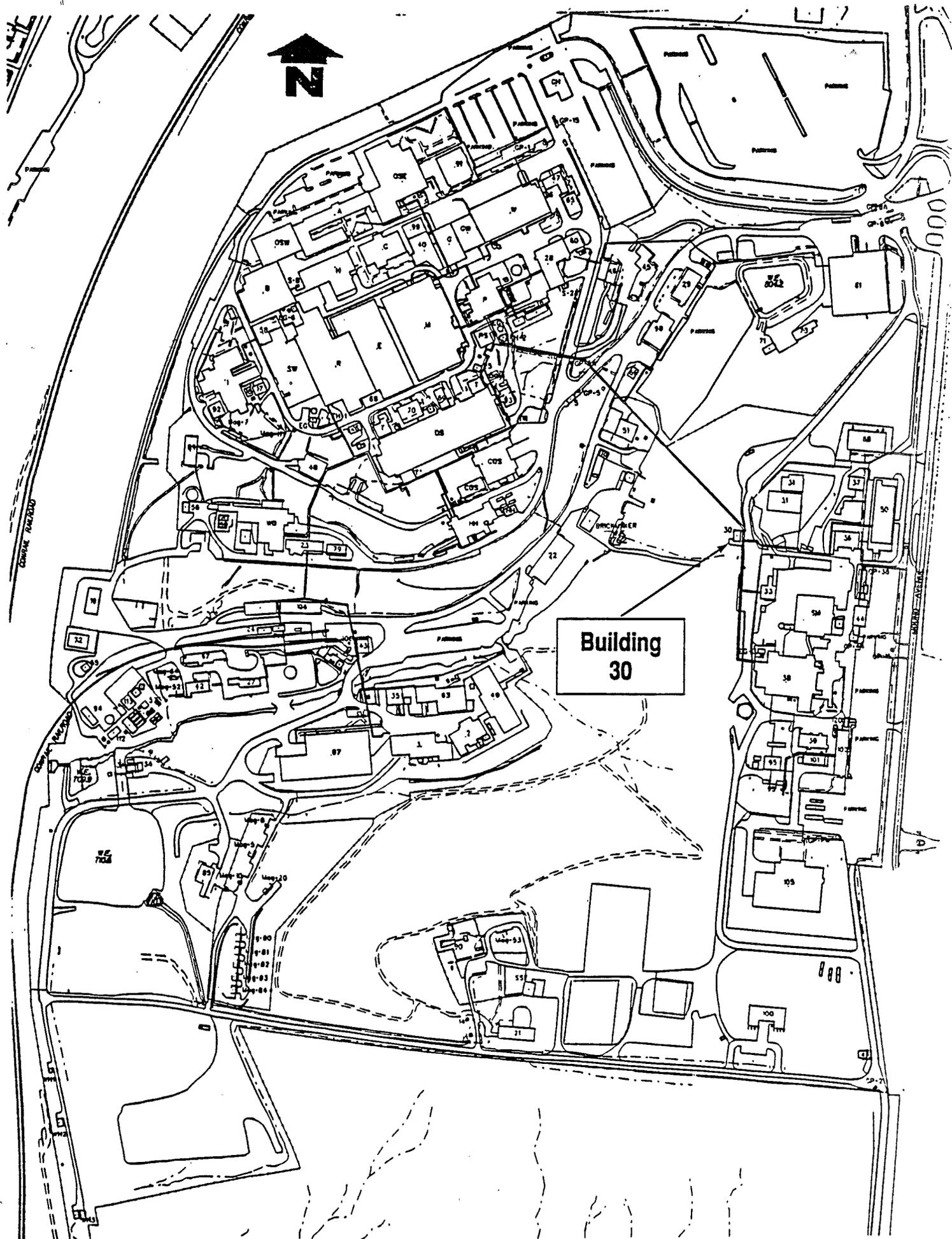
HYGIENIC PRACTICES	No eating, drinking or smoking in area. Wash after use.
--------------------	---

**SPECIAL PRECAUTIONS**

PRECAUTIONARY LABELING	WARNING! Contains the mildly irritating solvent alkylnaphthalene. Avoid contact with eyes and skin, prolonged breathing of vapor. Avoid sparks and open flame.
------------------------	--

# **Environmental Appraisal of the Mound Plant**

## **9.53.6.3 Location of Building 30**



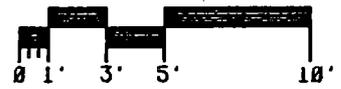
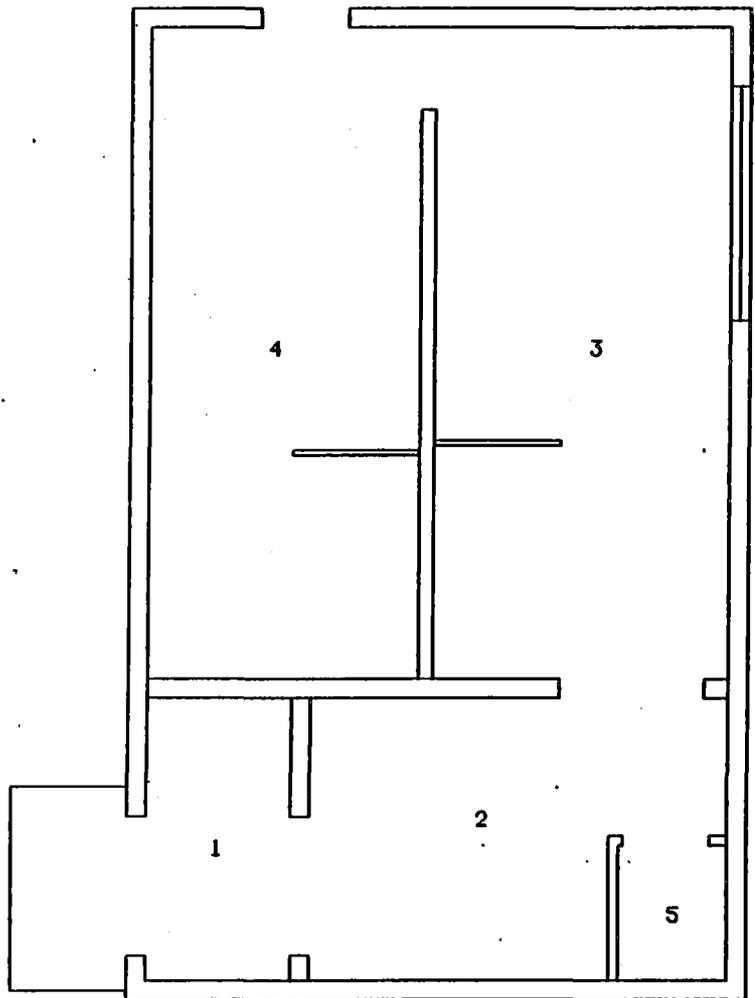
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.53.6.4 Floor Plans for Building 30**

ISS	DATE	REVISION	BY	CHKD	DATE	APPROV	NO
B	12/12/91	ASBUILT ISSUE					



**BLDG #30  
FIRST FLOOR  
BLDG CODE:3030**

APPROVALS: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SAFETY COMMITTEE REVIEWED: \_\_\_\_\_  
 \_\_\_\_\_ TRLEOC \_\_\_\_\_ TEAOC \_\_\_\_\_ CHOC \_\_\_\_\_  
 TECH. RESP. \_\_\_\_\_  
 SR. MGR. \_\_\_\_\_  
 TRLEOC \_\_\_\_\_  
 TEAOC \_\_\_\_\_  
 CHOC \_\_\_\_\_

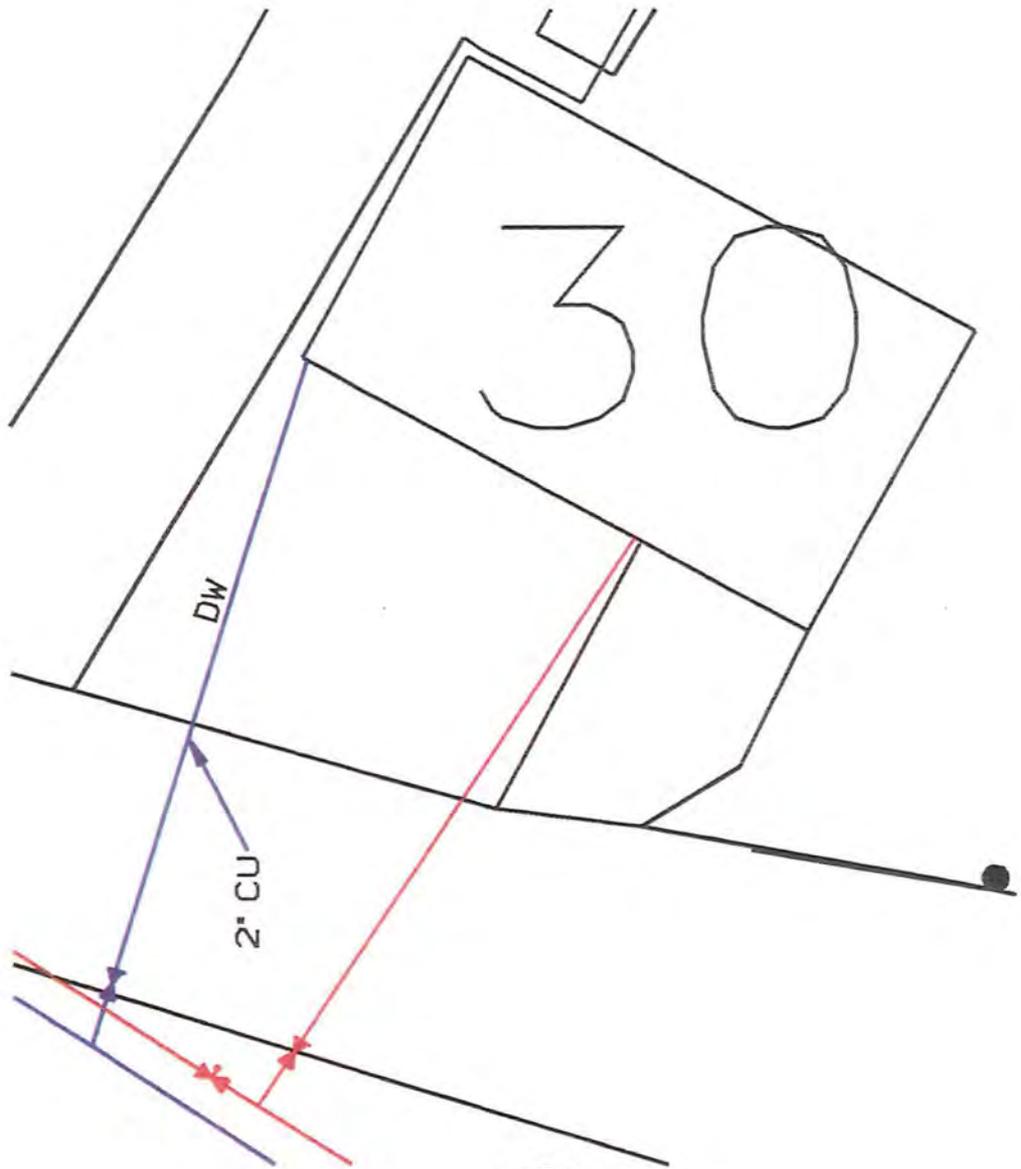
DESIGN ENG	PROJ MGR	SHEET	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION
ISSUE	DATE REPLY	TITLE	B						BLDG #30	
LP & DC	PERM REV	DATE CLASSIFICATION							FLOOR PLANS	
DATE		UNCLASSIFIED	C						FSC911242	12335
		DWG TYPE SFP							SCALE AS NOTED	SHEET 1 OF 1
		STATUS MD-REL-12/12/91							ORIGIN MD-BR3-V3.0	

9.53-75

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.53.6.5 Underground Utility Lines**



- FIRE
- POTABLE
- RAW
- SANITARY
- STORM
- RADIOLOGICAL



**UNCLASSIFIED**

**E.G. & G. - MOUND**  
 UNDERGROUND WATER & WASTE LINES  
 BLDG. 30  
 DATE: 3-4-96

9.53-79

# **Environmental Appraisal of the Mound Plant**

## **9.53.6.6 Photographs**

Mound Plant Building 30





## **Environmental Appraisal of the Mound Plant**

### **9.54 BUILDING 31**

#### **9.54.1 Scope of Building 31 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 31 on January 24, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.54.6.1). Escorting the appraisers was the building manager and other knowledgeable personnel such as the process owner. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.54.6.2).

#### **9.54.2 Description of Building 31**

Building 31 is a 6,090-square-foot, prefabricated metal building with a metal roof. The building is bordered by a road to the west, a staging area to the east, Building 31-A to the south, and a road to the north. The location is shown in Attachment 3 (Section 9.54.6.3).

Floor plans are presented as Attachment 4 (Section 9.54.6.4). The facility has heating and air conditioning systems of central steam and chilled water. The building has a fire sprinkler system (*Mound Facility Physical Characterization*, 12-1-93).

Building 31 was constructed in 1966. The building has been used for the same purpose since construction. The building is not known to be contaminated with radioactive or energetic materials (*Mound Facility Physical Characterization*, 12-1-93).

#### **9.54.3 Summary of Findings**

Building 31 houses low-level waste (LLW) storage and staging activities. The building is well-maintained, but has several issues of environmental concern identified during the walk-through or during review of reference materials.

#### **9.54.4 Observations**

##### **9.54.4.1 Air Emissions**

There are no air emission sources included in the LLW storage process. No air emission permit applications have been submitted to the Regional Air Pollution Control Agency (RAPCA) for

## **Environmental Appraisal of the Mound Plant**

activities in the building. There are no fuel-burning units in the building. There is no evidence of fugitive dust.

### **9.54.4.2 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.

#### **9.54.4.2.1 Sanitary**

The building does not have sanitary services. There is a portable toilet located behind the building on the northeast side. There is minimal wastewater routinely generated or occurring from spills in the process of storing LLW. This wastewater which comes from waste containers storing sludge is collected in a sump and sent to either Building WD or the sanitary treatment plant, based on characterization or process knowledge.

#### **9.54.4.2.2 Storm**

The building is serviced by storm drains according to the diagram of underground utility lines presented as Attachment 5 (Section 9.54.6.5). There are no interior connections to the storm system. Roof drains discharge to the storm system. Exterior grates and drains were not tested to confirm that they connect to the storm drainage system. Inspection 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.

#### **9.54.4.2.3 Process Wastewater**

There is no process water that drains from the building. Boxes of solidified sludge classified as LLW had been stored outside the building for approximately six years. Free liquid had accumulated inside the containers. The metal box and 192 others were drilled in the fall of 1995. The liquid was drained into paint trays, then poured into new empty LLW drums. Three of the drums were stored outside and one was stored inside the building. It could not be determined where the other drums were located. The drums were marked in accordance with current procedures.

## **Environmental Appraisal of the Mound Plant**

### **9.54.4.2.4 Chemicals**

Minimal amounts of chemicals are stored and used in Building 31. A list of chemicals found in Building 31 is included in the BMQ. 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 was not attempted as the current inventory was still in process. Storage, handling, and disposal of chemicals listed in the BMQ were reviewed to assure conformance to regulations in 40 CFR 122, 40 CFR 261-265,268, and 29 CFR 1910. Chemical storage and handling procedures are in place for proper disposal of chemicals. There is no evidence that chemicals enter the storm or sanitary drains. There have been no reported spills from Building 31.

### **9.54.4.3 Potable and Service Water**

Potable water is not supplied to the building. Two portable water coolers that use bottled water were available for drinking. According to Environmental Protection Agency (EPA) protocol, annual sampling criteria do not require testing of each water cooler.

### **9.54.4.4 Chemical Storage and Hazardous Materials**

Janitorial and maintenance supplies used in the Building 31 are stored in the metal cabinets. Paint supplies are stored in a flammable cabinet in accordance with applicable standards. These cabinets are used by maintenance personnel. The building manager needs to coordinate with the maintenance supervisor on how materials are stored in these cabinets and how the cabinets are labelled. Some Material Safety Data Sheets (MSDSs) were available in the building.

The building is equipped with appropriate emergency response equipment such as sprinklers and fire extinguishers. Extinguishers are bar-coded. The inspection date database is maintained in the Fire Station, Building 98. There is an Emergency Evacuation Plan, and signs were posted in work areas.

There are no aboveground storage tanks in or around the building and no underground storage tanks are associated with this building. There are no sumps, separators, or catch basins, in or around the building.

The building was tested and does contain suspect asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95).

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

### **9.54.4.5 Solid, Hazardous, and Radioactive Wastes**

Solid wastes generated are primarily empty paint containers. There is paper and aluminum can recycling to minimize solid waste. Solid wastes are removed by janitorial personnel to a site

## **Environmental Appraisal of the Mound Plant**

collection point, then shipped offsite to a local landfill by a contractor. The disposal permit is maintained by Waste Management. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

Containers of LLW are staged in the building, where they are prepared for shipping. Some of the containers hold sludge for the sanitary treatment plant. It was discovered that the sludge needed to be dewatered. The wastes containers were modified to remove water. A Department of Transportation (DOT) standard, full-size metal box was observed drilled with holes that had been plugged with screws, located along the bottom third of the panels. The box observed during the walk-through will be stored in Building 31 and eventually shipped to Envirocare. A review of the procedures for Waste Acceptance Procedures for Envirocare Shipments stated that the container should be inspected for damage that could affect the integrity of the container, such as handling damage, holes, and leaking. In addition, ML-7042A: Low-Level Radioactive Waste Input Form has a Unit of Inspection which includes "No Holes." There is no evidence of an evaluation of this modification of a DOT-regulated container to determine if the drilling would compromise the integrity of the container or whether the application of screws and washers would be sufficient to plug the container. There was no available record of authorization engineering approval for the modification of a DOT LLW container. It could not be determined at this time if there were other containers that had been modified. If containers are to be modified, documented approval should be acquired by management, EnviroCare, and DOT. Waste containers should not leave the Mound site in a nonconforming condition.

During the appraisal, it was noted that heavy duty equipment from the garage had been stored in the facility without the knowledge of the building manager. There had been no coordination between the building manager and the heavy equipment maintenance superintendent. This imposes an unwarranted burden of responsibility on the building manager and also brings into question the security of this LLW building. The building manager was provided no training to perform his functions.

### **9.54.4.6 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 in place including aluminum can and paper recycling. Process procedures have been reviewed for preventing or minimizing pollution. Building 31 will not generate but a minimal amount of waste.

### **9.54.5 Findings and Recommendations**

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.54.6.6).

## **Environmental Appraisal of the Mound Plant**

The environmental appraisal of Building 31 indicates that the following action items, in order of priority, should be planned and scheduled for accomplishment thus assuring the best management and operating practices are in place.

- 31-1 Evaluate the Waste Acceptance Criteria, 49 CFR 109-199 regulations and engineering specifications to ensure that procedures are either established or implemented to ensure that engineering specifications that are modified are authorized in writing by Mound engineers and management, and approved by Envirocare and DOT.
- 31-2 Perform frequent inspections of the facility. Establish or review procedures for inspection and certifying LLW containers. Inspections should identify any non-conformities to the engineering specifications of LLW containers.
- 31-3 MSDSs should be prominently displayed, clearly labeled, and readily available. A visitor to the area should be able to walk into the room and find them immediately.
- 31-4 There were two LLW drums marked as "contamination area" roped off and staged outside the rear of the building next to a storm drain. They should be moved to a more secure location.
- 31-5 There were numerous rusty metal LSA boxes full of what appeared to be ice. The boxes should be removed from the area and disposed of properly.
- 31-6 Establish guidelines to ensure that any modifications of radioactive waste containers are evaluated, approved, and documented.
- 31-7 Provide training to building managers on building specifics, process operations, security, and other responsibilities.

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.54.6.1 Environmental Appraisal Checklist**



**ENVIRONMENTAL APPRAISAL  
CHECKLIST**

**Table of Contents**

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

Revision 3.0 (1-5-96)

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander Mary-Louis Hoagland  
John Puckett Mary Sizemore

Date: 1/24/96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

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

9.54-11

### Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
 John Puckett            Mary Sizemore

Date: 1/24/96

#### Clean Air Act (CAA) Screening Checklist

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

#### CAA Checklist

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

9.54-12

### Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander Mary-Louis Hoagland  
John Puckett Mary Sizemore

Date: 1/24/96

#### CAA Checklist

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

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

Source: \_\_\_\_\_

9.54-13

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander Mary-Louis Hoagland  
John Puckett Mary Sizemore

Date: 1/24/96

### Hazardous Materials (HM) Screening Checklist

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

### HM Checklist

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

### Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander      Mary-Louis Hoagland  
 John Puckett                      Mary Sizemore

Date: 1/24/96

HM Checklist

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

9.54-15

### Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

HM Checklist

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

**Above Ground Storage Tanks Inventory**

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
<del> </del>	<del> </del>	<del> </del>	<del> </del>	Y/N	Y/N	Y/N	Y/N
<del> </del>	<del> </del>	<del> </del>	<del> </del>	Y/N	Y/N	Y/N	Y/N
<del> </del>	<del> </del>	<del> </del>	<del> </del>	Y/N	Y/N	Y/N	Y/N
<del> </del>	<del> </del>	<del> </del>	<del> </del>	Y/N	Y/N	Y/N	Y/N
<del> </del>	<del> </del>	<del> </del>	<del> </del>	Y/N	Y/N	Y/N	Y/N
<del> </del>	<del> </del>	<del> </del>	<del> </del>	Y/N	Y/N	Y/N	Y/N
<del> </del>	<del> </del>	<del> </del>	<del> </del>	Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander  
John Puckett

Mary-Louis Hoagland  
Mary Sizemore

Date: 1/24/96

### Safe Drinking Water Act (SDWA) Screening Checklist

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

#### SDWA Checklist

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

TABLE C—Water Fountain Survey — NONE			
Building	Location	Model #	Comments / Date of Analysis for Lead
X			

Source: \_\_\_\_\_

9.54-17

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander Mary-Louis Hoagland  
John Puckett Mary Sizemore

Date: 1/24/96

### RCRA Screening Checklist

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

#### RCRA Checklist - STORAGE ONLY

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

9.54-18

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander Mary-Louis  
John Puckett Mary Sizemore

Date: 1/24/96

### RCRA Checklist

9.54-20

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

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

### RCRA Checklist

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

9.54-21

# Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander Mary-Louis Hoagland  
John Puckett Mary Sizemore

Date: 1/24/96

## RCRA Checklist

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

General Comments:

9.54-22

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

### Asbestos Screening Checklist

Does this facility contain ACM?	(Y) N	If yes, conduct the following survey.
---------------------------------	-------	---------------------------------------

### Asbestos Checklist

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

Regulatory Guideline	Question	Response	Comments
<b>ADAPTED FROM TSCA ACM IN SCHOOLS:</b>			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?  If no for this building or area note this conclusion in the comment section.	(Y) N	Suspect BUILDING MATERIALS   If there is no asbestos removal, do not complete the following section.
	Is there any evidence of friable asbestos?	Y / (N)	
	Is the asbestos removal properly managed? (See questions listed below)	Y / N N/A	
<b>NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:</b>			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACM during the removal.	Y / N	X
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	Y / N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y / N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y / N	

9.54-23

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

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

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

#### TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?  If the answer is no, note .  If the answer is yes, proceed with next section.	Y / N	X
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated?  If no, note and stop here.  If yes, note the location of the management unit, and the method of management, and proceed.	Y / N	
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?	Y / N	
	If yes, are auditable records maintained.	Y / N	
40 CFR.30 (a) (1) (ix)	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?	Y / N	
	Are they visually inspected quarterly? If yes, are auditable records maintained?	Y / N	

9.54-24

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/94

### TSCA Checklist

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

9.54-25

**Environmental Appraisal Checklist**

Building Name: 31

Appraisers: Terry Glander      Mary-Louis Hoagland  
 John Puckett              Mary Sizemore

Date: 1/24/96

TSCA Checklist

9.54-26

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

**GENERAL COMMENTS:**



## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

### Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	(Y) N	If yes, conduct the following survey.
---	-------	---------------------------------------

### Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
<b>Low-Level Waste</b>			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW?  If the answer is no, note.  If the answer is yes, proceed with next section.	Y/N	ONLY STORED AT LOCATION
DOE Order 5820.2A Chapter III.	Are any of the materials noted by inspection LLW?  If no, The audit would stop here, because there are no LLW.  If yes, note the location of the management unit, and the method of management, and proceed with the section below.	(Y) N	EACH CONTAINER'S LLW INPUT FORM DOCUMENTS MEASUREMENTS AT THE SURFACE AND AT ONE METER
DOE Order 5820.2A Chapter III, 3.a.	Have the storage configurations in use in this area been taken into account for keeping external exposures to the general public below 25 mrem/yr?  Is the waste stored in a configuration that protects ground-water resources?	Y/N  (Y) N	N/A - NO PUBLIC ACCESS  (SEE ABOVE)
DOE Order 5820.2A Chapter III, 3.b.	Has monitoring been conducted in this area in accordance with DOE Order 5820.2A in order to evaluate the area against the performance standard?  Based on field data, does the monitoring conducted in this area conform to the performance standard?	(Y) N  (Y) N	AREA DOSIMETERS ARE POSTED; HEALTH PHYSICS TAKES FLOOR WIPES

9.54-27

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander      Mary-Louis Hoagland  
                   John Puckett         Mary Sizemore

Date: 1/24/96

### Low-Level Waste and Transuranic Waste Checklist

9.54-28

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A Chapter III, 3.d.	Based on field data, is the characterization of the materials in this area sufficient to assure proper segregation to assure proper segregation, treatment, storage, and disposal?	(Y) N	CONTAINERS CONTAIN LLW-SOIL
	Based on field data does the characterization as documented at the time of generation of the waste ensure that the actual physical and chemical characteristics, and major radionuclide content of this material are recorded and known at all stages of the waste management process?	(Y) N	ML 7042-A & ML-7042-X WASTE INPUT FORM IS DOCUMENTATION USED
	Do characterization data include the following:		
	Physical and chemical characteristics of the waste?	(Y) N	
	Volume of the waste (including solidification and absorbent material)?	(Y) / N	
	Weight of the waste (including solidification and absorbent material)?	(Y) / N	
	Major radionuclides and their concentrations?	(Y) / N	
	Packaging date, package weight, external volume?	(Y) N	
	How were the concentration of radionuclides determined? Direct methods?	_____	PROCESS KNOWLEDGE / ANALYTICAL
	How were the concentrations of radionuclides determined? Indirect methods?	_____	SAME AS ABOVE
DOE Order 5820.2A Chapter III, 3.h	Is the storage configuration in long term storage sufficient to meet the performance standard?	(Y) / N	
	Are records maintained at the facility enabling this waste to be traced from its origin?	(Y) / N	

### Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander · Mary-Louis Hoagland  
John Puckett · Mary Sizemore

Date: 1/24/96

#### Low-Level Waste and Transuranic Waste Checklist

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

9.54-29

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
 John Puckett        Mary Sizemore

Date: 1/24/96

### Low-Level Waste and Transuranic Waste Checklist

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

### Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

#### Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

9.54-31

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

### Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals?

Y  N

If yes, conduct the following survey:

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.54-32

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
 John Puckett                      Mary Sizemore

Date: 1/24/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.54-33

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
 John Puckett            Mary Sizemore

Date: 1/24/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.54-34

## Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander    Mary-Louis Hoagland  
 John Puckett            Mary Sizemore

Date: 1/24/94

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.54-35

### Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander      Mary-Louise Hoagland  
                          John Puckett              Mary Sizemore

Date: 1/24/96

#### Waste Minimization/Pollution Prevention Activities Checklist

9.54-36

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



### Environmental Appraisal Checklist

Building Name: 31

Appraisers: Terry Glander      Mary-Louis Hoagland  
                   John Puckett        Mary Sizemore

Date: 1/24/96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.54.6.2 Building Manager's Questionnaire**

## Building Manager's Questionnaire

Name: 31 Building Manager: L.T. Lamsa Phone: 4182 Date: 12-07-95  
Alternate: DOUG Phone: 4524  
HANAHAN

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

RAD WORKER TRAINING

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

SAFETY GLASSES

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

4. Provide a physical description of the building.

Building is an approximately 6,090-ft<sup>2</sup>, prefabricated metal building with a metal roof. Building is 29 years old. Building itself is not contaminated with radioactive or energetic materials.

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

5. Provide a drawing of the building.

Attached.

6. What is the current building use?

Building supports Decontamination and Decommissioning (D & D) and waste management operations. Building is used to store transuranic (TRU) wastes and as a staging area for the metal LSA boxes.

Source: Mound Building, 5-9-95

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

Source: Mound Buildings, 5-9-95

## Building Manager's Questionnaire

Building Name: 31 Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: Storage and staging of LSA and TRU wastes

How Wastes Are Generated:

No wastes generated.

Contact:

Phone #:

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

## Building Manager's Questionnaire

Building Name: 31    Building Manager: L.T. Lamsa    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

10. Does the building have air emission sources?    No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

## Building Manager's Questionnaire

Building Name: 31 Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

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

14. Does the building discharge to the storm sewer?  Yes  No  
 Where? OUTSIDE (RAIN WATER)

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

16. Has an asbestos survey been conducted? Yes  
 What are the results? SUSPECTED

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

### Building Manager's Questionnaire

Building Name: 31 Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? NO

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

## Building Manager's Questionnaire

Building Name: 31 Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures

Source: \_\_\_\_\_

21. Where do waste chemicals go?

WASTE MANAGEMENT / HAZ WASTE  
 PICK UP IS APPLICABLE.

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

NONE

23. Where do excess janitorial supplies go?

NOT APPLICABLE

Source: LARR: Lamsa

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

Chemical	Amount	Chemical	Amount

Source: LARR: LAMSA

## Building Manager's Questionnaire

Building Name: 31 Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

NONE

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflows
Y / N			Y / N	Y / N

Source: LARRY LAMSA

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

Materials	Amount
Aerosol Cans	125.0
Aerosol Cans	111.8
Aerosol Cans	47.2

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

## Building Manager's Questionnaire

Building Name: 31    Building Manager: L.T. Lamsa    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.?    Yes    No
29. Is waste material stored in or around the building for more than 90 days?    Yes    No    ASSUMPTION: LOW LEVEL RAD AND TRU WASTE ≠ WASTE MATERIAL.
30. Has the building been identified as a 90 day waste accumulation area?    Yes    No
31. Has any area in the building been identified as a satellite accumulation area?    Yes    No
32. Is mixed waste generated, stored, or disposed of from the building?    Yes    No  
 Where are logs found?

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

Source: LARRY LAMSA

## Building Manager's Questionnaire

Building Name: 31    Building Manager: L.T. Lamsa    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes     No     (NOT PRESIDENT)  
 Where are logs found?    JOHN LYONS

Process	Waste	Stored	Disposed	Logs
NONE	TRU	Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

Source: LARRY LAMSA

## Building Manager's Questionnaire

Building Name: 31    Building Manager: L.T. Lamsa    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

Process	Waste	Stored	Disposed	Logs
NONE	LLW	Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

Source: LARRY LAMSA

35. Identify all administrative orders, temporary or permanent injunctions, civil administrative penalties, or criminal activities issued against the building.  
NONE

### Building Manager's Questionnaire

Building Name: 31 Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Yes

No

MINIMAL WASTE IS GENERATED

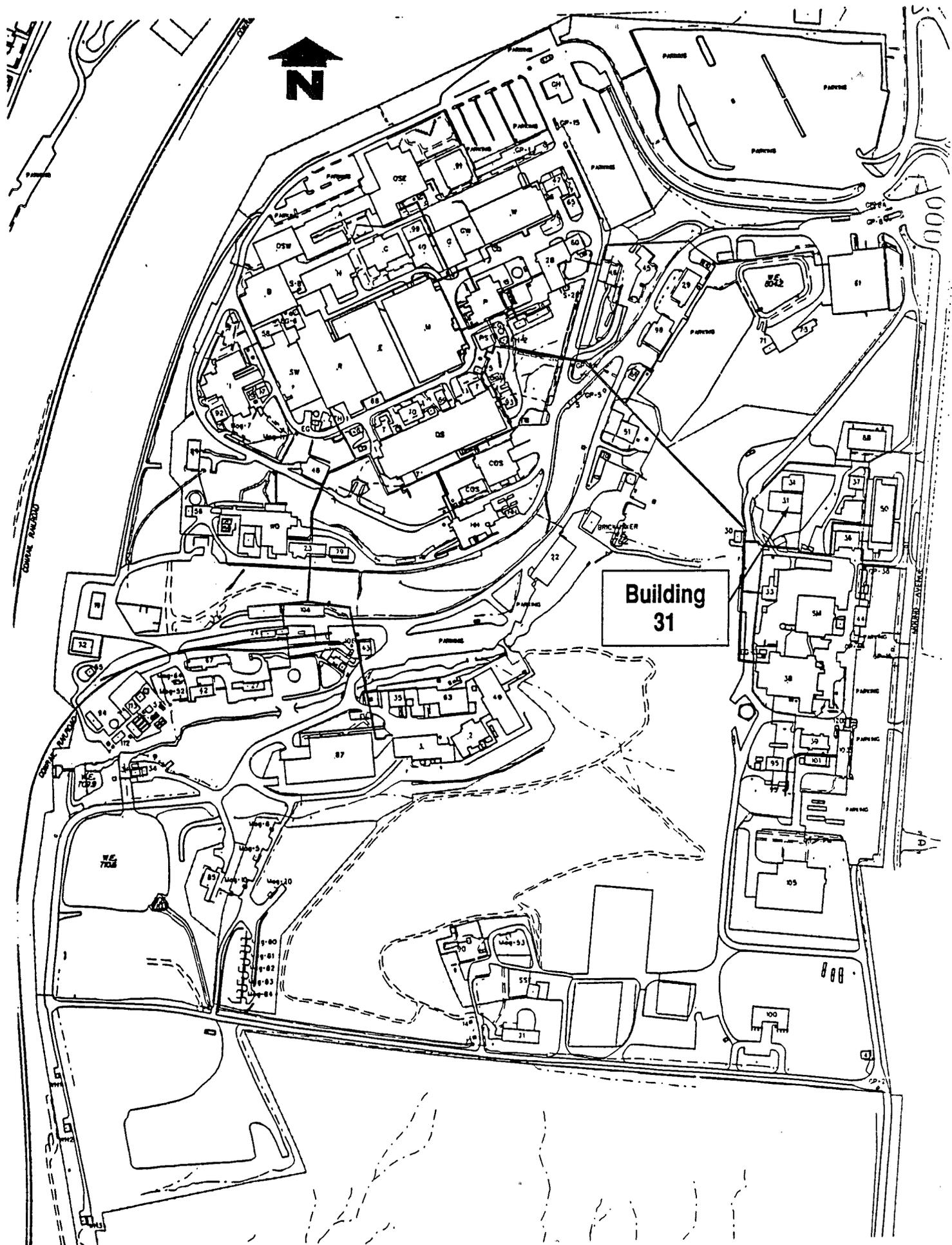
37. Has a pollution prevention program been developed for the building? Yes

No

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.54.6.3 Location of Building 31**



SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

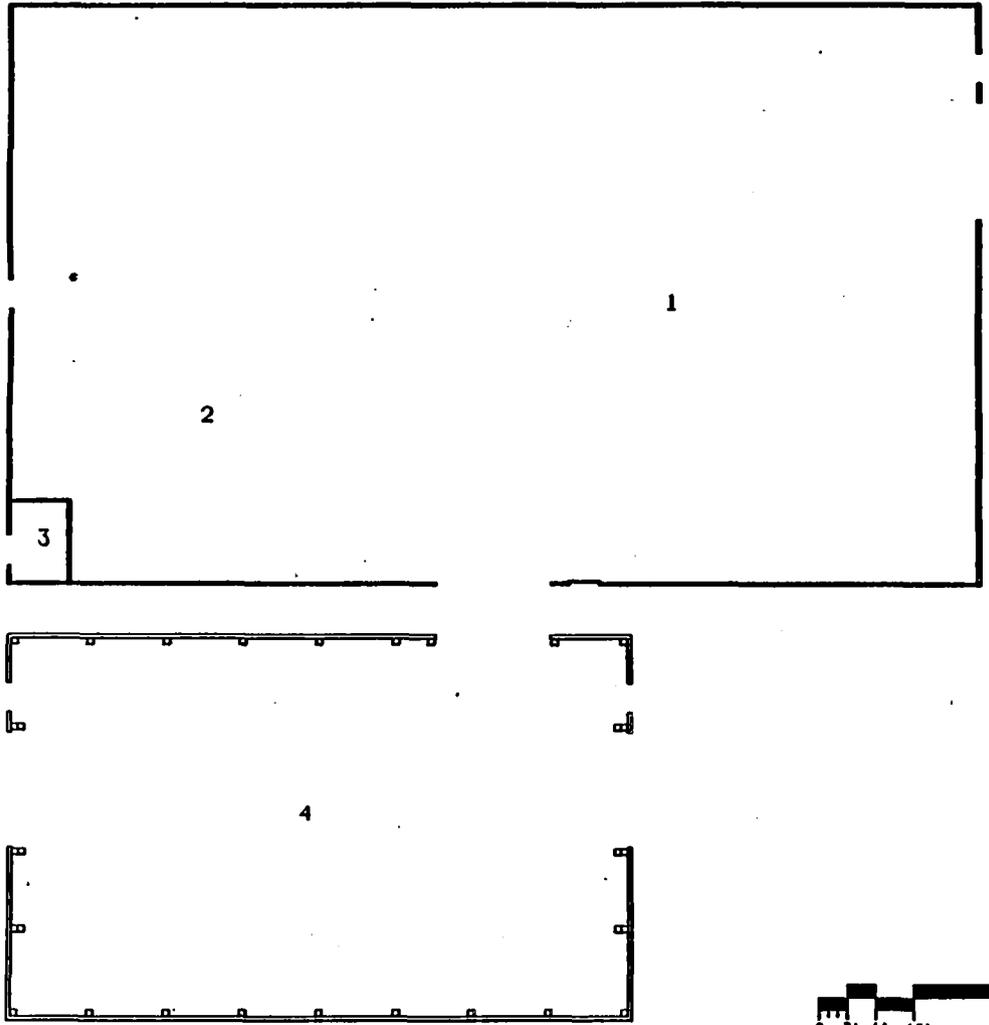
**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

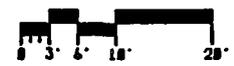
## **9.54.6.4 Floor Plans for Building 31**

REV	DATE	REVISION	BY	CHK	DES	APPROV	DATE
0	12/12/91	ASBUILT ISSUE					

BLDG. 31-31A  
OFFICE MODULE



**BLDG #31  
FIRST FLOOR  
BLDG CODE:3031**



9.54-59

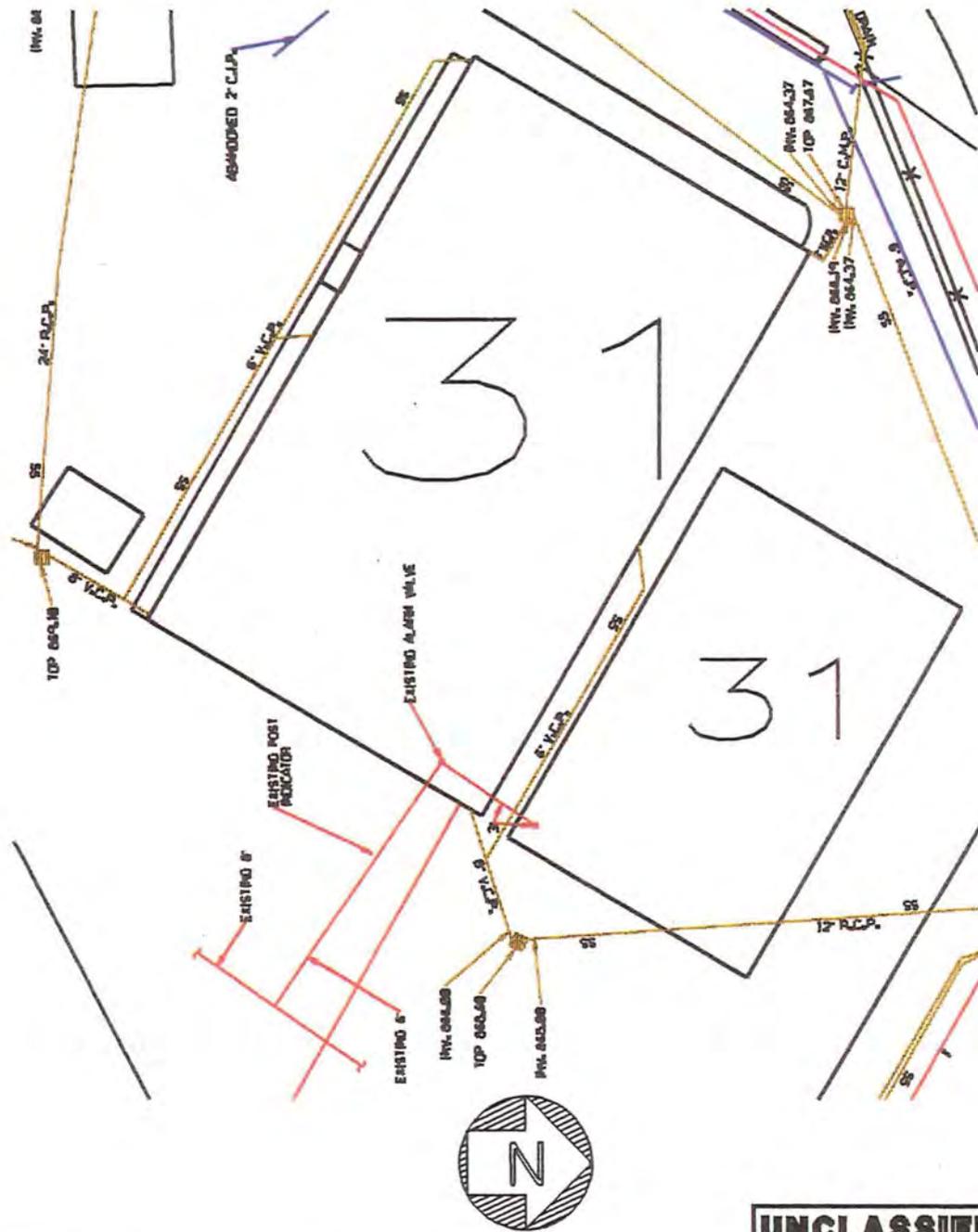
APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
NAME _____ TITLE _____	
TECH. REP. _____	
DR. NO. _____	
TITLE _____	
TITLE _____	
TITLE _____	

DESIGN DRG	PROJ. NO.	SHEET	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION	
		0							BLDG #31 FLOOR PLANS		
SPONS.	JOB NO.	PART CLASSIFICATION									
LP & DC	FEED REV.	DRAWING CLASSIFICATION							012	DRAWING NUMBER	JOB NUMBER
ENG. NO.		<b>UNCLASSIFIED C</b>							FSC911243	12335	
APPROV.	DATE	DRG. TYPE	FROM BLDG #31		CHK# 14865	SCALE AS NOTED		SHEET 1 OF 1			
		STATUS	MD-REL-12/12/91		ORIGIN		MD-8R3-V3.2				

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.54.6.5 Underground Utility Lines**



- FIRE
- POTABLE
- RAW
- SANITARY
- RADIOLOGICAL

**E.G. & G. - MOUND**  
 UNDERGROUND WATER & WASTE LINES  
 BLDG. 31  
 DATE: 5-14-96

**UNCLASSIFIED**

# **Environmental Appraisal of the Mound Plant**

## **9.54.6.6 Photographs**



Mound Plant Building 31

9.54-67



## **Environmental Appraisal of the Mound Plant**

### **9.55 BUILDING 31-A**

#### **9.55.1 Scope of Building 31-A 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 site-wide 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 31-A on January 24, 1996. The EAC (Attachment 1—Section 9.55.6.1) was used to record findings. The appraisers were accompanied by the building manager and other knowledgeable personnel such as the process owners. Other information was supplied by the building manager and recorded on the BMQ, included as Attachment 2 (Section 9.6.2).

#### **9.55.2 Description of Building 31-A**

Building 31-A is a 2,650-square-foot, prefabricated metal building with a metal roof. It is 10 years old. The building is bordered by a roadway to the west, a staging area to the east, a dock to the south, and a roadway to the north. Location is shown in Attachment 3 (Section 6.55.6.3). The facility has heating and air conditioning. HVAC systems are central steam and chilled water. The building has a fire sprinkler system. The building was originally built as a low specific activity (LSA) and Transuranic (TRU) wastes storage facility. The building is currently used for storing TRU wastes.

Building 31-A was constructed in 1986 (MD-10391, *Asbestos Program Manual*, 9-14-95). No research, development, or production activities using radioactive or energetic materials have occurred in the building (Mound Facility Physical Characterization, 12-1-93).

#### **9.55.2 Summary of Findings**

Building 31-A houses LSA and TRU wastes storage. The building is well-maintained. Some issues of environmental concern were identified during the walk-through and during review of reference materials.

#### **9.55.4 Observations**

##### **9.55.4.1 Air Emissions**

There are no air emission sources associated with the LSA and TRU wastes storage process. There are no fuel-burning units in the building. There is no evidence of fugitive dust.

## **Environmental Appraisal of the Mound Plant**

### **9.55.4.2 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.

#### **9.55.4.2.1 Sanitary Wastewater**

The building does not have sanitary services. There is no wastewater generated in the process of storing LSA or TRU wastes.

#### **9.55.4.2.2 Storm Wastewater**

The building is serviced by storm drains according to Attachment 5 (Section 9.55.6.6.5). Storm drain connections are in the exterior of the building. There were no floor drains evident in the building. Exterior grates and drains were not tested to confirm that they connect to the storm drainage system. Inspection 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.

There is no monitoring of building effluent. Based on operations data supplied by the process manager, no effluent is generated from Building 31-A.

#### **9.55.4.2.3 Chemicals**

There are no chemicals stored or used in Building 31-A. There is no evidence that chemicals enter the storm or sanitary drains. There have been no reported spills from Building 31-A.

#### **9.55.4.3 Potable and Service Water**

Potable water is not supplied to the building. There were no water coolers or drinking fountains located in the building.

## **Environmental Appraisal of the Mound Plant**

### **9.55.4.4 Chemical Storage and Hazardous Materials**

The building is equipped with appropriate emergency response equipment such as sprinklers and fire extinguishers. There were no emergency evacuation plans or signs were posted in work areas.

There are no aboveground storage tanks in or around the building and there are no underground storage tanks associated with this building. There are no sumps, separators, or catch basins, in or around the building. There are no underground storage tanks associated with the building.

The building has been tested and does contain suspect asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There was no evidence of friable asbestos.

There are no capacitors or transformers containing PCB's located in the building (1995 PCB Annual Document Log).

### **9.55.4.5 Solid, Hazardous, and Radioactive Wastes**

The LSA waste storage process does not generate solid, hazardous, radioactive or explosive wastes.

The building is used to store TRU wastes. Several of the boxes stored in the building on the day of the walk-through were labeled as LSA waste. Containers were not investigated to confirm that identification and labelling conformed to MD-81240, LSA waste management procedures and DOE Order 5820.

### **9.55.4.6 Waste Minimization and Pollution Prevention**

There are no programs for waste minimization, since the process of storing LSA and TRU wastes does not generate waste. Process procedures have been reviewed for preventing or minimizing pollution.

### **9.55.5 Findings and Recommendations**

The environmental appraisal of Building 31-A indicates that the following action items should be planned and scheduled for accomplishment. Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.55.6.6).

- 31-A-1. Markings on boxes labeled "LSA waste" that contain TRU waste should be reviewed to assure that containers are properly identified and labeled according to Mound procedures and DOE Order.
- 31-A-2. There were no emergency evacuation plans or signs posted in work areas, as required by 29 CFR 1910.

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.55.6.1 Environmental Appraisal Checklist**

# ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 31-A

Appraisers:

*Max Symon*  
Name Discipline

\_\_\_\_\_  
Name Discipline

*Larry L. Lamsa*  
Name Discipline

\_\_\_\_\_  
Name Discipline

Building Manager: LARRY T. LAMSA

Process Manager: LARRY T. LAMSA

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: 1/24/96

**ENVIRONMENTAL APPRAISAL  
CHECKLIST**

**Table of Contents**

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

### Environmental Appraisal Checklist

MARY SIZEMORE  
JOHN PUCKETT

Appraisers: MARY LOUISE HOAGLAND  
TERRY GLANDER

Building Name: 31/A

Date: 1/24/96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

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

9.55-9

9.55-10

**Environmental Appraisal Checklist**

MARY SIZEHORE  
 JOHN PUCKETT  
 MARY LOUISE HOAGLAND  
 TERRY GLANDER

Building Name: 31-A

Appraisers:

Date: 1/24/96

Clean Air Act (CAA) Screening Checklist

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

CAA Checklist

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

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY SIZENDRE  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER  
CAA Checklist - N/A

Date: 1/24/96

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

**TABLE A**

Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

Source: \_\_\_\_\_

9.55-11

9.55-12

### Environmental Appraisal Checklist

Building Name: 31-A

Appraisers: MARY SIZEHORE  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER

Date: 1/24/96

### Hazardous Materials (HM) Screening Checklist

Question	Response	Comments
Are any chemicals used or stored in this building, now or in the past?	Y/N <input checked="" type="radio"/>	If the answer is yes, proceed with the following checklist.

#### HM Checklist

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

**Environmental Appraisal Checklist**

Building Name: **31-A**

Appraisers: **MARY SIZEMORE  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER  
HM Checklist**

Date: **1/24/96**

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

9.55-13

9.55-14

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY Sizemore  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER  
HM Checklist

Date: 1/24/96

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

**Above Ground Storage Tanks Inventory - N/A**

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY SIZEMORE  
JOHN DOCKETT  
MARY LOUISE HOAGLAND Date: 1/24/96  
TERRY GLANDER

**Safe Drinking Water Act (SDWA) Screening Checklist**

Does this facility have potable water?	Y (N)	If yes, conduct the following survey.
--	-------	---------------------------------------

SDWA Checklist

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

**TABLE C—Water Fountain Survey — N/A**

Building	Location	Model #	Comments / Date of Analysis for Lead
<del> </del>	<del> </del>	<del> </del>	<del> </del>
<del> </del>	<del> </del>	<del> </del>	<del> </del>
<del> </del>	<del> </del>	<del> </del>	<del> </del>
<del> </del>	<del> </del>	<del> </del>	<del> </del>

Source: \_\_\_\_\_

9.55-15

9.55-16

**Environmental Appraisal Checklist**

Building Name: **31-A**

Appraisers: **MARY SIZEHORE  
JOHN POCKET  
MARY LOUISE HOAGLAND  
TERRY GLANDER**

Date: **1/24/96**

**RCRA Screening Checklist**

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

**RCRA Checklist**

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

### Environmental Appraisal Checklist

Building Name: **31-A**

Appraisers: **MARY SIZEMORE**  
**JOHN PUCKETT**  
**MARY LOUISE HOAGLAND**  
**TERRY GLANDER**  
RCRA Checklist

Date: **1/24/96**

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

9.55-17

**Environmental Appraisal Checklist**

Building Name: **31-A**

Appraisers: **MARY SIZEMORE  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER  
RCRA Checklist - N/A**

Date: **1/24/96**

9.55-18

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

### Environmental Appraisal Checklist

Building Name: **31-A**

Appraisers: **MARY SIZEMORE**  
**JOHN PUCKETT**  
**MARY LOUISE HOAGLAND**  
**TERRY GLANDER**  
RCRA Checklist - N/A

Date: **1/24/96**

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

9.55-19

**Environmental Appraisal Checklist**

MARY Sizemore

JOHN PUCKETT

MARY LOUISE HOAGLAND

TERRY GLANDER

RCRA Checklist - N/A

Building Name: 31-A

Appraisers:

Date:

1/24/96

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

General Comments:



9.55-20

**Environmental Appraisal Checklist**

Building Name: **31-A**

Appraisers: **MARY SIZEMORE**  
**JOHN PUCKETT**  
**MARY LOUISE HOAGLAND**  
**TERRY GLANDER**

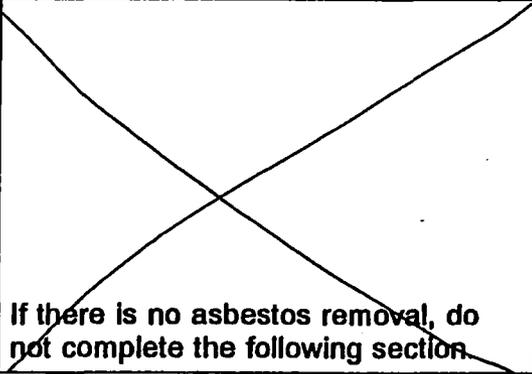
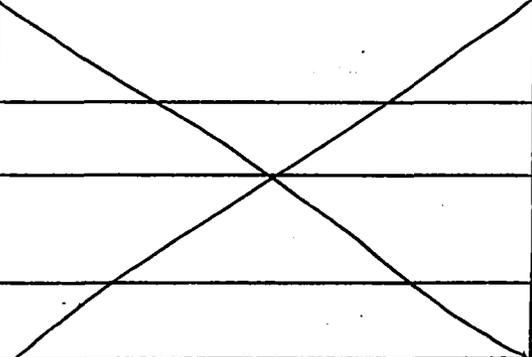
Date: **1/24/96**

**Asbestos Screening Checklist**

Does this facility contain ACBM?	Y (N)	If yes, conduct the following survey.
----------------------------------	-------	---------------------------------------

Asbestos Checklist - N/A

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

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

9.55-21

9.55-22

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY Sizemore  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER

Date: 1/24/96

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

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

TSCA Checklist - N/A

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?  If the answer is no, note .  If the answer is yes, proceed with next section.	Y / N	X
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated?  If no, note and stop here.  If yes, note the location of the management unit, and the method of management, and proceed.	Y / N	
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?  If yes, are auditable records maintained.	Y / N Y / N	
	40 CFR.30 (a) (1) (ix)	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?  Are they visually inspected quarterly? If yes, are auditable records maintained?	

**Environmental Appraisal Checklist**

Building Name: *31-A*

Appraisers: *MARY SIZEMORE*  
*JOHN PUCKETT*  
*MARY LOUISE HOAGLAND*  
*TERRY GLANDER*  
TSCA Checklist - N/A

Date: *1/24/96*

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

9.55-23

9.55-24

**Environmental Appraisal Checklist**

Building Name: *31-A*

Appraisers: *MARY SIZENORE*  
*JOHN PUCKETT*  
*MARY LOUISE HOAGLAND* Date: *1/24/96*  
*TERRY GLANDER*  
TSCA Checklist - N/A

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

**GENERAL COMMENTS:**



**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY Sizemore  
John Pockett  
MARY Louise Hoagland  
TERRY GLANDER

Date: 1/24/96

**Low-Level Waste and Transuranic Waste Screening Checklist**

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

**Low-Level Waste and Transuranic Waste Checklist**

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

9.55-25

**Environmental Appraisal Checklist**

MARY Sizemore

JOHN PUCKETT

Appraisers: MARY LOUISE HOAGLAND

TERRY GLANDER

Date: 1/24/96

Building Name: 31-A

Low-Level Waste and Transuranic Waste Checklist

9.55-26

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

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY Sizemore  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER

Date: 1/24/96

Low-Level Waste and Transuranic Waste Checklist

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

9.55-27

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY Sizemore  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER

Date: 1/24/96

Low-Level Waste and Transuranic Waste Checklist

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

9.55-28

**Environmental Appraisal Checklist**

Building Name: *31-A*

Appraisers: *MARY SIZEMORE  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER*

Date: *1/24/96*

Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

9.55-29

9.55-30

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY SIZEMORE  
JOHN POCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER

Date: 1/24/96

**Waste Minimization/Pollution Prevention Activities Screening Checklist**

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

**Waste Minimization/Pollution Prevention Activities Checklist**

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

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY Sizemore  
 JOHN PUCKETT  
 MARY LOUISE HOAGLAND  
 TERRY GLANDER

Date: 1/24/96

Waste Minimization/Pollution Prevention Activities Checklist

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

9.55-31

9.55-32

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY Sizemore  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER

Date: 1/24/96

Waste Minimization/Pollution Prevention Activities Checklist

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

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY SIZEMORE  
JOHN POCKETT  
MARY LOUISE HOAGLAND Date: 1/24/96  
TERRY GLANDER

Waste Minimization/Pollution Prevention Activities Checklist

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

9.55-33

9.55-34

**Environmental Appraisal Checklist**

Building Name: 31-A

Appraisers: MARY Sizemore  
JOHN PUCKETT  
MARY LOUISE HOAGLAND  
TERRY GLANDER

Date: 1/24/96

Waste Minimization/Pollution Prevention Activities Checklist

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

**Environmental Appraisal Checklist**

Building Name: 31-A

*MARY SIZE MORE*  
 Appraisers: JOHN PUCKETT Date: 1/24/96  
                   MARY LOUISE HOAGLAND  
                   TERRY GLANDER

Waste Minimization/Pollution Prevention Activities Checklist

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

9.55-35

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.55.6.2 Building Manager's Questionnaire**

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: 4182 Date: 12-07-95  
Alternate: Doug Phone: -524  
MANAGAN

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

SAD WORKER II RAMPS

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

SAFETY GLASSES

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

THE BUILDING ITSELF.

4. Provide a physical description of the building.

Building 31-A is an approximately 2,650-ft<sup>2</sup>, prefabricated metal building with a metal roof. Building is 9 years old. Building itself is not contaminated with radioactive or energetic materials.

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

5. Provide a drawing of the building.

Attached.

6. What is the current building use?

Building supports Decontamination and Decommissioning (D & D) and waste management operations. Building is used to store ~~empty~~ waste packages.

TRU & LLW

Source: Mound Building, 5-9-95

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

Source: Mound Buildings, 5-9-95

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: Storage and staging of LSA and TRU wastes

How Wastes Are Generated:

No wastes generated.

Contact:

Phone#:

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

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

10. Does the building have air emission sources? No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

13. Does the building have potable water? Yes  No

14. Does the building discharge to the storm sewer? Yes  No

15. Does the building discharge to the sanitary sewer? Yes  No

16. Has an asbestos survey been conducted? Yes

What are the results? SUSPECTED

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

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? NO

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures

Source: LARRY LAMSA

21. Where do waste chemicals go?

WASTE MANAGEMENT'S HAZ WASTE  
PICK UP, IF APPLICABLE.

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

NONE

23. Where do excess janitorial supplies go?

NO APPLICABLE

Source: LARRY LAMSA

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

Chemical	Amount	Chemical	Amount

Source: LARRY LAMSA

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

NONE

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / N			Y / N	Y / N

Source: LARS LARSA

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

Materials	Amount
Aerosol Cans	125.0
Aerosol Cans	111.8
Aerosol Cans	47.2

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

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.? Yes  No
29. Is waste material stored in or around the building for more than 90 days? Yes  No  ASSUMPTION: LOW-LEVEL RAO AND TRU WASTE ≠ WASTE MATERIAL
30. Has the building been identified as a 90 day waste accumulation area? Yes  No
31. Has any area in the building been identified as a satellite accumulation area? Yes  No
32. Is mixed waste generated, stored, or disposed of from the building? Yes  No   
 Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes                      No

Where are logs found?

JOHN LYONS

Process	Waste	Stored	Disposed	Logs
<u>NONE</u>	<u>TRU</u>	<u>Y/N</u>	<u>Y/N</u>	<u>Y/N</u>
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

Source: LARRY LAMSA

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

*RAD WASTE MANAGEMENT*

Process	Waste	Stored	Disposed	Logs
<i>NONE</i>	<i>LLW</i>	<i>Y/N</i>	<i>Y/N</i>	<i>Y/N</i>
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

Source: *LARE: LAMSA*

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

*NONE*

## Building Manager's Questionnaire

Building Name: 31-A Building Manager: L.T. Lamsa Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

36. Is there a waste minimization program in the building? Yes  No   
Discuss your ideas about how to minimize waste.

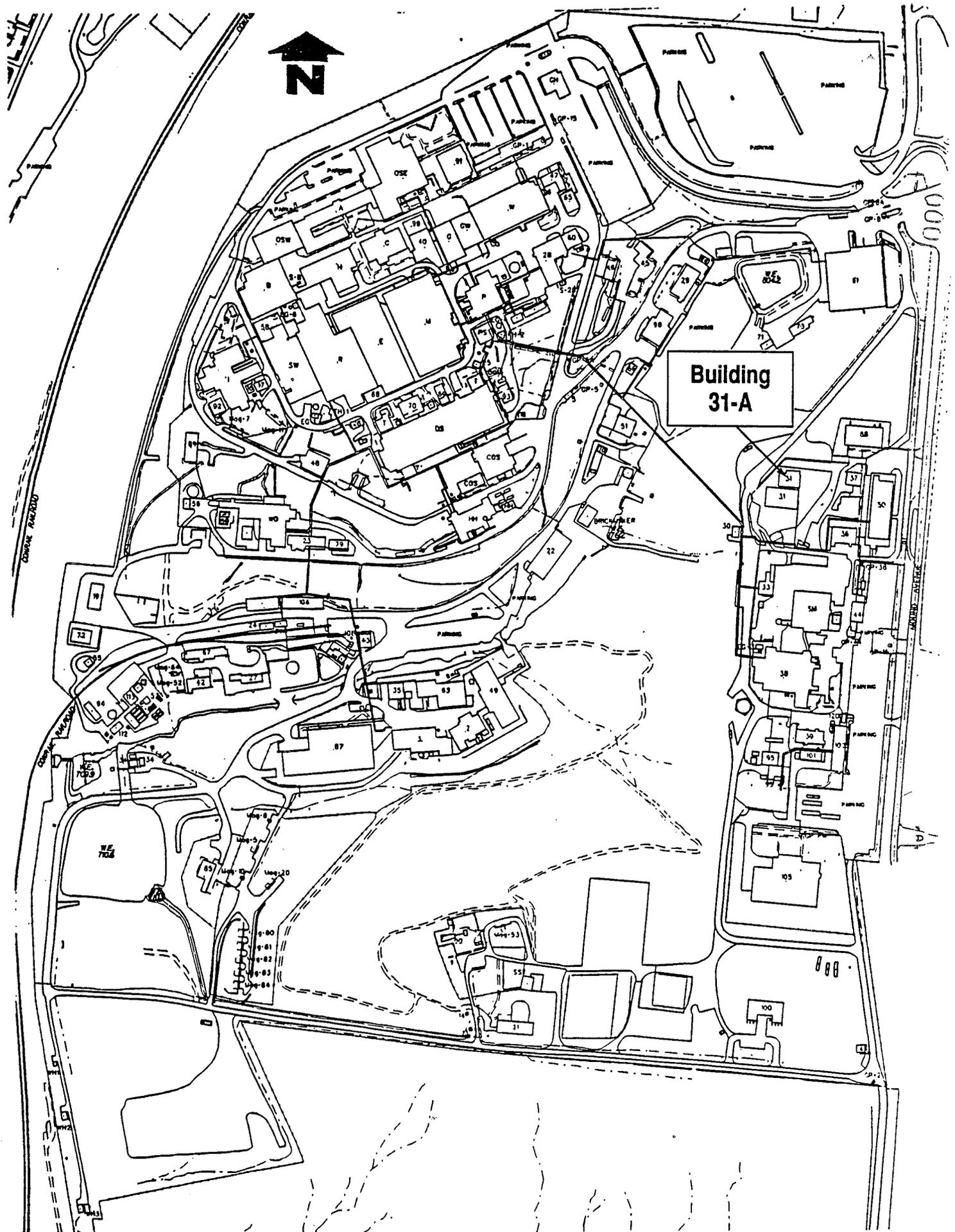
NOT MUCH WASTE IS GENERATED

37. Has a pollution prevention program been developed for the building? Yes  No

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.55.6.3 Location of Building 31-A**



SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

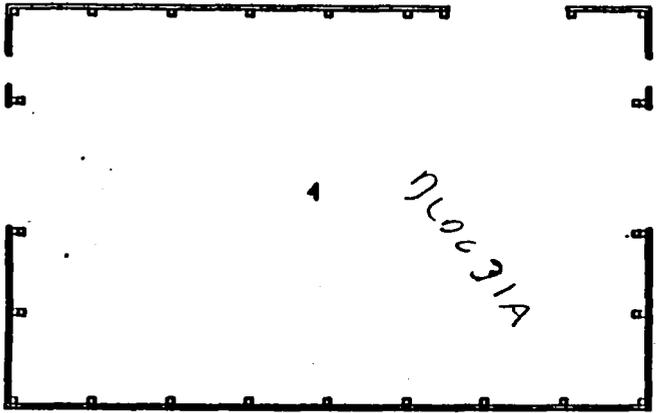
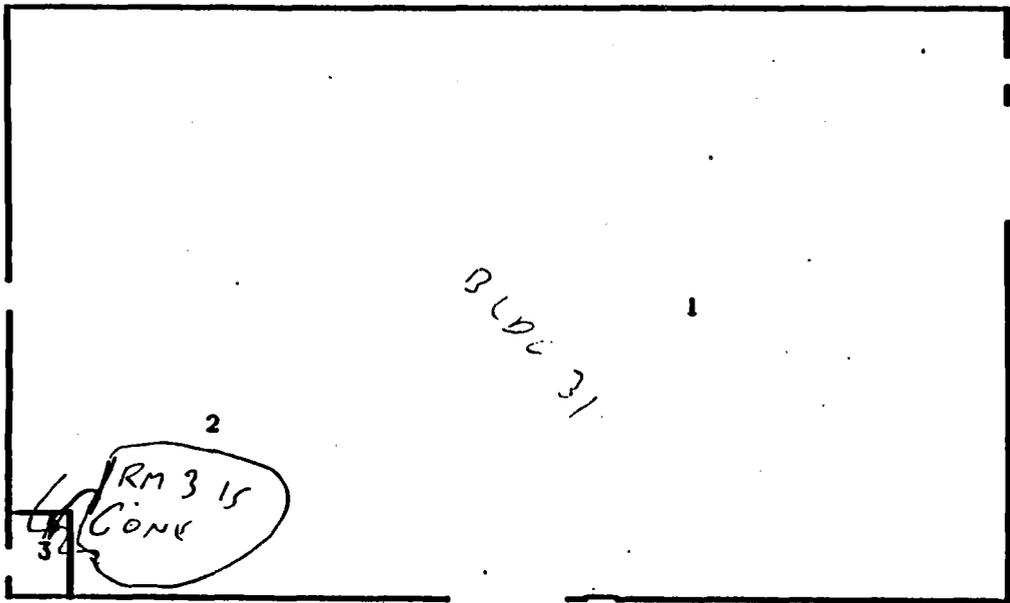
**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.55.6.4 Floor Plans for Building 31-A**

NO	DATE	REVISION	BY	CHKD	APPD	BY
0	12/12/91	ASBUILT ISSUE				

BLDG. 31-31A  
OFFICE MODULE



**BLDG #31**  
**FIRST FLOOR**  
**BLDG CODE:3031**

9.55-57

APPROVALS:

SAFETY CHECKING REQUIRED:

NAME \_\_\_\_\_ DATE \_\_\_\_\_

TECH. REP. \_\_\_\_\_

DR. REP. \_\_\_\_\_

PLUMBING \_\_\_\_\_

ELECT. \_\_\_\_\_

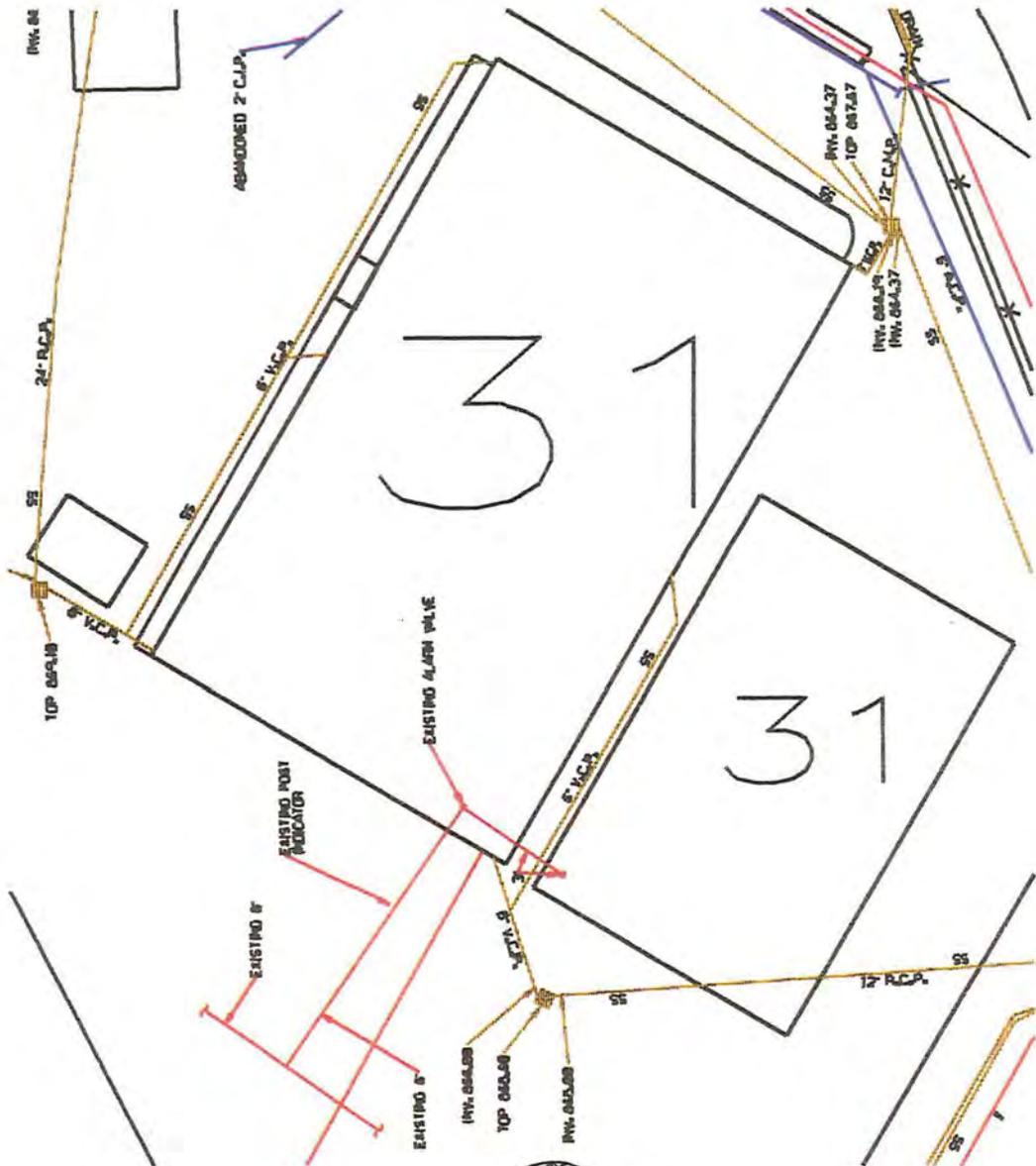
MECH. \_\_\_\_\_

DESIGN NO.	PART NO.	DATE	REV	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION
										BLDG #31 FLOOR PLANS	
CLASSIFICATION	FROM BLDG	DATE	SCALE	SHEET NO		SHEET		OF			
UNCLASSIFIED	#31	12/12/91	1/8" = 1'-0"	4845		12335		1 OF 1			
STATUS	MD-REL-12/12/91	ORIGIN	MD-BR3-V3.2								

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.55.6.5 Underground Utility Lines**



**UNCLASSIFIED**

**E.G. & G. - MOUND**  
 UNDERGROUND WATER & WASTE LINES  
 BLDG. 31A  
 DATE: 3-14-96

# **Environmental Appraisal of the Mound Plant**

## **9.55.6.6 Photographs**



Mound Plant Building 31-A

9.55-65



## Environmental Appraisal of the Mound Plant

### 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.

# Environmental Appraisal of the Mound Plant

## 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

## **Environmental Appraisal of the Mound Plant**

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.

## Environmental Appraisal of the Mound Plant

### 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.

## **Environmental Appraisal of the Mound Plant**

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.

## **Environmental Appraisal of the Mound Plant**

- 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.

# **Environmental Appraisal of the Mound Plant**

## **9.56.6.1 Environmental Appraisal Checklist**



**ENVIRONMENTAL APPRAISAL  
CHECKLIST**

**Table of Contents**

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

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	(Y) / N Y / (N) *	OUT OF DATE. NO. OF CHEMICALS ARE LESS. BUT OTHERS PRESENT
	Is the building in operation? What are the processes and where do they discharge to?	(Y) N _____ _____	SANITARY
	Do the floor drains, sinks & toilets appear to be draining properly?	(Y) / N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	(Sanitary) Storm	
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	Y / (N) _____ _____ Y / N Y / N	
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	(Y) / N  (Y) / N ** (Y) / N	AROUND BUILDING STORM WATER GRATE. DRAIN IN ROOMS 1 & 3

\*\* STAINS ON FLOOR, ROOM 1 LEADING TO FLOOR DRAIN. Page 1 of 27

\* POTENTIAL HYDROCARBON PRODUCTS & CHEMICALS SUCH AS HERBICIDES FROM EQUIPMENT UNDER REPAIR THRU

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: Team # 4

Date: 2-26-96

### Clean Air Act (CAA) Screening Checklist

Regulatory Guideline	Question	Response	Comments
	Are there any rooms that have air emissions sources that vent to the outside of the building, e.g., fumehoods, equipment? If so, note the rooms.	Y/N	
OAC 3745-35	Using the air emissions inventory reference for this building, are there any sources in the building that are not documented?	Y/N	EVIDENCE OF SPRAY PAINTING IN ROOM #1 Black paint on the floor EQUIPMENT PERMIT RECENTLY PAINTED
	Is there evidence of fugitive dust emissions inside or outside of the building?	Y/N	

### CAA Checklist

Regulatory Guideline	Question	Response	Comments
	Are there existing air permits or applications applicable to the building?	Y/N	
OAC 3745-31,35	If yes, are the terms and conditions of the permit or the information included on the application (see air emissions database) being followed? Note any differences and update the air emissions database.	<del>Y/N</del> *	SPRAY PAINTING OF HEAVY EQUIPMENT - BECAUSE OF COLD WEATHER ASSUME ACCESS EQUIPMENT DOOR TO ROOM #1 NOT OPENED
OAC 3745-31	Are there any sources that are not included in the air emissions database? If so, note the room, hood number, active or not, POC, and applicable air emission database information on Table B.	Y/N*	↓
OAC 3745-31-03	Are there sources which are lab equipment of lab fumeheads used exclusively for chemical or physical analyses and bench scale lab equipment? These sources do not require a permit. However, the air emissions database should be updated.	Y/N	
	Has there been any release of air contaminants from this building?	Y/N	

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### CAA Checklist

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

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
SPRAY PAINTING	L	N/A	Y/ <del>N</del>	<del>Y</del> /N	PAINT	UNKNOWN	NONE	INTERMITTENT	UNKNOWN
			Y/N	Y/N					
			Y/N	Y/N		<i>Blank</i>			
			Y/N	Y/N					
			Y/N	Y/N					

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: Team #4

Date: 2-26-96

### Hazardous Materials (HM) Screening Checklist

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

### HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.1200(b,f)	All containers of hazardous chemicals shall be labeled as to the identity of the chemical and the appropriate hazard warnings.	(Y) / N	
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	Y / (N)	
29 CFR 1910.22, 1910.106, 1910.176	All places of employment, passageways, storerooms and service areas shall be kept clean and orderly and in a sanitary manner. Aisles shall be unobstructed. Drums and containers are not leaking and are tightly sealed.	Y / (N)	DRUMS OF LUBRICANT, OIL, PRESTON WASTEWATER W/ PRESTON OUTSIDE - NOT LEAKING BUT SPILLED DURING TRANSFER OF S.
29 CFR 1910.106	Storage cabinets for flammable materials are constantly kept closed, are fire resistant and are labeled "FLAMMABLE - Keep Fire Away". Containers inside should be labeled and closed. No spills inside cabinet.	Y / (N)	NO FLAMMABLE STORAGE CABINET IN BLDG INCLUDING STORAGE ROOM SAND SPRAY CANS OF HANDI FOAM <span style="float: right;">Flammable</span>
29 CFR 1910.106(d)(7)	Incompatible chemicals are not stored together.	(Y) / N	2-1 GAL PAINT
29 CFR 1910.106(d)(4)	Inside Flammable/combustible storage rooms must meet the following: 4 in. raised sill or trench that drains to a safe area, liquid tight wall/floor joints, self-closing doors, gravity or mechanical exhaust providing 6 room changes/hr., exhaust switch located outside room, at least one 3 ft. aisle; no cracks in secondary containment.	Y / (N)	

9.56-14

## Environmental Appraisal Checklist

Building Name:

33

Appraisers:

TEAM # 4

Date:

2-26-96

### HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	(Y) / N	
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	(Y) / N	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	(Y) / N	
CGA P-1 3.5.3	Full and empty containers should be stored separately with the storage layout planned so that containers comprising of old stock can be removed first with a minimum handling of other containers.	(Y) / N	
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	(Y) / N	
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y / N	NONE
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y / N	N/A
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y / N	N/A
	Is there a sign posted in each work area regarding emergency egress and emergency response action?	(Y) / N	
	Is there an emergency response plan available?	(Y) / N	

9.56-15

9.56-16

### Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

#### HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	(Y) N	EQUIPMENT MAINTENANCE/REPAIR CONSIDERED PROCESS
	Does it have proper containment?	Y/(N)	
	Is there a liquid bulk transfer area?	(Y) N	5-55 GAL DRUMS CONSIDERED BULK TRANSFER
	Is there proper containment?	Y/(N)	
	Is there an above ground storage tank? If so, complete Table B.	Y/(N)	

#### Above Ground Storage Tanks Inventory

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/Contamination	If Empty, Flushed
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
		<i>Blank</i>		Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM # 4

Date: 2-26-96

### Safe Drinking Water Act (SDWA) Screening Checklist

Does this facility have potable water?	(Y) / N	If yes, conduct the following survey.
--	---------	---------------------------------------

### SDWA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 95-02 (A)	Do actual or potential cross-connections exist between potable (light green) and service water (dark green)?	(Y) / N	
OAC 3745 95-04 (B)(C)	Are backflow prevention devices installed where cross connections (hoses connected to faucets, hot water tank vented directly to a drain) exist?	Y / (N)	DEEP SINK IN ROOM 3 DOES WATER FAUCET WITH NOSE IN ROOM #1 DOES NOT
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	Y / (N)	
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	Y / (N)	BOTTLED WATER

**TABLE C—Water Fountain Survey**

Building	Location	Model #	Comments / Date of Analysis for Lead

Source: \_\_\_\_\_

9.56-17

9.56-18

### Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM # 4

Date: 2-26-96

#### RCRA Screening Checklist

Does this facility generate waste or use chemicals?	<input checked="" type="radio"/> Y <input type="radio"/> N	If yes, conduct the following survey.
---	--	---------------------------------------

#### RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	<p>Has any material generated been characterized RCRA hazardous?                      Was characterization by analysis or by process knowledge?                      Are lab results or documentation of process knowledge readily available?                      Note any uncharacterized material in comment section.                      Is it waste?</p> <p>If yes, proceed with next section.</p>	<p><input checked="" type="radio"/> Y <input type="radio"/> N</p> <p>analysis /  <input checked="" type="radio"/> process</p> <p>Y <input checked="" type="radio"/> N</p> <p>Y / N</p>	<p>USED OIL                      WATER FROM EQUIPMENT                      CONTAINING PRESTONE                      (OR EQUIVALENT) IN                      55 GAL DRUMS</p>
OAC 3745 52-11	<p>Are any of the materials noted RCRA hazardous waste?</p> <p>If no, note and stop here.</p> <p>If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.</p>	<p>Y / <input checked="" type="radio"/> N</p>	

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: Team #4

Date: 2-26-96

### RCRA Checklist

Regulatory Guideline	Question	Response	Comments
<b><u>I. HAZARDOUS WASTE STORED IN CONTAINERS</u></b>			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	Y/(N) Y/N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas?  If no, proceed to the next section.  If yes, answer the following.	Y/(N)	OIL MAY CONTAIN GASOLINE. NOT CHARACTERIZED.
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y/(N)	
	Are the containers in good condition?	(Y)/N	
	Are the waste compatible with the containers?	(Y)/N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the plant site boundary?	Y/(N)	
	Are containers kept closed and locked except during filling?	(Y)/N	
	Are containers moved within 3 days of being filled?	Y/N	UNKNOWN NOT FULL

9.56-20

### Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM # 4

Date: 2-26-96

#### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### RCRA Checklist

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

9.56-21

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### RCRA Checklist

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

General Comments:

9.56-22

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM # 4

Date: 2-24-96

### Asbestos Screening Checklist

Does this facility contain ACBM?	(Y) N	If yes, conduct the following survey.
----------------------------------	-------	---------------------------------------

### Asbestos Checklist

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

Regulatory Guideline	Question	Response	Comments
<b>ADAPTED FROM TSCA ACBM IN SCHOOLS:</b>			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?  If no for this building or area note this conclusion in the comment section.	(Y) N	
	Is there any evidence of friable asbestos?	Y (N)	
	Is the asbestos removal properly managed? (See questions listed below)	Y / N	If there is no asbestos removal, do not complete the following section.
<b>NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:</b>			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACBM during the removal.	Y / N	<i>Blank</i>
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	Y / N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y / N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y / N	

9.56-23

### Environmental Appraisal Checklist

Building Name: .33

Appraisers: TEAM # 4

Date: 2-26-96

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

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

#### TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?  If the answer is no, note .  If the answer is yes, proceed with next section.	Y / N	<i>Blank</i>
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated?  If no, note and stop here.  If yes, note the location of the management unit, and the method of management, and proceed.	Y / N	
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?	Y / N	
	If yes, are auditable records maintained.	Y / N	
40 CFR.30 (a) (1) (ix)	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?	Y / N	
	Are they visually inspected quarterly? If yes, are auditable records maintained?	Y / N	

9.56-24

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### TSCA Checklist

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

### Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

#### TSCA Checklist

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

**GENERAL COMMENTS:**

9.56-26



# Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

## Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	Y/N	If yes, conduct the following survey.
---	-----	---------------------------------------

### Low-Level Waste and Transuranic Waste Checklist

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

9.56-27

### Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM # 4

Date: 2-26-96

#### Low-Level Waste and Transuranic Waste Checklist

9.56-28

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

# Environment Appraisal Checklist

Building Name: 33

Appraisers: Team #4

Date: 2-26-96

## Low-Level Waste and Transuranic Waste Checklist

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

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### Low-Level Waste and Transuranic Waste Checklist

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

9.56-30

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: Team #4

Date: 2-26-96

### Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

### Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

#### Waste Minimization/Pollution Prevention Activities Screening Checklist

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

#### Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.).  If yes, list candidate areas in the comment section.	Y (N)	
	Are there solvent wastes?	Y/N	SXL-48 PARTS CLEANER SELF CONTAIN
	Is vehicle maintenance performed?	Y/N	
	Are oils used ?	Y/N	
	Are these corrosive wastes?	Y/N	
	Are there sludges?	Y/N	IN SXL-48 PERIODICALLY PETROLIUM WASTE
	Are there halogenated organic (nonsolvent) wastes?	Y/N	
	Are metals recovered from wastewater?	Y/N	
	Is waste sludge generated?	Y/N	
	Are any waste minimization practices used that reduce the generation of sludge?	Y/N	
	Ion exchange process?	Y/N	<del>Blank</del>
	Lead in gasoline lowered to reduce tank sludge toxicity?	Y/N	
	Storage tank agitators installed?	Y/N	
	Corrosive resistant materials used?	Y/N	
	Prevention of crude oil oxidation ?	Y/N	
	Drying?	Y/N	

9.56-32

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.56-33

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are ion exchange resins used to remove heavy metals and cyanides from acid and base solutions?	Y / N	<i>Blank</i>
	Is crystallization used to remove corrosives from solution by cooling?	Y / N	
	Is the process of evaporation of liquid wastes by heating used to leave behind a more concentrated solution?	Y / N	
<b><u>CYANIDE AND REACTIVE WASTES</u></b>			
	Has non-cyanide or low concentration of cyanide process replaced zinc cyanide bath ?	Y / N	<i>Blank</i>
	Are any of these processes used to recycle cyanide wastes?	Y / N	<i>Blank</i>
	Refrigeration/crystallization?	Y / N	
	Evaporation?	Y / N	
	Ion exchange?	Y / N	
	Membrane separation which includes reverse osmosis or electrodialysis?	Y / N	
<b><u>VEHICLE MAINTENANCE</u></b>			
	How are auto parts cleaned?	(Y) / N	
	Solvent sink?	(Y) / N	
	Solvent dunk bucket?	Y / (N)	
	Solvent dip tank?	Y / (N)	
	Are parts cleaning solvents used for anything else besides cleaning parts?	Y / (N)	
	Are spills reduced by locating sinks or dunk buckets near auto service bays?	Y / N	NO SERVICE BAY

9.56-34

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

### Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are cleaned parts drained on the sink to minimize solvent spills?	(Y) N	
	Are drip tanks used to capture losses?	(Y) N	
	Is a solvent sink used for mineral solvents rather than a dunk bucket or dip tank?	(Y) N	
	Does a waste hauler collect solvent waste for recycling or treatment?	(Y) N	
<u>OILS</u>			
	What kind of oils are used?		
	Hydraulic oil?	(Y) N	
	Transformer oil?	Y / (N)	
	Metal working fluids?	Y / (N)	
	Spent lubricating oils?	(Y) N	
	Can the process be modified or changed to use water-based fluids?	Y / (N)	
	Are these good housekeeping and operation practices used to minimize oil waste production?		
	Use oils not contaminated with other liquids?	Y / N	MAY BE CONTAMINATED WITH GASOLINE
	Oil spills prevented?	Y / (N)	PROCESSED AS SUCH, STAINS ON FLOOR & OUTSIDE APPEAR
	Drip pans installed?	Y / (N)	TO THE CONTRARY
	Oil soaked rags laundered?	Y / N *	NONE DIRECTLY TURNED OVER TO
	Rags and absorbants used to their limit?	Y / N	EQUIPMENT MAINTENANCE BLDG 6 YES ACCORDING TO FOREMAN

\* OIL SOAKED RAGS WERE PLACED IN A PLASTIC BAG - ON THE GROUND NEXT TO PAINT & PAINT THINNER. RECOMMEND APPROPRIATE CONTAINER ETC.

9.56-36

### Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM #4

Date: 2-26-96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

## Environmental Appraisal Checklist

Building Name: 33

Appraisers: TEAM # 4

Date: 2-26-96

### Waste Minimization/Pollution Prevention Activities Checklist

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

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.56.6.2 Building Manager's Questionnaire**

BOB WARD  
X3821

## Building Manager's Questionnaire

Building Name: 33 Building Manager: R.A. Ward Phone: 3821 Date: 12-07-95  
Alternate: K. KOEHLER Phone: 4886

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

NONE

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

SAFETY GLASSES

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

4. Provide a physical description of the building.

This one-story building was built in 1965 and has 1,344 ft<sup>2</sup> of space. The structure is concrete block with a BUM roof (asphalt). The building contains thermal system insulation containing asbestos. Grounds around the building are radiologically contaminated.

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

5. Provide a drawing of the building.

Attached

6. What is the current building use?

Building is used by Decommissioning and Decontaminating (D & D) operations as a storage facility. The building is scheduled for D & D.

<sup>A</sup>  
PLUS MAINTENANCE/REPAIR OF EQUIPMENT

QUESTION SCHEDULED FOR D&D. CONTRACTOR REPLACING FIRE DEBUGE AND SANITARY SEWER LATERALS TO BLDG PLUS ELECTRICAL SERVICE DROP.

Source: Mound Buildings, 5-9-95

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

ORIGINALLY A MAINTENANCE SHOP. ALSO USED AS A BUFFER AREA TO THE CONTAMINATION AREAS OF THE SM D&D PROJECT.

Source: Mound Buildings, 5-9-95

## Building Manager's Questionnaire

Building Name: 33 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: ~~Now empty~~ - formerly SM Area Maintenance Shop

How Wastes Are Generated:

*NOT EMPTY ON 2/26/96 - FULLY OPERATIONAL*

No wastes generated.

*WASTES include USED OIL (MAY include gasoline)  
AND Vehicle coolant WATER CONTAINING PRESTONE  
(OR EQUIVALENT).*

Contact:

Phone#:

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

## Building Manager's Questionnaire

Building Name: 33 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

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

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

\* SPRAY PAINTING (HAND HELED CANS) HAD OCCURRED WITHIN PAST 24 HOURS (PARTS STILL LOCATED WHERE PAINTED ON FLOOR ROOM 1.)

## Building Manager's Questionnaire

Building Name: 33 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

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

14. Does the building discharge to the storm sewer? Yes   No  
 Where? !

15. Does the building discharge to the sanitary sewer?  Yes  No  
 Where? NORTH END OF BLDG.

16. Has an asbestos survey been conducted? Yes  
 What are the results? Yes

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

# Building Manager's Questionnaire

Building Name: 33 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? NO

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		
INERT GAS IN STORAGE ROOM	CYLINDER	ONE

Source: Chemical Inventory 1994

# Building Manager's Questionnaire

Building Name: 33    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures

Source: \_\_\_\_\_

21. Where do waste chemicals go?

*NONE*

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

*PLASTIC BAGS, PAPER TOWELS, WINDOW CLEANER, TOILET PAPER, COMQUEST DETERGENT, IRON STONE ACRYLIC SEAL, SCOURING POWDER.*

23. Where do excess janitorial supplies go?

*VARIOUS JANITORIAL STORAGE AREAS AS DIRECTED BY CUSTODIAL SERVICES.*

Source: PHIL CREECH, BLDG. OCCUPANT

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

Chemical	Amount	Chemical	Amount

Source: VISUAL SHOWED TO THE COURSEY

## Building Manager's Questionnaire

Building Name: 33 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

NONE

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflows
Y / N			Y / N	Y / N

Source: \_\_\_\_\_

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

Materials	Amount
Aerosol Cans	240.0
Antifreeze Waste	305.4
Antifreeze Waste	394.0
Antifreeze Waste	511.0
Antifreeze Waste	400.0
Antifreeze Waste	131.7
Driveway Filler And Sealer	45.0
Driveway Filler And Sealer	45.0
Driveway Filler And Sealer	45.0
Hydrochloric Acid	0.3
Hydrochloric Acid	0.3
Nox Rust - Unopened	539.2
Oil Waste	410.2
Oil Waste	330.0
Oil Waste, Gas	218.7
Oil Waste, Hydraulic Oil	238.2
Oil, Gas Waste	431.2
Oil, Gas Waste	380.2

OUT OF  
DATE

## Building Manager's Questionnaire

Building Name: 33    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

Materials	Amount
Oil, Gas Waste	440.4
Petroleum Naphtha Waste	185.8
Petroleum Naphtha Waste	358.6
Petroleum Naphtha, Unit 341-06499	75.0
Resinex Waste	513.0
Resinex Waste	505.7
Resinex Waste	400.1
Stokes V-Lube	38.2
Thoro Patch	45.0
Turco Coating	538.9
Turco Coating	366.2
Turco Coating	535.1
Turco Coating	229.2

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

## Building Manager's Questionnaire

Building Name: 33 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

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

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

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

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

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 33    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes

No

Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 33    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

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

Source: \_\_\_\_\_

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

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Building Manager's Questionnaire

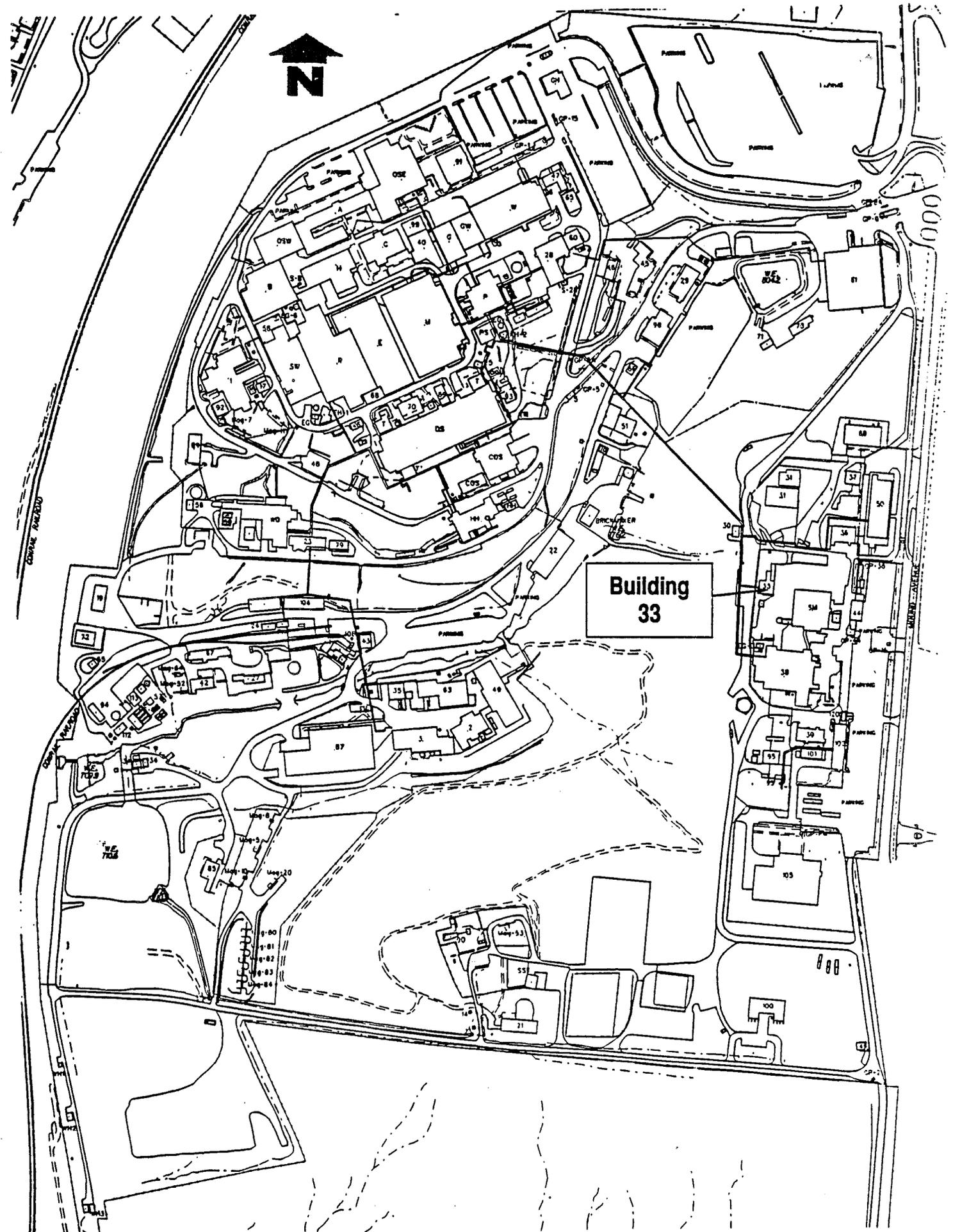
Building Name: 33    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

36. Is there a waste minimization program in the building?    Yes     No  
Discuss your ideas about how to minimize waste.

37. Has a pollution prevention program been developed for the building?    Yes     No

# **Environmental Appraisal of the Mound Plant**

## **9.56.6.3 Location of Building 33**



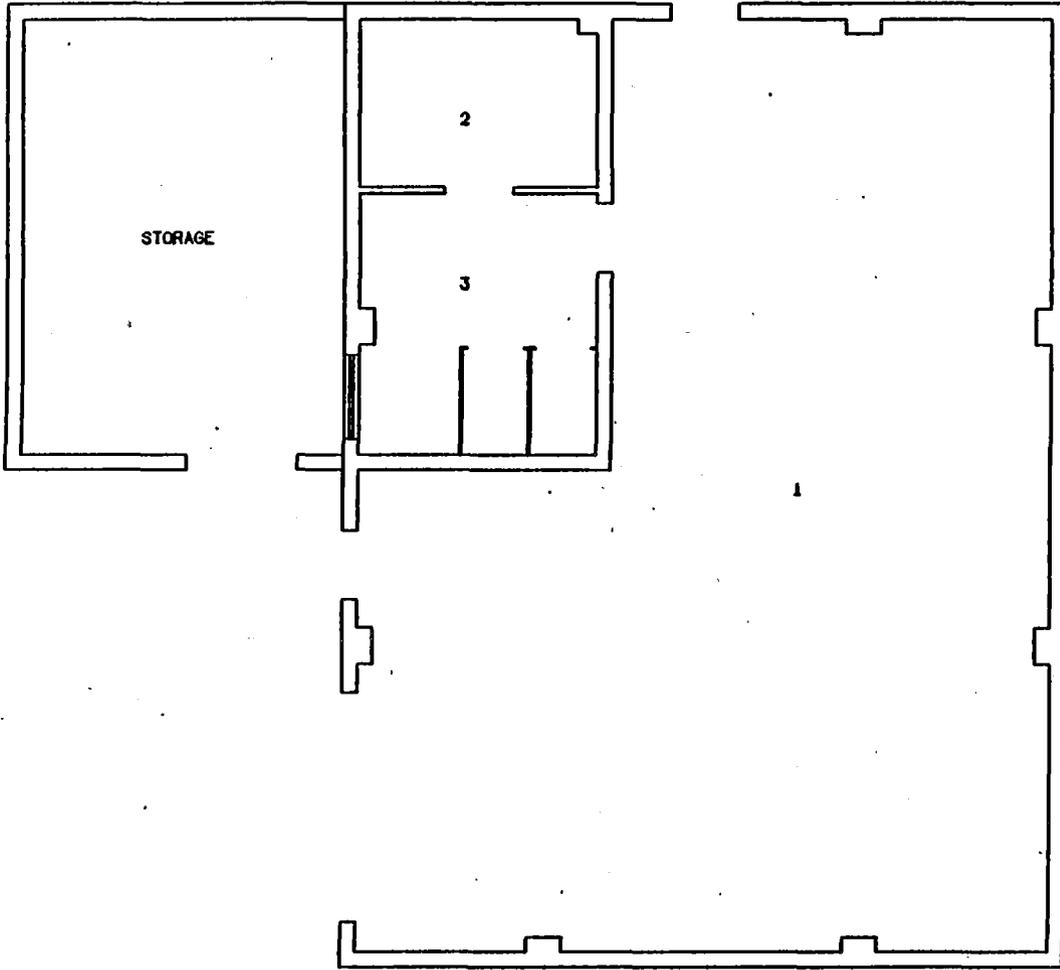
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.56.6.4 Floor Plans for Building 33**

ISS	DATE	REVISION	BY	CHKD	ENR	LP/REV	APPRO	#
8	12/12/91	ASBUILT ISSUE					DCW	



**BLDG #33**  
**FIRST FLOOR**  
**BLDG CODE:3033**

9.56-59

APPROVALS:	DATE:
SAFETY COMMITTEE REVIEWED:	
____ NONE ____ TRACOC ____ TEACOC ____ DWOC	
TECH. REV.:	
DR. MR.:	
TRACOC	
TEACOC	
DWOC	

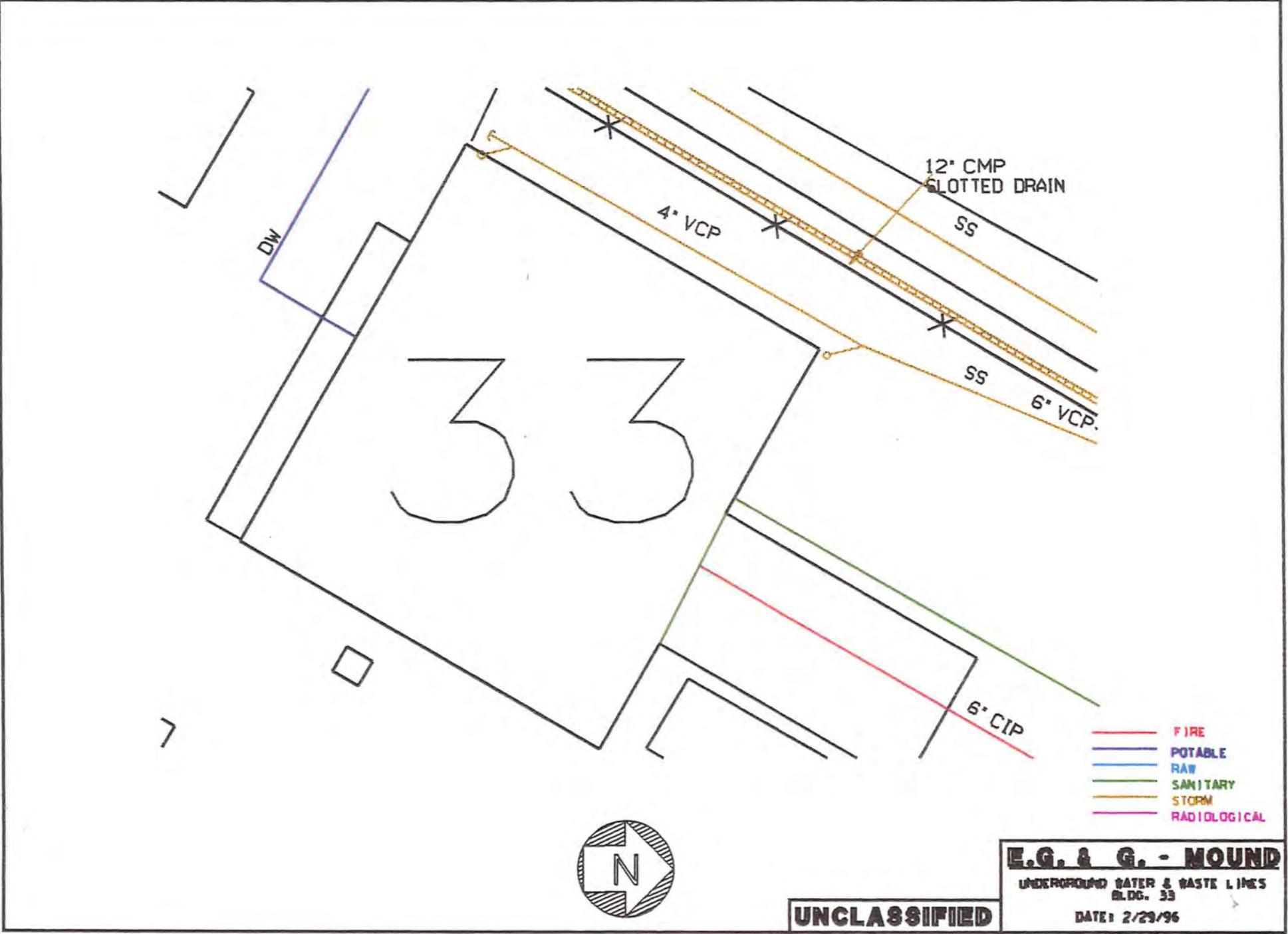
DESIGN OR	PROJ. NO.	SHEET	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION	
ISSUE	DATE	8							BLDG #33		
DATE	DATE	PART CLASSIFICATION							FLOOR PLANS		
UP & EC	PERM REV	DRAWING CLASSIFICATION							ITEM DRAWING NUMBER	JOB NUMBER	
DATE	DATE	<b>UNCLASSIFIED</b>							<b>C</b>	<b>FSC911244</b>	<b>123335</b>
APPRO	DATE	DRAWING TYPE							SCALE AS NOTED	SHEET 1 OF 1	
		SFP							FROM BLDG #33	CHG 14865	
		STATUS							MD-REL-12/12/91	ORIGIN	
									MD-BR3-V3.8		

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.56.6.5 Underground Utility Lines**

9.56-63



7

DW

33

4" VCP

12" CMP  
SLOTTED DRAIN

SS

SS

6" VCP

6" CIP

- FIRE
- POTABLE
- RAW
- SANITARY
- STORM
- RADIOLOGICAL



**UNCLASSIFIED**

**E.G. & G. - MOUND**

UNDERGROUND WATER & WASTE LINES

BLDG. 33

DATE: 2/29/96

# **Environmental Appraisal of the Mound Plant**

## **9.56.6.6 Photographs**

Mound Plant Building 33



9.56-67



Oil, Lubricants, and antifreeze are stored exposed to weather with no secondary containment.



Decontamination and decommissioning (D&D) equipment and parts are received without a record of decontamination. Drains and grates connect to the storm drainage system.



## **Environmental Appraisal of the Mound Plant**

### **9.57 BUILDING 34**

#### **9.57.1 Scope of Building 34 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 34 on the morning of February 6, 1996. The Environmental Appraisal Checklist (EAC) (Attachment 1—Section 9.57.6.1) was used to record findings. The appraisers were accompanied by the process manager. He has been process manager and a Mound firefighter for many years and has extensive historical knowledge about activities and the building. The building manager was not present. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.57.6.2).

#### **9..2 Description of Building**

Building 34 is the old "burn building," an area formerly used for training of Mound firefighters. It is located close to the sewage treatment plant, separated from the plant by a drainage ditch. A burn pit and burn areas are at the south side of the building. A rectangular in-ground chamber is located on the north side. It is a drop impact tester used to test nuclear materials shipping containers for integrity. Two fuel tanks, one aboveground and one below ground, were removed several years ago. A bioremediation activity located to the east of the building treats soil contamination which resulted from those tanks, as well as from soils contaminated with oil from around the site. Location is shown in Attachment 3 (Section 9.57.6.3).

The building is a 1,110-square-foot concrete block and metal structure with a concrete and metal roof. It was constructed in 1966. There is electrical service of 240V. The building is supplied with service water only; the potable water has been disconnected. Room 1 is a block concrete facility formerly used for live fire training; it is contaminated by depleted uranium and is now roped off and the floor is painted with yellow lines. The uranium tailings were carried to the building from other areas at Mound and burned during fire training exercises many years ago. Room 2 is used as office space, and Room 4 is used for storage. Neither room 2 nor Room 4 are known to be contaminated by radioactive materials. A floor plan is presented as Attachment 4 (Section 9.57.6.4). Note that the area designated as Room 3 on the floor plan is actually an open corridor that runs between sections of the building.

Building 34 was historically used as a firefighter training facility. Various fuels and flammable materials were burned to simulate potential emergency situations at Mound. This practice was discontinued several years ago, when depleted uranium contamination was discovered.

## **Environmental Appraisal of the Mound Plant**

According to the process manager, the building has been scheduled for decontamination and decommissioning (D&D) since 1993. Due to funding limitations, D&D has not begun. At the time of the walk-through, Room 2 was not in use. In the recent past it was used by environmental restoration program contractors as a sample processing and staging area. On the day of the walk-through the ambient temperature was 15°F. The building was heated but not in use.

### **9.57.3 Summary of findings**

There were several findings of environmental concern identified during the walk-through and subsequent review of reference materials. Of most concern were issues related to handling of low level waste (LLW). Problems identified at Building 34 are not specific to this building only.

### **9.57.4 Observations**

#### **9.57.4.1 Air Emissions**

Since the firefighters' practice area is no longer in use, there are no processes or fuel burning activities in the building. Heat is provided by electric resistance units. There are no sources of emissions, and the building is not included in the Mound Air Emissions Database (11-30-95). There is no fugitive dust. No air permits have been submitted for activities in this building.

#### **9.57.4.2 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.

##### **9.57.4.2.1 Sanitary Wastewater**

According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.57.6.5), the building is not serviced by a sanitary wastewater collection line. There is no restroom, but there are drains in the building. It appears that wastewater from the building sink may drain to the spillway behind the building.

## **Environmental Appraisal of the Mound Plant**

### **9.57.4.2.2 Storm Wastewater**

The building is not serviced by storm drains according to drawings presented in Attachment 5 (Section 9.57.6.5). There is a floor drain in Room 2. It appears that the floor drain is tied to a line which drains into the spillway behind the building. It was outside the scope of this appraisal to perform tests to confirm drainage patterns.

Roof drains discharge onto the ground, and the water drains into the spillway or is absorbed into the soil. No exterior grates and drains were observed in the area around the building.

### **9.57.4.2.4 Chemicals**

There were no liquid or solid chemicals containing Clean Water Act (CWA) pollutants in evidence. There was no visual evidence that chemicals had entered the drainage system.

There are no records of the chemicals burned behind the building in the burn pit and burn areas, but according to the process manager, they included aviation fuel and other flammables. The burn pit is a concrete pad with concrete sides, recessed less than a foot into the ground. Its shape and construction resemble the lid of a shoe box. Because the burn pit has a concrete floor, contamination of soil by residual materials left behind when the chemicals were burned may be limited. Surrounding soils in burn areas could have been contaminated.

D&D and Environmental Restoration program records were not reviewed as a part of the walk-through. The building manager and the process manager could not verify, and had no information in the building record, that all areas around the building were sampled to determine levels and types of contamination and that appropriate remediation occurred. Clearly, some areas around the building had been tested, and contamination found, as evidenced by the D&D activities underway on the east side of the building. This is important as the spillway is behind the burn pit, and runoff is uncontrolled.

### **9.57.4.3 Potable and Service Water**

Potable water was supplied to the building, according to information presented in the site utility drawing, shown as Attachment 5 (Section 9.57.6.5). It has been disconnected, according to the process manager. Service water is still supplied to the building. Additionally, Room 2 has untreated well water available for fire fighting. Water sources are not marked. There is no water cooler.

### **9.57.4.4 Chemical Storage and Hazardous Materials**

There were no janitorial supplies or chemicals stored in Building 34, however, there was a flammables cabinet that could not be opened for inspection. If there are no chemicals there are no requirements for Material Safety Data Sheets (MSDSs). There were no MSDSs.

At the time of the walk-through there were no aqueous or soil samples stored in the environmental restoration sample processing area in Room 2. Building 34 is not designated as a

## Environmental Appraisal of the Mound Plant

storage unit for regulated waste, under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) program, and samples should not be stored in the building.

There were several file cabinets of records and assorted pieces of equipment, ranging from sample equipment to a fire hose, strewn in Room 2 and Room 4. The process manager planned to request that past users remove unnecessary equipment.

The building is equipped with emergency response equipment such as a portable eyewash and a fire extinguisher. The extinguisher tag was not current, and it needed to be charged in accordance with 29 CFR 1910. The process manager volunteered to have it charged. There is no evidence of information about an Emergency Evacuation Plan, and no signs were posted in work areas as required in 29 CFR 1910. This is especially important as contractor personnel working in Building 34 might not be aware of Mound procedures.

There are no aboveground storage tanks in or around the building. An aboveground fuel tank located next to the building was removed several years ago; it was not clear if the tank was on a concrete pad with containment berms. No such pad was in evidence. According to information provided in the BMQ, surrounding soil was tested and did contain fuel oil, and an environmental restoration activity has been completed.

There are no sumps, separators, or catch basins in the building. An underground storage tank was removed in the early 1990s and associated environmental remediation activities commenced.

North of the building is a rectangular in-ground impact tester used to certify shipping containers. It was covered with a locked screen and full of a frozen liquid, assumed to be ice. The process manager had no records regarding its use or management. The test chamber was not considered to be a part of Building 34 by the process manager as the function was not associated with the burn building. It is not considered within the scope of this report on Building 34, but is mentioned as it was near to the building.

There are no capacitors or transformers in the building. According to the 1995 PCB Annual Document Log, the building does not contain polychlorinated biphenyls (PCBs). However, according to the BMQ, drums of "PCB Decon Water" were removed from Building 34. It is not clear if the drums came from Building 34 or were stored at Building 34 or if the area was merely a collection point for drums from other areas. There is no record to indicate if the building is contaminated.

The building was tested and does not contain asbestos, based on screening recorded in the *Asbestos Program Manual*, MD 10391 (9-14-95).

Three gas cylinders are located in the storage area in Room 4. Labelling was not in conformance with 29 CFR 1910.151. The process manager planned to label them properly and those which have not been used for over two years will be returned to Building 71.

## **Environmental Appraisal of the Mound Plant**

### **9.57.4.5 Solid, Hazardous, and Radioactive Wastes**

According to information provided in the BMQ, hazardous wastes are generated in Building 34. It should be noted that some of the materials listed are related to environmental restoration activities. There is a specific exemption for CERCLA samples but it applies only until analysis is completed. In Building 34, samples which are being prepared for analysis do not fall within the scope of the Resource Conservation and Recovery Act (RCRA). For lab samples which have been returned following analysis, the generator must make a hazardous waste determination and document it. There was no evidence of returned lab samples in Building 34 on the day of the walk-through.

At the time of the walk-through, there was no activity in the building, and there was no solid, hazardous, or radioactive waste pickup from Building 94.

At the time of the inspection, there was a white low specific activity (LSA) waste storage box located on a concrete pad beside the building. It was locked, but the process manager indicated that it contained LSA waste that was generated in cleanup of Room 1 over two years ago. The process manager had no characterization documents, although he indicated that in the past the waste had been characterized. It contained materials that he had removed from Room 1 that had been contaminated by burning of uranium tailings. Waste characterization, handling, and storage did not conform to Mound Procedure MD 81240, Issue 7, *Low Level Waste Management Procedures*. (Issue 7 was operable two years ago; Issue 8 is now in place.)

The process manager indicated that he would contact Waste Management. During a follow up visit to Building 34 two weeks after the initial walk-through, pick up had not occurred. The issue was addressed with the EG&G MAT manager of low-level waste programs. He indicated that until waste is properly characterized in accordance with Mound procedures, and his organization is notified for pickup, he has no knowledge of improperly handled waste. There is no routine field surveillance or inspection of LSA storage containers or other storage areas to identify improperly characterized or stored waste.

### **9.57.4.6 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.

### **9.57.5 Findings and Recommendations**

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.57.6.6).

Findings related to the environmental appraisal of Building 34 indicates that the following action items, in priority order, should be planned and scheduled.

## **Environmental Appraisal of the Mound Plant**

- 34-1 Characterization, handling, storage, and disposal of LSA waste stored at Building 34 does not conform to guidelines established in Mound procedure MD-81240, or DOE Order 5820. There is no evidence that characterization was completed.
- 34-2 EG&G MAT did not perform routine field surveillance to identify potential waste characterization, storage, handling, or assure that the Building 34 generator/process manager was properly managing waste streams. Field surveillance activities by those knowledgeable about technical issues are critical, as quality assurance and verification are a necessary part of an environmental protection program, as discussed in DOE Order 5400.
- 34-3 Training requirements and records of the process manager were not verified to confirm that he had completed LSA waste generator training in accordance with NVO 325 Training Matrix. If training was up-to-date, and the process manager was aware of the generator's responsibilities for characterization, the process should be reviewed to determine why it failed.
- 34-4 D&D and Environmental Restoration Program records were not reviewed as a part of the walk-through. It is assumed that all areas around the building were sampled to determine levels and types of contamination and that appropriate remediation occurred. The building manager and the process manager should review and verify that this assumption is correct, and add information to the building record. If the assumption is incorrect, action should be taken to confirm that runoff from contaminated soils is not entering the spillway.
- 34-5 Since it appears that drains in Building 34 may be connected to the spillway, all drains should be posted and management controls instituted to assure that only appropriate materials enter the drains. This is especially important as contractors use the building, as they may be unfamiliar with Mound systems.
- 34-6 Water sources should be posted.
- 34-7 Since hazardous waste records indicate that PCB-contaminated water was stored in or around the building several years ago, records should be checked to confirm that the building is not contaminated.
- 34-8 Several issues related to hazardous materials and emergency response discussed in the report should be corrected: the fire extinguisher, emergency response posting, and gas cylinders. The process manager has a high level of knowledge related to these issues.
- 34-9 The building is used by contractors for environmental sample processing. If CERCLA program samples are stored in Building 34, it should be a designated area. It should be noted that samples returned by laboratories following characterization are a waste and must be handled as such. Building 34 is not a designated storage area.

# **Environmental Appraisal of the Mound Plant**

## **9.57.6.1 Environmental Appraisal Checklist**



ENVIRONMENTAL APPRAISAL  
CHECKLIST

Table of Contents

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

South of building is burn pit - recessed concrete pit  
Oil tank - removed & area remediated. Tank  
contained aviation fuel & other flammable.

Test cell in ground North side of building. covered/  
locked / full of ice.

Potable water disconnected.

Environmental Appraisal Checklist

Building Name: 34

Appraisers: Vyas/Hausfeld/Merker Date: 2-6-96am

Clean Water Act (CWA) Screening Checklist

Question	Response	Comments
Does the outside drain spouting of the building discharge directly to a storm sewer/sanitary system?	<input checked="" type="radio"/> Y <input type="radio"/> N	<del>may go to spillway</del> If the answer to any of these questions is yes, proceed with the following checklist.
Are there sinks, toilets and floor drains in the building?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Are chemicals being used in the building?	<input checked="" type="radio"/> Y <input type="radio"/> N	Street
Is there a process which discharges to the storm or sanitary system?	<input checked="" type="radio"/> Y <input type="radio"/> N	fire history training program in action

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	<input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N	Storage of chemicals + materials used by <del>the contractor</del> env-remediation contractor (waster)
	Is the building in operation? What are the processes and where do they discharge to?	<input checked="" type="radio"/> Y <input type="radio"/> N	fire safety program inactive
	Do the floor drains, sinks & toilets appear to be draining properly?	<input checked="" type="radio"/> Y <input type="radio"/> N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	? Sanitary Storm	may drain to spillway Floor drain in Rm 2.
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	<input checked="" type="radio"/> Y <input type="radio"/> N  <input type="radio"/> Y <input type="radio"/> N <input type="radio"/> Y <input type="radio"/> N	Outside Sump. NO Sump INSIDE
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	<input type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/> X <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N	

Building no longer used for fire training. Used for contractor staging area.

### Environmental Appraisal Checklist

Building Name: 34

Appraisers: V/Hunsper/Medler

Date: 2-6-96 am

#### Clean Air Act (CAA) Screening Checklist

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

#### CAA Checklist

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

Environmental Appraisal Checklist

Building Name: 34

Appraisers: *Vegas/Hausfeld/Meeker* Date: 2-6-96am

CAA Checklist

*NOT completed*

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

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

Source: \_\_\_\_\_

9.57-13

## Environmental Appraisal Checklist

Building Name: 34

Appraisers: Vignos/Hausfeld/Meeker Date: 2-6-96 am.

## Hazardous Materials (HM) Screening Checklist

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

## HM Checklist

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

### Environmental Appraisal Checklist

Building Name: 34

Appraisers: *Hungfeld/Marker/Vigas*

Date: 2-6-96am

#### HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	Y/N	<i>may not be need was ext. in cont. area not charged. Etter to contact fire dept</i>
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	Y/N	<i>portable eyewash</i>
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	Y/N	<i>got rid of old not in use.</i>
CGA P-1 3.5.3	Full and empty containers should be stored separately with the storage layout planned so that containers comprising of old stock can be removed first with a minimum handling of other containers.	Y/N	
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	Y/N	<i>cylinder not in use to be returned.</i>
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y/N NA	
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y/N NA	
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y/N NA	
	Is there a sign posted in each work area regarding emergency egress and emergency response action?	Y/N	<i>sign needed in cont area</i>
	Is there an emergency response plan available?	Y/N	

- Etter will get fire extinguisher charged
- Cylinders will be sent to B-71.

9.57-15

**Environmental Appraisal Checklist**

Building Name: 34

Appraisers: Hausfeld/Meeker/Vyas

Date: 2-6-96am

HM Checklist

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

**Above Ground Storage Tanks Inventory**

TABLE B—Above Ground Storage Tanks Inventory

Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
	<u>NONE</u>			Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_



**Environmental Appraisal Checklist**

Building Name: 34

Appraisers: Hausfeld/Mercer/Vyso Date: 2-6-96 am

**Safe Drinking Water Act (SDWA) Screening Checklist**

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

SDWA Checklist

*potable disconnected; service water only*

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

**TABLE C—Water Fountain Survey**

Building	Location	Model #	Comments / Date of Analysis for Lead
	<u>NONE</u>		

Source: \_\_\_\_\_

9.57-17

9.57-18

**Environmental Appraisal Checklist**

Building Name: 34

Appraisers: Vogel/Hausfeld/Meeker

Date: 2-6-96am

**RCRA Screening Checklist**

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

**RCRA Checklist**

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

## Environmental Appraisal Checklist

Building Name: 34

Appraisers: Haudred/Marker/Vys

Date: 2-6-96am

### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 34

Appraisers: Vignos/Haugfeldt/Marker

Date: 2-6-96am

## RCRA Checklist

*not completed*

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

## Environmental Appraisal Checklist

Building Name: 34

Appraisers: Hausfeld/Vys/Merkur Date: 2-6-96 am

### RCRA Checklist

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

9.57-21

## Environmental Appraisal Checklist

Building Name: **34**

Appraisers: *Vignos/Hausfeld/Marker* Date: *2-6-96 am*  
RCRA Checklist

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

General Comments:

## Environmental Appraisal Checklist

Building Name: **34**

Appraisers: *Vyys/Hausfeld/Meeker*

Date: *2-6-96 am*

### Asbestos Screening Checklist

Does this facility contain ACBM?	Y / <b>(N)</b>	If yes, conduct the following survey.
----------------------------------	----------------	---------------------------------------

Asbestos Checklist     *tested + none found - Asbestos Program Manual*

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

Regulatory Guideline	Question	Response	Comments
<b>ADAPTED FROM TSCA ACBM IN SCHOOLS:</b>			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?  If no for this building or area note this conclusion in the comment section.	Y / N	
	Is there any evidence of friable asbestos?	Y / N	
	Is the asbestos removal properly managed? (See questions listed below)	Y / N	If there is no asbestos removal, do not complete the following section.
<b>NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:</b>			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACBM during the removal.	Y / N	
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	Y / N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y / N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y / N	

9.57-23

**Environmental Appraisal Checklist**

Building Name: 34

Appraisers: Merker/Hausfeld/Vegs

Date: 2-6-96 am

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

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

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?  If the answer is no, note .  If the answer is yes, proceed with next section.	Y <input checked="" type="radio"/> N	
40 CFR 761.65 (c) (5)	Based on an inspection, are any of the materials or equipment potentially PCB contaminated?  If no, note and stop here.  If yes, note the location of the management unit, and the method of management, and proceed.	Y / N	
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?  If yes, are auditable records maintained.	Y / N	
40 CFR.30 (a) (1) (ix)	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?  Are they visually inspected quarterly? If yes, are auditable records maintained?	Y / N	

## Environmental Appraisal Checklist

Building Name: *34*

Appraisers: *Viggo/Hansfeld/Merker* Date: *2-6-96am*

### TSCA Checklist

*not completed*

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

## Environmental Appraisal Checklist

Building Name: 34

Appraisers: *Vigno/Hausfeld/Merker* Date: 2-6-96 *ams*TSCA Checklist*not completed*

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

## GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 34

Appraisers: *Viggo Hausfeld Merker* Date: *2/6/96 am*

Low-Level Waste and Transuranic Waste Screening Checklist

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

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
<b>Low-Level Waste</b>			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW?  If the answer is no, note.  If the answer is yes, proceed with next section.	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOE Order 5820.2A Chapter III.	Are any of the materials noted by inspection LLW?  If no, The audit would stop here, because there are no LLW.  If yes, note the location of the management unit, and the method of management, and proceed with the section below.	<input checked="" type="radio"/> Y <input type="radio"/> N	locked - not inspected white LSA storage box
DOE Order 5820.2A Chapter III, 3.a.	Have the storage configurations in use in this area been taken into account for keeping external exposures to the general public below 25 mrem/yr?	<input checked="" type="radio"/> Y <input type="radio"/> N	
	Is the waste stored in a configuration that protects ground-water resources?	<input checked="" type="radio"/> Y <input type="radio"/> N	on pad.
DOE Order 5820.2A Chapter III, 3.b.	Has monitoring been conducted in this area in accordance with DOE Order 5820.2A in order to evaluate the area against the performance standard?	<input checked="" type="radio"/> Y <input type="radio"/> N	NO sign of such
	Based on field data, does the monitoring conducted in this area conform to the performance standard?	<input checked="" type="radio"/> Y <input type="radio"/> N	

9.57-27

*Rm 3 - roped off. Contaminated by uranium tailings burned during fire training exercises - later cleaned up and deposited LSA waste in white box 1992/93. Not collected by LSA waste management. No characterization documents discuss with A. Anderson.*

Environmental Appraisal Checklist

Building Name: 34

Appraisers: Vypo Hausfeld Merker

Date: 2/6/96

Low-Level Waste and Transuranic Waste Checklist

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

**Environmental Appraisal Checklist**

Building Name: **34**

Appraisers: **Vignos/Hausfeld Nether** Date: **2/6/96**

Low-Level Waste and Transuranic Waste Checklist

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

**Environmental Appraisal Checklist**

Building Name: 34

Appraisers: *Viggo Hansford Morker*

Date: 2/6/96

Low-Level Waste and Transuranic Waste Checklist

*Not completed*

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

9.57-30

## **Environmental Appraisal of the Mound Plant**

**Page 21 of 27 of the Environmental Appraisal Checklist was not provided.**

**Environmental Appraisal Checklist**

Building Name: **34**

Appraisers: **Viggo/Hausfeld/Merker** Date: **2-6-96 am**

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimization/Pollution Prevention Activities Checklist

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



### Environmental Appraisal Checklist

Building Name: 34

Appraisers: Vyas/Hausfeld/Merker Date: 2-6-96 am

#### Waste Minimization/Pollution Prevention Activities Checklist

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

9.57-33

9.57-34

**Environmental Appraisal Checklist**

Building Name: 34

Appraisers: Meeker/Hausfeld/Vyas

Date: 2-6-96 am

Waste Minimization/Pollution Prevention Activities Checklist

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

### Environmental Appraisal Checklist

Building Name: 34

Appraisers: Vyas/Hausfeld/Murker Date: 2-6-96am

#### Waste Minimization/Pollution Prevention Activities Checklist

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

9.57-35

**Environmental Appraisal Checklist**

Building Name: 34

Appraisers: *Vyas/Hausfeld/Moher* Date: 2-6-96 am

Waste Minimization/Pollution Prevention Activities Checklist

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

9.57-36

### Environmental Appraisal Checklist

Building Name: 34

Appraisers: *Vyas/Hausfeld/Merker* Date: *2-6-96am*

#### Waste Minimization/Pollution Prevention Activities Checklist

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

9.57-37

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.57.6.2 Building Manager's Questionnaire**

COMPLETED BY STEVE ETTER - BLDG MGR DID NOT  
Building Manager's Questionnaire CONFIRM.

Building Name: 34 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

Date	12/13/95	Page	11
From	KATHY KOEHLER		
Co.			
Phone #			
Fax #	3124		
Post-It Fax Note	7671		
To	DAVE HELTZ		
Company	STEVE ETTER		
Phone #			
Fax #	5077		

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

SEC 1 BURN BUILDING IS HP CONTROLLED - REQUIREMENTS POSTED  
ALL OTHER BLDGS NO REQUIREMENTS

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

SEC 1 BURN BLDG IS HP CONTROLLED - REQUIREMENTS POSTED  
ALL OTHERS - NO REQUIREMENTS

3. Are there any restricted areas?  Yes  No  
Where are they? BURN BLDG UNDER H.P. CONTROL

ENVIRONMENTAL RESTORATION  
SAMPLE PROCESSING AREA.

4. Provide a physical description of the building.

Building # 1: 1,110-ft<sup>2</sup> building complex used for emergency brigade training. Section 1 is a block concrete facility used for live fire training. Section 2 is used as office space or ~~a classroom~~. ~~Good~~ ~~3~~. It is a one-story concrete facility with a concrete and metal roof.

ENVIRONMENTAL RESTORATION CONTRACTORS  
CHEMICAL INVENTORIES NOT INCLUDED IN THIS REPORT,  
Source: Mound Facility Physical Characterization, 12-1-93

(USED PERIODICALLY)

5. Provide a drawing of the building.

Attached.

6. What is the current building use?

HAS NOT BEEN PRACTICED IN YEARS.

Brigade and fire training with live fire, ~~offices and storage space~~.  
Deconditioning and Decontamination (D & D) ~~was removing depleted~~ of  
uranium from it in November of 1993. They were supposed to be  
~~finished by early 1994.~~ WAS SCHEDULED IN 1993 BUT

FUNDING WAS NOT AVAILABLE. IN FY93, FY94, FY95 or  
FY96. ENVIRONMENTAL RESTORATION CONTRACTORS PRESENTLY  
Source: Mound Building, 5-9-95 USE ROOM 2 FIRE PROCESSING  
(SAMPLES)

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

Building has <sup>HISTORICALLY</sup> been used for live fire training, office  
bldg and storage buildings added later.

Source: Mounds Building, 5-9-95

## Building Manager's Questionnaire

Building Name: 34 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) focused: Emergency brigade training, equipment repair

How Wastes Are Generated: ENVIRONMENTAL RESTORATION CONTRACTORS  
(SPURIOUSLY)

~~No wastes generated.~~ UNKNOWN, CONTRACTORS WASTES,

Contact:  
Phone #:

ESSENTIALLY DED WASTES  
WILL BE GENERATED

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

### Building Manager's Questionnaire

Building Name: 3 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

9. In the last six months, have any modifications been made to the building or to processes in the building? Yes

~~No~~ PAINT URANIUM  
CONTAMINATED  
AREAS

10. Does the building have air emission sources? Yes  
UNKNOWN

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
			Y / N					
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

The facility was historically used as a Fire fighters practice burn facility. They burned various types of fuels & flammable materials for practice.

## Building Manager's Questionnaire

Building Name: 34 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

12. For existing permits are emissions monitored? At what frequency? Where are the records maintained?

*UNKNOWN → ASK JOHN PUCKET*

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

Source: Air Permits 2/4/95

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

*SEC 2 HAS RAW WATER - ALL OTHERS NO*

14. Does the building discharge to the storm sewer? Yes  No   
 Where? *BURN Bldg. SEC 1 DISCHARGES TO THE POND*

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

16. Has an asbestos survey been conducted? Yes  No  What are the results? *UNKNOWN*

*RAW WATER  
DIRECT FROM  
WELL  
(AQUIFER)  
UNTREATED*

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

## Building Manager's Questionnaire

Building Name: 34 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures

Source: SURROUNDING SOILS CONTAIN FUEL OIL CONTAMINATION - CERCLA REMOVAL ACTION

21. Where do waste chemicals go? NONE USED

CONTRACTOR'S CHEMICALS - UNKNOWN

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

SOME CLEANING PRODUCTS - NO CHEMICALS IN SEC. 2

23. Where do excess janitorial supplies go? NONE

Source: \_\_\_\_\_

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

Chemical	Amount	Chemical	Amount

Source: \_\_\_\_\_

### Building Manager's Questionnaire

Building Name: 34 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? NO

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NON: CO2 in STORAGE SEC. 4	COMPRESSED GAS	2-150 lb
	CYLINDERS	CYLINDERS

Source: Chemical Inventory 1994

NEED TO CHECK CONTRACTORS  
 CHEMICALS!

**Building Manager's Questionnaire**

Building Name: 34 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

THE  
500  
GALLON  
ABOVE  
GROUND  
TANK WAS  
REMOVED  
(NOT  
REGISTERED)

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
	Diesel			Y/N	
				Y/N	

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

NEW  
DREM  
BITS  
INSTALLED  
IN  
7-11-95

26. Is there a sump or pit or underground tank in or around the building?  
 Yes  Unknown  BLDG 34 UST REMOVED IN EARLY 1990'S  
 Is it double-walled? What does it contain? How many days per year is it filled?  
 Is there an emergency overflow tank? Have there been previous overflows?  
 NO LIKELY-YES

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / N			Y / N	Y / N

Source: \_\_\_\_\_

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

Materials	Amount
PCB Decon Water <50PPM From Sitewide Sampling	335.5
PCB Empty Drum <50PPM From Sitewide Sampling	55.0
PCB Empty Drum <50PPM From Sitewide Sampling	55.0

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

## Building Manager's Questionnaire

Building Name: 34 Building Manager: K.G. Keebler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

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

*YES, FUEL OIL CONTAM SOIL PILES* *THERE IS A BIOREMEDIATION FACILITY ADJACENT TO*

30. Has the building been identified as a 90 day waste accumulation area? BLDG 34

Yes  ~~No~~ UNKNOWN - CERCLA ACTIVITY

31. Has the building been identified as a satellite accumulation area?

Yes  ~~No~~ UNKNOWN - CERCLA ACTIVITY

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

Where are logs found? UNKNOWN (CERCLA & HEALTH PHYSICS)

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

Source: \_\_\_\_\_

### Building Manager's Questionnaire

Building Name: 34 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes  No

Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 34    Building Manager: K.G. Koehler    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

34. Is low-level radioactive waste generated, stored, or disposed of from the building? Yes ~~No~~

Where are logs found?

*SURFACE CONTAMINATION  
IN WALLS & FLOOR*

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

Source: \_\_\_\_\_

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

*UNKNOWN*

### Building Manager's Questionnaire

Building Name: 3 Building Manager: K.G. Koehler Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

No

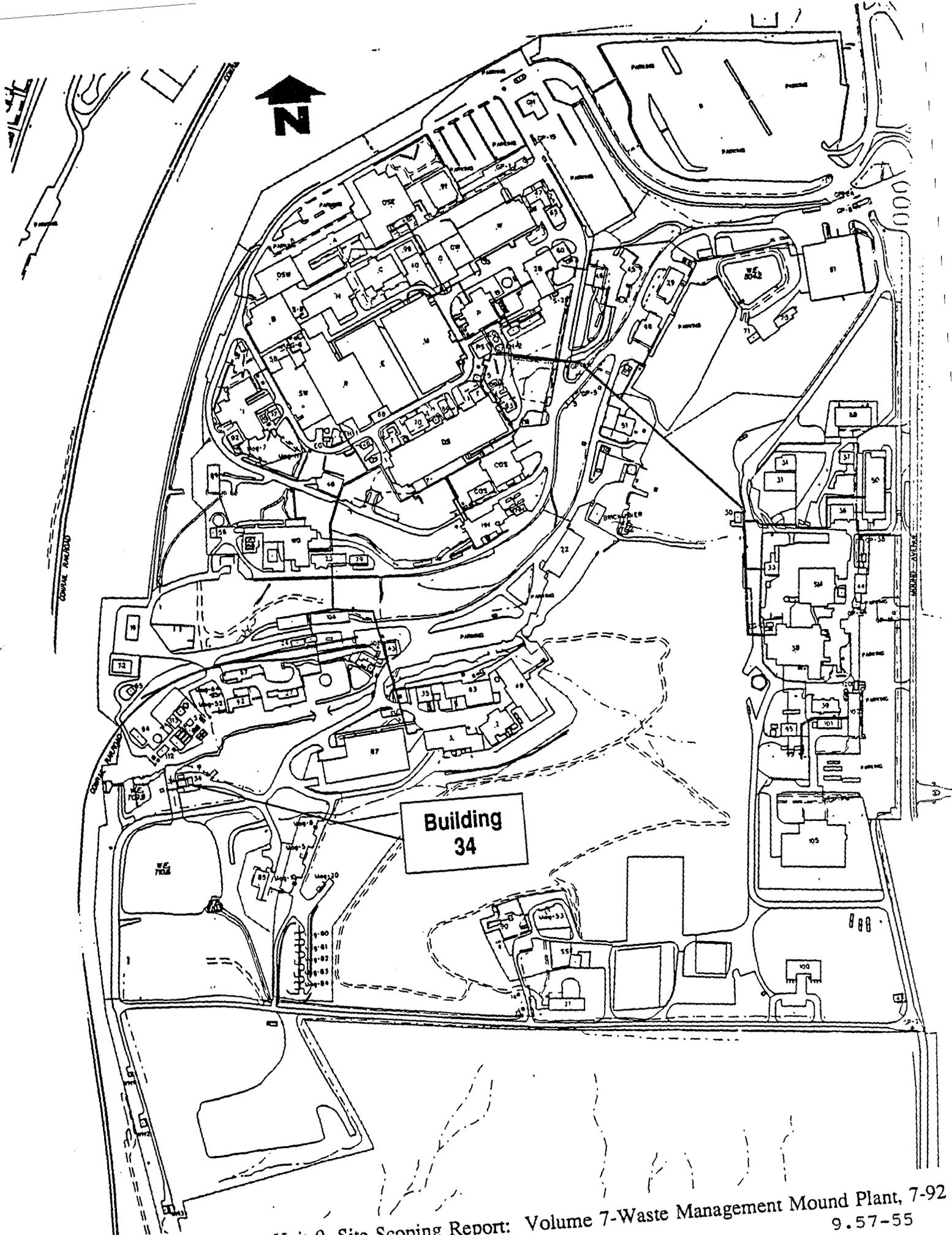
37. Has a pollution prevention program been developed for the building? Yes

No

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.57.6.3 Location of Building 34**



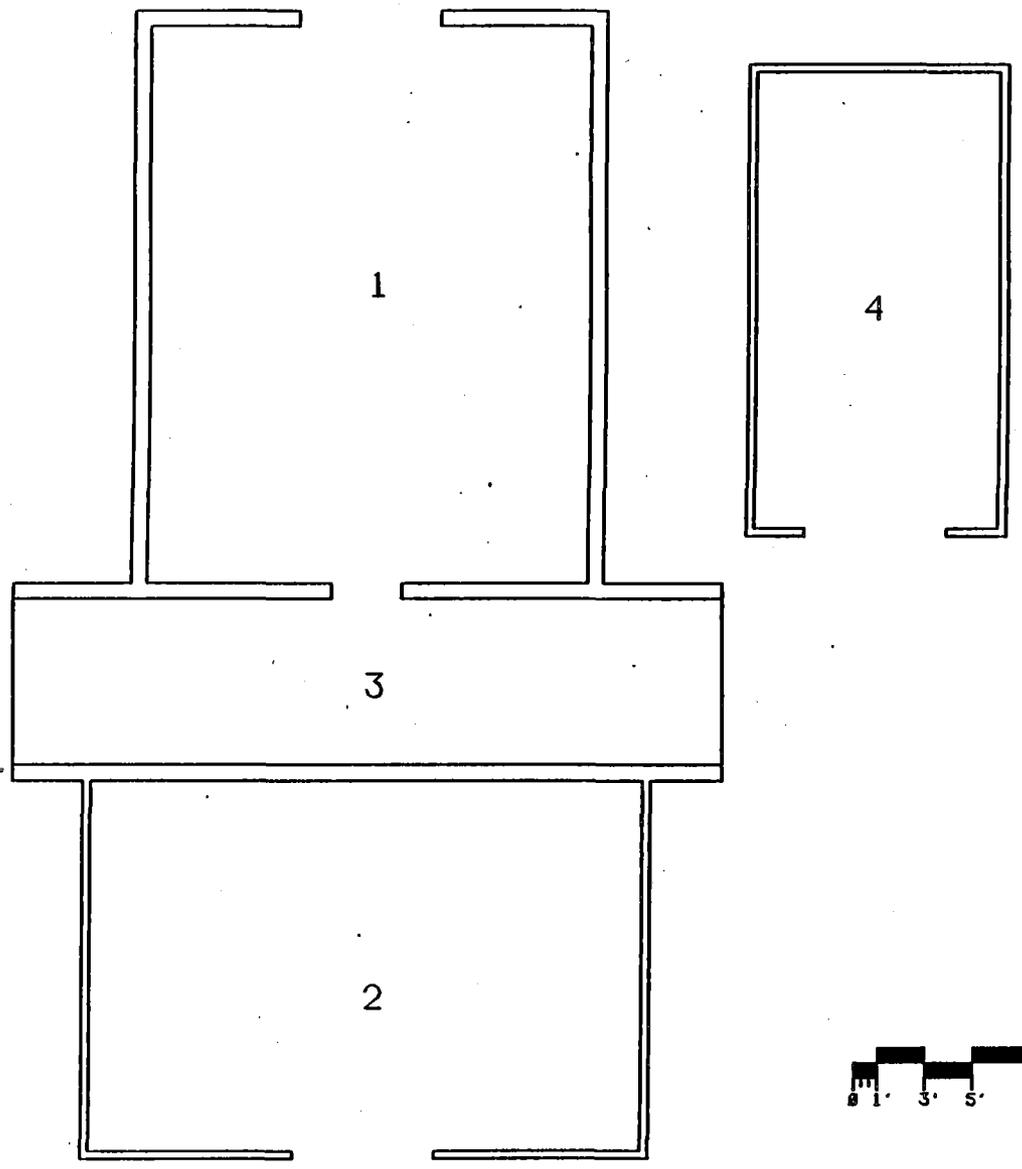
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92  
9.57-55

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.57.6.4 Floor Plans for Building 34**

ISS	DATE	REVISION	BY	CHK	APP	APD	#
B	12/12/91	ASBUILT ISSUE	DCB			DVD	



**BLDG #34  
FIRST FLOOR  
BLDG CODE:3034**

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
NONE _____ TRACOC _____ TERCOC _____ ETRCOC _____	
TECH. REP. _____	
DR. NBR. _____	
TRACOC _____	
TERCOC _____	
ETRACOC _____	

DESIGN ENG	PROJ NBR	SHEET	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION	
		ISSUE	B						BLDG #34		
SPCS	ENG REV	PART CLASSIFICATION								FLOOR PLANS	
LP & DC	PROJ REV	CLASSIFICATION								UNCLASSIFIED	C
ENG TIME		JOB NUMBER								FSC911245	12335
APD	DATE	JOB TYPE								SFP	FROM BLDG #34
		CASE								14865	SCALE AS NOTED
		SHEET								1	OF 1
		STATUS								MD-FEL-12/12/91	ORIGIN
										MD-BR3-V3.2	

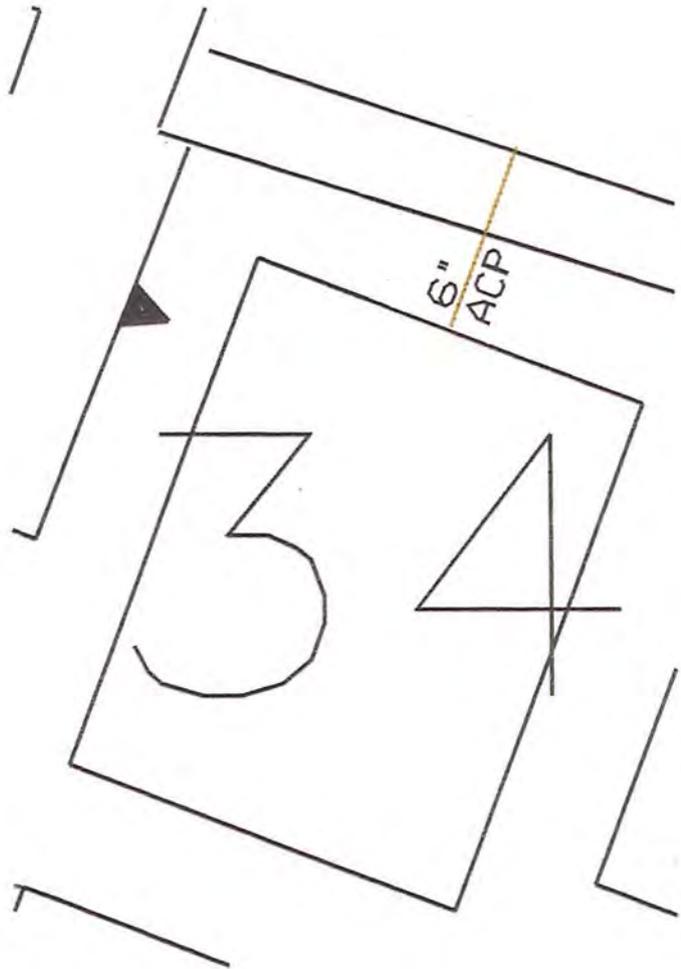
9.57-59

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.57.6.5 Underground Utility Lines**

9.57-63



- FIRE
- POTABLE
- RAW
- SANITARY
- STORM
- RADIOLOGICAL

**UNCLASSIFIED**

**E.G. & G. - MOUND**  
UNDERGROUND WATER & WASTE LINES  
BLDG. 34  
DATE: 3-4-96

# **Environmental Appraisal of the Mound Plant**

## **9.57.6.6 Photographs**



Mound Plant Building 34

9.57-67



## **Environmental Appraisal of the Mound Plant**

### **9.58 BUILDING 35**

#### **9.58.1 Scope of Building 35 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 35 on the afternoon of February 21, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is included as Attachment 1 (Section 9.58.6.1). The appraisers were not accompanied by the building manager, however, the building Safe Shutdown manager did accompany the appraisal team. Other information has been supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.58.6.2).

#### **9.58.2 Description of Building 35**

Building 35 is a 2,500-square-foot single-story structure. It is built of concrete blocks on grade and has a built-up membrane roof. Its location is shown in Attachment 3 (Section 9.58.6.3). The facility is bordered by Building 59 to the east and Building 87 to the southwest. The main Mound plant drainage ditch lies north of Building 35. The building is serviced by central steam, chill water, service, potable water, service water including a fire sprinkler system, and electrical service of 480V (*Mound Facilities Physical Characterization*, 12-1-93).

Building 35 was constructed in 1967. The facility was designed to provide x-ray and eddy current nondestructive testing. Additionally, the facility was used as the control room for the californium-252 multiplier (CFX) neutron radiography facility located in adjacent Building 59. The building has been used for the same purpose since construction. No research, development, or production activities using radioactive materials have occurred in the building. However, non-destructive testing of components containing energetic materials has occurred.

The facility is currently being shut down. All operations have been suspended.

#### **9.58.3 Summary of Findings**

The facility is in the process of being shut down with all weapons support operations suspended. The facility appeared to be well-maintained. All chemicals, with the exception of some unopened film processing chemicals, have been removed. There were two observations noted that are potential issues of environmental concern.

## **Environmental Appraisal of the Mound Plant**

### **9.58.4 Observations**

#### **9.58.4.1 Air Emissions**

There are no fumehoods. There are no fuel-burning units in the facility. There is no evidence of fugitive dust. No air emission permit applications had been submitted to the Regional Air Pollution Control Agency (RAPCA) for activities in the building.

#### **9.58.4.2 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.

##### **9.58.4.2.1 Sanitary Wastewater**

According to underground utility drawings (Attachment 5—Section 9.58.6.5), Building 35 is serviced by a sanitary line. Confirmation of drainage of sanitary waste into the sanitary line was not within the scope of the project and was, therefore, not verified with dye or smoke tests.

Sanitary effluent is conveyed to the onsite tertiary wastewater treatment facility, and subsequently discharged to the Great Miami River. There is no monitoring of building effluent. Based on operations data, supplied by the process owner, effluent from Building 35 does not deviate from that expected by the sanitary treatment plant manager.

##### **9.58.4.2.2 Storm Wastewater**

According to underground utility drawings (Attachment 5—Section 9.58.6.5), the facility is serviced by a storm sewer.

##### **9.58.4.2.3 Chemicals**

All chemicals, with the exception of a small quantity of unopened photographic chemicals, have been removed from the facility. There were several pieces of idle photo processing equipment in Room 2 that were connected to a floor drain. One of the units was a silver recovery system.

## **Environmental Appraisal of the Mound Plant.**

It appeared, from the manner in which the system was installed, that all effluent from the processing passed through the silver recovery system prior to discharge into the drain.

### **9.58.4.3 Potable and Service Water**

Potable water is supplied to the building. Backflow prevention devices are installed at all visible points of potential cross connection. The fountains which supply drinking water have not been tested for lead. According to EPA protocol, annual sampling criteria do not require testing of each fountain. There is service water supplied to the building.

### **9.58.4.4 Chemical Storage and Hazardous Materials**

As noted, all chemicals with the exception of the small quantity of unopened photo processing chemicals, have been removed from the facility. During the inspection, the Safe Shutdown project manager noted that several sealed radioactive calibration sources were found in the facility. The sources are stored in a large, steel-clad lead "pig" (shielded storage cask). Health Physics has examined the sources and recommended they be kept in that same facility until they are removed from the facility. No documentation exists regarding this recommendation.

A review of the procedures and requirements contained in MD-10431, Safe Shutdown Standards Operating Procedures, and the Safe Shutdown Process Managers' records indicate that once Phase II Activities (i.e., commencement of Safe Shutdown) begin, all chemicals within the building are inventoried (chemicals contained in idle equipment are handled separately). Chemicals which can be reused (at Mound or transferred to the City of Miamisburg), subject to age and condition, are identified and processed separately.

Subsequently, all the remaining chemicals are containerized, characterized, and transferred to Waste Management for disposition. A copy of the inventory, chemical profile of each container, and Waste Management's acceptance becomes a permanent part of the Mound Safe Shutdown Plan for the specific building. As chemicals are transferred to Waste Management, a central chemical database in the Program Manager's Office is updated monthly to reflect the disposition. All activities are conducted in accordance with MD-70523, 40 CFR 265, and OAC 3745.52. As hazardous waste generators, all Safe Shutdown Process Managers have received training in accordance with 40 CFR 265.16.

### **9.58.4.5 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 local collection point, then shipped to a landfill by a contractor. The disposal permit is maintained by Waste Management.

The facility never contained radioactive materials with the exception of the sealed radioactive calibration sources. There is asbestos in the thermal system insulation. There was no evidence

## **Environmental Appraisal of the Mound Plant**

of friable asbestos. The facility does not have polychlorinated biphenyl (PCB)-containing equipment (1995 PCB Annual Document Log).

During the Safe Shutdown process, hazardous materials and/or mixed wastes are generated in the process of cleaning idle equipment, furnishings, and personal property; removing tanks, cylinders, and process piping; and cleaning sumps and pits; etc. A review of procedures and requirements contained in MD-10431, Safe Shutdown Standard Operating Procedures, and the Safe Shutdown Process Manager's records indicate that the wastes are containerized, characterized (including testing for radionuclides), and then transferred to Waste Management for disposition. A copy of the inventory, chemical profile of each container, and Waste Management's acceptance become a permanent part of the Mound Safe Shutdown Plan for the specific building. All activities are conducted in accordance with MD-70523, 40 CFR 265, and OAC 3745.52. As hazardous waste generators, all Safe Shutdown Process Managers have received training in accordance with 40 CFR 265.16.

### **9.58.4.6 Waste Minimization and Pollution Prevention**

The building has undergone safe shutdown, and waste minimization and pollution prevention activities are not applicable to an empty building.

### **9.58.5 Findings and Recommendations**

Photographs were taken in connection with the appraisal process. They are included in Attachment 6 (Section 9.58.6.6).

The environmental appraisal of Building 35 indicates that the following action items, in order of priority, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

- 35-1 Health Physics should be contacted regarding the sealed radioactive sources stored in the "pig." These sources should most likely be removed from the facility and stored in a more appropriate location.
- 35-2 The drain system in Room 2 may be contaminated with photochemical processing materials. Depending on the planned future use of the facility, this may need to be investigated.

# **Environmental Appraisal of the Mound Plant**

## **9.58.6.1 Environmental Appraisal Checklist**

# ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name BUILDING 35

Appraisers:

MARCIA VANNET CHEMIST  
Name Discipline

MARK GILLIST ENGINEER  
Name Discipline

MYRON SMITH ENGINEER  
Name Discipline

\_\_\_\_\_  
Name Discipline

Building Manager:

BOB WARD

Process Manager:

SAFE SHUTDOWN PROJECT MANAGER: BILL NEALD

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: 2/21/96

**ENVIRONMENTAL APPRAISAL  
CHECKLIST**

**Table of Contents**

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

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	Y / N Y / N	N/A All chemicals removed w/ exception of unopened photo proc. chems. (small quantity).
	Is the building in operation? What are the processes and where do they discharge to?	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N _____ _____	
	Do the floor drains, sinks & toilets appear to be draining properly?	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	<input checked="" type="radio"/> Sanitary <input checked="" type="radio"/> Storm	
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	Y <input checked="" type="radio"/> N _____ _____ Y / N Y / N	
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N _____ Y / N <input checked="" type="radio"/> Y <input checked="" type="radio"/> N	see note below

9.58-9

\* Photochemical process which appears to have discharged into drain in room 2

### Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

#### Clean Air Act (CAA) Screening Checklist

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

#### CAA Checklist

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

9.58-10

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### CAA Checklist

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

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

BLANK

Source: \_\_\_\_\_

9.58-11

9:58-12

### Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

#### Hazardous Materials (HM) Screening Checklist

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

#### HM Checklist

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

Revised (1-5-96) \* small quantity of unopened photoprocessing chemicals to

**Environmental Appraisal Checklist**

Building Name: FEAR 35

Appraisers: TEAM 4

Date: 2/21/96

HM Checklist

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

9.58-13

9.58-14

### Environmental Appraisal Checklist

Building Name: \_\_\_\_\_

Appraisers: \_\_\_\_\_

Date: \_\_\_\_\_

#### HM Checklist

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

#### Above Ground Storage Tanks Inventory

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N

BLANK

Source: \_\_\_\_\_

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### Safe Drinking Water Act (SDWA) Screening Checklist

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

#### SDWA Checklist

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

**TABLE C—Water Fountain Survey**

Building	Location	Model #	Comments / Date of Analysis for Lead
35		OAS 15	NO MODEL # (COULDN'T SEE)

Source: \_\_\_\_\_

9.58-15

### Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

#### RCRA Screening Checklist

Does this facility generate waste or use chemicals?	Y <input checked="" type="radio"/> N <input type="radio"/>	If yes, conduct the following survey.
---	--	---------------------------------------

#### RCRA Checklist

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

# Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

## RCRA Checklist

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

### Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

#### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### RCRA Checklist

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

9.58-19

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### RCRA Checklist

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

General Comments:

9.58-20

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### Asbestos Screening Checklist

Does this facility contain ACBM?	(Y) N	If yes, conduct the following survey.
----------------------------------	-------	---------------------------------------

### Asbestos Checklist

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

Regulatory Guideline	Question	Response	Comments
<b>ADAPTED FROM TSCA ACBM IN SCHOOLS:</b>			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?  If no for this building or area note this conclusion in the comment section.	(Y) N	NO THERMAL SYSTEM INSULATION
	Is there any evidence of friable asbestos?	(Y) N	
	Is the asbestos removal properly managed? (See questions listed below)	Y / N	NO ASBESTOS REMOVAL If there is no asbestos removal, do not complete the following section.
<b>NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:</b>			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACBM during the removal.	Y / N	
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	Y / N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y / N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y / N	

9.58-22

### Environmental Appraisal Checklist

Building Name: .

Appraisers:

Date:

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

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

#### TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	<p>Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?</p> <p>If the answer is no, note .</p> <p>If the answer is yes, proceed with next section.</p>	Y / N	
	<p>Based on an inspection, are any of the materials or equipment potentially PCB contaminated?</p> <p>If no, note and stop here.</p> <p>If yes, note the location of the management unit, and the method of management, and proceed.</p>	Y / N	
40 CFR 761.65 (c) (5)	<p>Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?</p>	Y / N	
	<p>If yes, are auditable records maintained.</p>	Y / N	
40 CFR.30 (a) (1) (ix)	<p>Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?</p>	Y / N	
	<p>Are they visually inspected quarterly? If yes, are auditable records maintained?</p>	Y / N	

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### TSCA Checklist

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

9.58-24

### Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

#### TSCA Checklist

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

#### GENERAL COMMENTS:

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	Y/N	If yes, conduct the following survey.
---	-----	---------------------------------------

### Low-Level Waste and Transuranic Waste Checklist

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

9.58-25

### Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

#### Low-Level Waste and Transuranic Waste Checklist

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

9.58-26

## Environmental Assessment Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### Low-Level Waste and Transuranic Waste Checklist

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

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Low-Level Waste and Transuranic Waste Checklist

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

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

### Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

9.58-30

#### Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals? <span style="float: right;">*</span>	Y/N	If yes, conduct the following survey.
--	-----	---------------------------------------

#### Waste Minimization/Pollution Prevention Activities Checklist

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

BUILDING SHUTDOWN; NO CURRENT PROCESSES

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

\* Silver recovery unit was used when facility was in operation; (room 2)

## Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

### Waste Minimization/Pollution Prevention Activities Checklist

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

## Environmental Appraisal Checklist

Building Name: 35

Appraisers: TEAM 4

Date: 2/21/96

### Waste Minimization/Pollution Prevention Activities Checklist

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

9.58-33

9.58-34

### Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

#### Waste Minimization/Pollution Prevention Activities Checklist

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

### Environmental Appraisal Checklist

Building Name: 35

Appraisers: RAM Y

Date: 2/21/96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.58.6.2 Building Manager's Questionnaire**

## Building Manager's Questionnaire

Building Name: 35 Building Manager: R.A. Ward Phone: 3821 Date: 12-07-95  
Alternate: K. KOEHLER Phone: 48810

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

NONE

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

NONE

3. Are there any restricted areas? Yes  
Where are they?

No

4. Provide a physical description of the building.

This one-story building contains 2,500 ft<sup>2</sup>. Construction is concrete block with BUM roof (asphalt and metal). The building has no radiological or energetic materials contamination. There is asbestos in the thermal system insulation. Building was built in 1970.

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

5. Provide a drawing of the building.

Attached

6. What is the current building use?

<sup>was</sup> Building ~~is~~ <sup>was</sup> used for x-ray and eddy current nondestructive testing. The building ~~is~~ used as a control room for the californium-252, multiplier, (CFX) neutron radiography facility located in Building 59. The building is undergoing safe shutdown.

Source: Mound Buildings, 5-9-95

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

**DYE PENETRANT & HELIUM LEAK TESTING  
PERFORMED IN BUILDING**  
Source: Mound Buildings, 5-9-95

## Building Manager's Questionnaire

Building Name: 35 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: ~~Non-destructive testing~~ *The facility is shut down.*

How Wastes Are Generated:

In this building explosive components <sup>WERE</sup> ~~are~~ tested using such non-destructive tools as x-rays, eddy currents, and neutron radiography. Parts are not destroyed, and no loose explosive powder is present. If a tested explosive component ~~is~~ rejected, it ~~is~~ put in a container and returned to the manufacturing cost center for evaluation/disposal.

X-ray film <sup>was</sup> ~~is~~ processed here. A new Fuji film processor <sup>was</sup> ~~is being~~ installed. ~~Used developer and fixer will be collected in waste containers for pickup by Waste Management.~~

Contact:  
Phone #:

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

## Building Manager's Questionnaire

Building Name: 35    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

10. Does the building have air emission sources? No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
	2		Y / N	AUDEL AUFIX AOSTART				
			Y / N					
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

## Building Manager's Questionnaire

Building Name: 35 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

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

14. Does the building discharge to the storm sewer?  Yes  No  
 Where? ROOF DRAIN

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

16. Has an asbestos survey been conducted? Yes  
 What are the results? Yes

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

## Building Manager's Questionnaire

Building Name: 35    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? **NO**

Source: PCB ANNUAL DOCUMENT LOG

18. Has the building been identified as containing PCBs? **NO**

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

## Building Manager's Questionnaire

Building Name: 35    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures

Source: \_\_\_\_\_

21. Where do waste chemicals go?

~~DEVELOPER TO DRAIN~~  
~~FIXER TO WASTE MGMT. FOR SILVER RECOVERY~~  
 N/A

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

No

23. Where do excess janitorial supplies go?

~~BLDG #37~~

Source: \_\_\_\_\_

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

Chemical	Amount	Chemical	Amount

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 35 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

NONE

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / N			Y / N	Y / N

Source: \_\_\_\_\_

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

Materials	Amount

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 35    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.?     Yes     No
29. Is waste material stored in or around the building for more than 90 days?     Yes     No
30. Has the building been identified as a 90 day waste accumulation area?     Yes     No
31. Has any area in the building been identified as a satellite accumulation area?     Yes     No
32. Is mixed waste generated, stored, or disposed of from the building? Yes  No   
 Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 35    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes      No

Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 35    Building Manager: R.A. Ward    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

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

Source: \_\_\_\_\_

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

*DON'T KNOW*

## Building Manager's Questionnaire

Building Name: 35 Building Manager: R.A. Ward Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

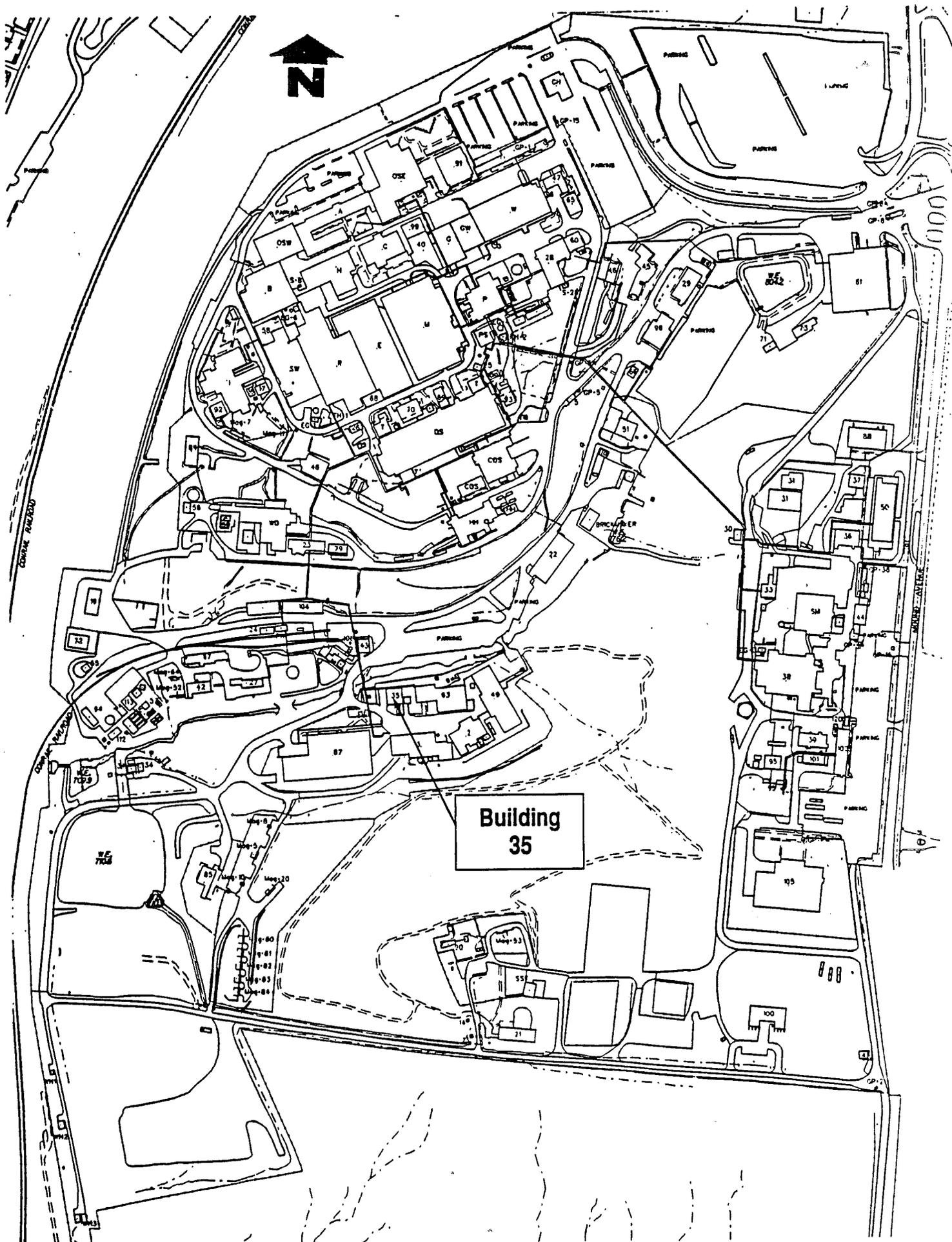
36. Is there a waste minimization program in the building? Yes  No   
Discuss your ideas about how to minimize waste.

37. Has a pollution prevention program been developed for the building? Yes  No

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.58.6.3 Location of Building 35**



SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92  
 9.58-53

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

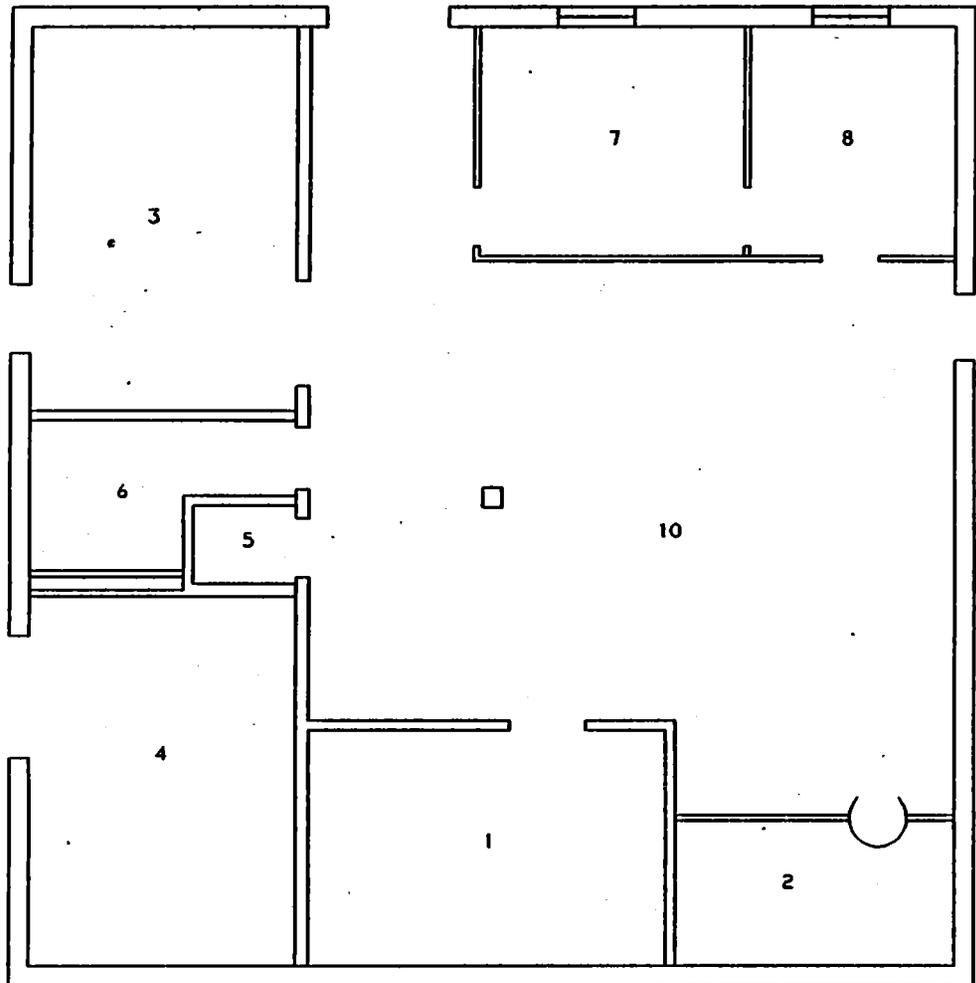
## **9.58.6.4 Floor Plans for Building 35**

ISS	DATE	REVISION	BY	CHK	DES	APP	REV
B	12/12/91	ASBUILT ISSUE					

UNCLASSIFIED

DERIVATIVE CLASSIFIER

*R. Myers*  
 S. Class. Anal. 2/20/96  
 (Title) (Date)



**BLDG #35  
 FIRST FLOOR  
 BLDG CODE:3035**

9.58-57

APPROVALS:	DATE:
SAFETY COMMITTEE REVIEWED:	
TECH. DESK:	

**NOT FOR PUBLIC DISSEMINATION**  
 MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.

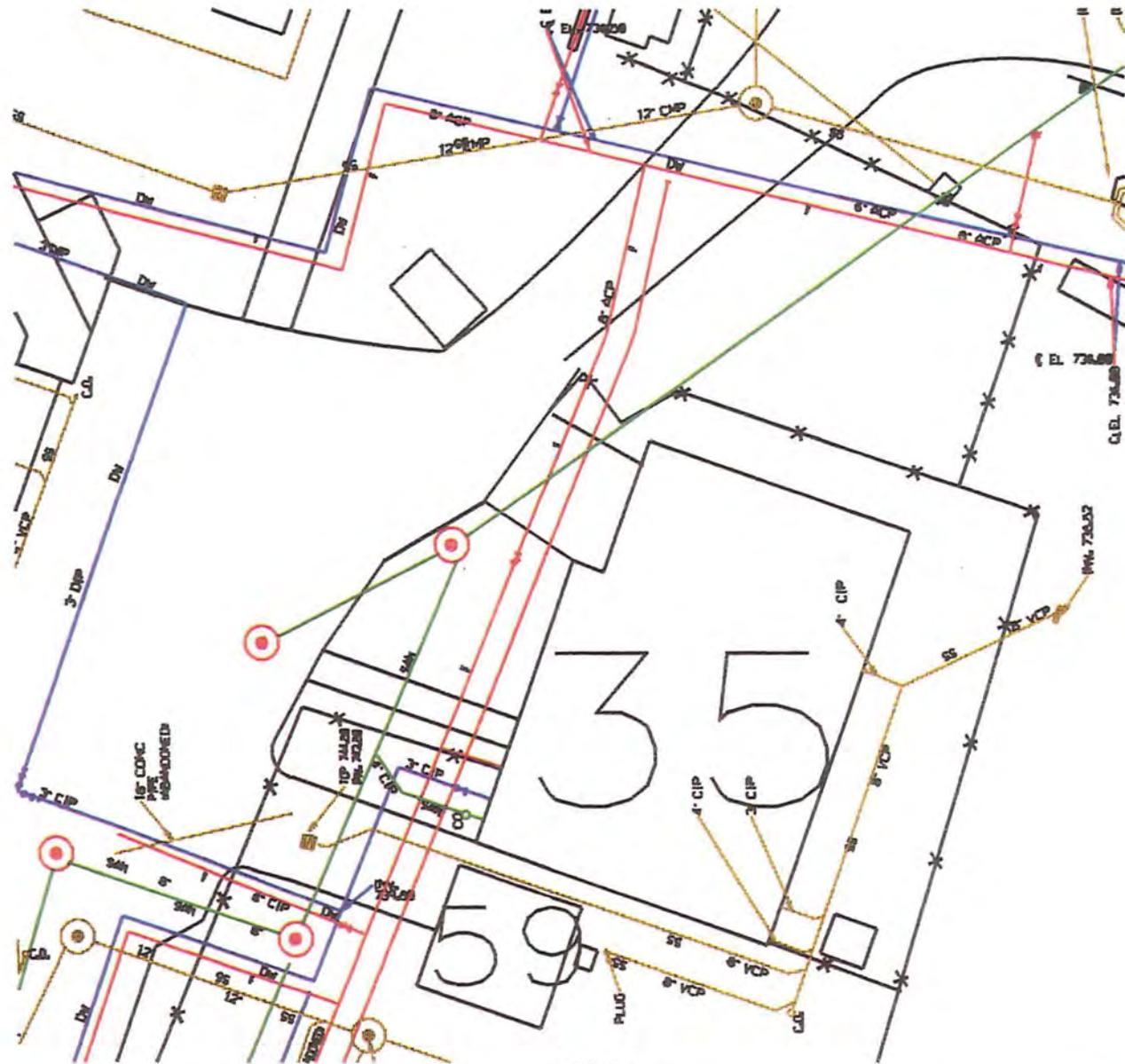
DESIGN OR		PROJECT		SHEET						TITLE		(U) TITLE CLASSIFICATION	
NO.	REV.	NO.	REV.	1	2	3	4	5	6	BLDG #35	FLOOR PLANS		
PART CLASSIFICATION				DRAWING CLASSIFICATION						SITE (Drawing Number)		JOB NUMBER	
				UCNI						FSC911246		12335	
DRAWING TYPE				PROJECT BLDG #				SCALE AS NOTED		SHEET 1 OF 1			
SFP				#35				14865					
STATUS				DATE				ORIGIN					
MO-REL-12/12/91								MO-BR3-V3.2					

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.58.6.5 Underground Utility Lines**

19-85'6



- FIRE
- POTABLE
- RAW
- SANITARY
- STORM
- RADIOLOGICAL



**E.G. & G. - MOUND**

UNDERGROUND WATER & WASTE LINES  
BLDG. 35

DATE: 5-14-96

**UNCLASSIFIED**

# **Environmental Appraisal of the Mound Plant**

## **9.58.6.6 Photographs**



Mound Plant Building 35

9.58-65



## **Environmental Appraisal of the Mound Plant**

### **9.59 BUILDING 36**

#### **9.59.1 Scope of Building 36 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 36 on February 26, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.59.6.1). The appraisers were accompanied by the building manager. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.59.6.2).

#### **9.59.2 Description of Building 36**

Building 36 is a one-story structure constructed of concrete block with a penthouse. The roof is a metal built-up membrane of asphalt. The building was constructed in 1968. Building 36 is located on what is known as the SM/PP hill as shown in Attachment 3 (Section 9.59.6.5). Adjacent buildings are Building 37 to the north, Building 50 to the east, Building 38 to the south, and Building 31 to the west. The building is serviced by central steam for heat, chilled water, and electrical service of 480V (*Mound Facility Physical Characterization*, 12-1-93).

Building 36 is used to support general purpose heat source testing operations. Operations conducted in the building are high-temperature bakeout of graphite modules and cleaning. Room 3 has been renovated and all that remains in it is a fumehood. Total area of Building 36 is 4,255-square-feet. Floor plans are presented as Attachment 4 (Section 9.59.6.4). No research, development or production activities using radiation or energetic materials have occurred in the building (*Mound Facility Physical Characterization*, 12-1-93).

#### **9.59.3 Summary of Findings**

Several concerns were identified during the walk-through and during the review of reference materials. The air emission database must be updated. There is an unidentified drum below Building 36 dock. There is an Environmental Protection Agency (EPA) listed water fountain suspected of lead contamination. Containers of chemicals need to be properly labeled, including gas cylinders.

## **Environmental Appraisal of the Mound Plant**

### **9.59.4 Observations**

#### **9.59.4.1 Air Emissions**

Three applications were filed on March 5, 1992 for a Permit to Operate (PTO). No PTOs were received from the Regional Air Pollution Control Agency (RAPCA). The applications covered EF-1 and EF-2 in Room 2 and EF-3 in Room 3. Operations and emissions in Room 2 are the same as those listed in Mound's air emission database, but operations in Room 3 are different since it was renovated. The fumehood in Room 3 is currently being used as a staging area for materials to be picked up by Waste Management. Emissions from vacuum pumps are not listed in the air emission database. There are no fuel-burning units in the building. There was no visual evidence of fugitive dust.

#### **9.4.2.2 Water 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.

##### **9.59.4.2.1 Sanitary Wastewater**

The building has sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.59.6.5), the building is serviced by a sanitary line. Expected discharges to the sanitary system are by sinks and toilets. Confirmation of drainage of sanitary waste into sanitary conveyance lines was not within the scope of this effort, therefore, dye tests or smoke tests were not conducted. There is no monitoring of building effluent. Based on current operations identified by the process owner, effluent from Building 36 should not deviate from that expected by the sanitary treatment plant manager. No chemicals would be expected to have entered the sanitary system as there are no floor drains in the laboratories.

##### **9.59.4.2.2 Storm Wastewater**

The building is also serviced by storm drains according to Attachment 5 (Section 9.59.6.5). Roof drains discharge to the storm sewer according to the BMQ, Attachment 2 (Section 9.59.6.2). Exterior grates and drains were not tested to confirm that they connect to the storm drainage

## **Environmental Appraisal of the Mound Plant**

system. Inspection showed no sign of odors, colored discharges, or scarring which would indicate that any materials other than storm water have entered the storm drainage system

### **9.59.4.2.3 Process Wastewater**

This building does not create or discharge radioactive wastewater to the WD facility. According to Attachment 5 (Section 9.59.6.5), no radioactive wastewater lines service Building 36.

### **9.59.4.2.4 Chemicals**

Chemicals in Building 36 were evaluated against Table V of Appendix D in 40 CFR 122 and none are listed Clean Water Act (CWA) pollutants. Chemical storage and handling procedures are in place for proper disposal of chemicals. A gallon of Dowtherm SR-1 (ethylene glycol) was spilled in Building 36, but none entered the storm or sanitary drains. No floor drains were seen in areas of operations. There is no evidence that chemicals have entered the storm or sanitary drains.

### **9.59.4.3 Potable and Service Water**

Potable water is supplied to the building. Backflow prevention devices are installed at all visible points of potential cross-connections. Potable and service water lines are uniquely marked and easily identified. The bottled water fountain in the building is not an EPA-listed model suspected of lead contamination, but the building water fountain is a listed model suspected of lead contamination.

### **9.59.4.4 Chemical Storage and Hazardous Materials**

Chemicals used in Building 36 were attached to the BMQ in Attachment (Section 9.59.6.2). There was no evidence of chemical storage incompatibility. Material Safety Data Sheets (MSDSs) are available in the building and were reviewed for completeness. There is a flammable storage cabinet which meets standard National Fire Protection Association (NFPA) requirements.

Several containers of tungsten molybdenum metals and nickel particle coolant used as simulate fuels were stored in a cabinet. These containers did not have a chemical inventory label attached. Lab personnel did not know why these items were there or how they got there. The materials are not used in any ongoing processes in the building. A bag containing Dowtherm SR-1 coolant was not labeled as such. The coolant was collected in a bag as part of a 1-gallon spill.

Compressed gas cylinders are stored on the north side of building. Full and empty storage bay areas were properly marked with posted signs. Some full/empty tags were not attached to the cylinders.

## **Environmental Appraisal of the Mound Plant**

The building is equipped with appropriate emergency response equipment such as eyewashes, safety showers, and fire extinguishers. Halon 1211 is the prevalent fire extinguisher. Inspection tags were present and current. There is an Emergency Evacuation Plan, and signs are posted in the building.

There is an aboveground storage tank outside Building 36 containing liquid nitrogen. No secondary containment is provided or required. The tank is owned and maintained by Airco, a contractor. This tank supports operations in Building 36. There are no sumps, separators, or catch basins, in or around the building. There are no underground storage tanks associated with Building 36.

The building was tested and does contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There was no visual evidence of friable asbestos. The areas containing asbestos material were identified and properly marked indicating the presence of 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).

### **9.59.4.5 Solid, Hazardous, and Chemical Wastes**

The solid waste generated in the building results from offices and laboratory activities. Solid wastes are removed by janitorial personnel to a local collection point, then shipped offsite to a local landfill by a service contractor. The disposal contract is maintained by Waste Management. There is no visual evidence that hazardous materials or wastes are mixed with solid waste streams.

Hazardous wastes generated by the operations in Building 36 are stored in solvent cans as a Satellite Accumulation Area (SAA) located inside the building. The SAA procedures and appearance conform to RCRA requirements. Hazardous wastes are characterized prior to being collected by the Waste Management Group. Hazardous wastes are transported and stored in Building 72 for ultimate disposal. There is no onsite treatment of waste. Waste disposal manifests and Certificates of Disposal are maintained by the EG&G Waste Management Group.

There was an unidentified 55-gallon drum outside of Building 36 below the west dock. Contents of the drum are unknown.

### **9.59.4.6 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. The use of Freon has been discontinued in the cleaning operations in Building 36.

## **Environmental Appraisal of the Mound Plant**

### **9.59.5 Findings and Recommendations**

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.59.6.6). The environmental appraisal of Building 36 indicates that the following action items, in priority order, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

- 36-1 Unidentified 55-gallon drum below the Building 36 west dock needs to be identified as to its contents and removed for proper management.
- 36-2 An EPA-listed water fountain suspected of lead contamination needs to be removed and replaced.
- 36-3 Secondary containers of chemicals need to be labeled. The bag of Dowtherm SR-1 should be properly, and promptly, disposed of.
- 36-4 Full and empty gas cylinders shall be stored separately and in a manner that minimizes handling. All gas cylinders shall carry a legible label or marking identifying their contents (CGA P-1).
- 36-5 Update air emissions database and air permit application for Building 36. RAPCA should be notified of the change in status of the fumehood in Room 3 (OAC 3745-31).

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.59.6.1 Environmental Appraisal Checklist**

# ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 36

Appraisers:

Ronald Paulick  
Name Discipline

Billie J. Williams  
Name Discipline

Phillip Warner  
Name Discipline

\_\_\_\_\_  
Name Discipline

Building Manager:

Billie for P. P. Malloy

Process Manager:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date:

2-26-96

# ENVIRONMENTAL APPRAISAL CHECKLIST

## Table of Contents

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

## Environmental Appraisal Checklist

Building Name: 36

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

### Clean Water Act (CWA) Screening Checklist

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

### CWA Checklist

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

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: *Publick/Adkins/Parker* Date: *2-26-96*

#### Clean Air Act (CAA) Screening Checklist

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

#### CAA Checklist

Regulatory Guideline	Question	Response	Comments
	Are there existing air permits or applications applicable to the building?	Y/N	<i>exempt. in Rm 2</i>
OAC 3745-31,35	If yes, are the terms and conditions of the permit or the information included on the application (see air emissions database) being followed? Note any differences and update the air emissions database.	Y/N	<i>Rm 3 hood not being used for as intended.</i>
OAC 3745-31	Are there any sources that are not included in the air emissions database? If so, note the room, hood number, active or not, POC, and applicable air emission database information on Table B.	Y/N	<i>Vacuum pumps, may vent to exhaust or outside</i>
OAC 3745-31-03	Are there sources which are lab equipment of lab fumeheads used exclusively for chemical or physical analyses and bench scale lab equipment? These sources do not require a permit. However, the air emissions database should be updated.	Y/N	
	Has there been any release of air contaminants from this building?	Y/N	



9.59-12

**Environmental Appraisal Checklist**

Building Name: 36

Appraisers: Paulsen / Adams / Parker Date: 2-26-96

CAA Checklist

*Page intentionally left blank* RP 3/8/96

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

TABLE A									
Process Source	Room Number	Hood Number	In Database	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Hours/Yr. Operation	Air Emissions
Vac pumps	004 005		Y/N	Y/N					
	003		Y/N	Y/N?	Not being used as intended. Room was remodeled.				
			Y/N	Y/N					
			Y/N	Y/N					
			Y/N	Y/N					

Source: \_\_\_\_\_

9.59-13

9.59-14

## Environmental Appraisal Checklist

Building Name: 36

Appraisers: *Paolick/Adams/Parner*

Date: 2-26-96

### Hazardous Materials (HM) Screening Checklist

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

### HM Checklist

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

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: *Pachick/Adkins/Parker* Date: 2-26-96

#### HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	(Y) N	<i>N/A/NO 12 B fire extinguishers</i>
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	(Y) N	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	(Y) N	
CGA P-1 3.5.3	Full and empty containers should be stored separately with the storage layout planned so that containers comprising of old stock can be removed first with a minimum handling of other containers.	(Y) N	
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	(Y) N	
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	(Y) N	
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	(Y) N	
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y N	<i>N/A No Bulk Storage of O2</i>
	Is there a sign posted in each work area regarding emergency egress and emergency response action?	(Y) N	
	Is there an emergency response plan available?	(Y) N	

9.59-15

**Environmental Appraisal Checklist**

Building Name: 36

Appraisers: Paulick/Adkins/Parker

Date: 2-26-96

HM Checklist

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

**Above Ground Storage Tanks Inventory**

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
<u>36</u>		<u>Nitrogen</u>		(Y)N	Y(N)	Y(N)	<del>Y/N</del>
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N

Source: \_\_\_\_\_



9.59-16

## Environmental Appraisal Checklist

Building Name: *36*

Appraisers: *Raulick/Adkins/Parker*

Date: *2-26-96*

### Safe Drinking Water Act (SDWA) Screening Checklist

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

#### SDWA Checklist

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

**TABLE C—Water Fountain Survey**

Building	Location	Model #	Comments / Date of Analysis for Lead
<i>36</i>	<i>Room 1</i>	<i>WM8A</i>	<i>Halsey Taylor - EPA LISTED.</i>
<i>36</i>	<i>Room 1</i>	<i>BLF1AHS-100</i>	<i>OASIS - Bottled Water</i> <span style="float: right;"><i>DL</i></span>

Source: \_\_\_\_\_

9.59-17

9.59-18

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: Paulick/Adkins/Parker

Date: 2-26-96

#### RCRA Screening Checklist

Does this facility generate waste or use chemicals?	<input checked="" type="radio"/> Y <input type="radio"/> N	If yes, conduct the following survey.
---	--	---------------------------------------

#### RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 36

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

### RCRA Checklist

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

9.59-19

**Environmental Appraisal Checklist**

Building Name: 36

Appraisers: *Louick/Adkins/Parker*

Date: 2-26-96

RCRA Checklist

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

## Environmental Appraisal Checklist

Building Name: 36

Appraisers: *Poubick/Adams/Parker* Date: 2-26-96

### RCRA Checklist

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

9.59-21

**Environmental Appraisal Checklist**

Building Name: 36

Appraisers: *Sauhick/Adkins/Parker*

Date: 2-26-96

RCRA Checklist

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

General Comments:



9.59-22

## Environmental Appraisal Checklist

Building Name: 36

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

### Asbestos Screening Checklist

Does this facility contain ACM?	<u>Y</u> /N	If yes, conduct the following survey.
---------------------------------	-------------	---------------------------------------

### Asbestos Checklist

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

Regulatory Guideline	Question	Response	Comments
<b>ADAPTED FROM TSCA ACM IN SCHOOLS:</b>			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?  If no for this building or area note this conclusion in the comment section.  Is there any evidence of friable asbestos?  Is the asbestos removal properly managed? (See questions listed below)	<u>Y</u> /N  Y/ <u>N</u>  Y/N	If there is <u>no asbestos removal</u> , do not complete the following section.
<b>NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:</b>			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACM during the removal.	Y/N	/
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	Y/N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y/N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y/N	

9-59-23

9.59-24

**Environmental Appraisal Checklist**

Building Name: 36

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

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

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

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ?  If the answer is no, note .  If the answer is yes, proceed with next section.	Y / <u>N</u>	<p>No PCB's</p>
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated?  If no, note and stop here.  If yes, note the location of the management unit, and the method of management, and proceed..	Y / N	
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days?  If yes, are auditable records maintained.	Y / N Y / N	
40 CFR.30 (a) (1) (ix)	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?  Are they visually inspected quarterly? If yes, are auditable records maintained?	Y / N Y / N	

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: Paulick/Adkins/Parker

Date: 2-26-96

#### TSCA Checklist

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

9.59-25

9.59-26

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: Paulick/Adkins/Parker

Date: 2-26-96

#### TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitors and PCB-containing electrical equipment are allowed to be stored outside of PCB storage areas, on pallets if stored outside, with containment for 10 percent of the volume of the equipment. Do all PCB's stored in this configuration conform with this requirement?	Y / N	No PCB's
40 CFR 761.45 and .65	Are all PCB storage areas marked with a large PCB mark as described in 40 CFR 761.45 (a)?	Y / N	↓
40 CFR 761.65 (c) (5)	Have all leaking PCB articles and containers been transferred to non-leaking containers?	Y / N	
40 CFR 761.65 (c) (6)	Do all PCB storage containers for the storage of liquid and non-liquid PCB's comply with DOT shipping container specifications?	Y / N	

#### GENERAL COMMENTS:

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: *Smith/Adkins/Parke* Date: 2-20-96

#### Low-Level Waste and Transuranic Waste Screening Checklist

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

#### Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
<b>Low-Level Waste</b>			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ?  If the answer is no, note.  If the answer is yes, proceed with next section.	Y <input checked="" type="radio"/> N	<i>NO RAD WASTE</i>
DOE Order 5820.2A Chapter III.	Are any of the materials noted by inspection LLW?  If no, The audit would stop here, because there are no LLW.  If yes, note the location of the management unit, and the method of management, and proceed with the section below.	Y / N	<div style="border-left: 1px solid black; border-right: 1px solid black; height: 300px; margin: 0 auto;"></div>
DOE Order 5820.2A Chapter III, 3.a.	Have the storage configurations in use in this area been taken into account for keeping external exposures to the general public below 25 mrem/yr?	Y / N	
	Is the waste stored in a configuration that protects ground-water resources?	Y / N	
DOE Order 5820.2A Chapter III, 3.b.	Has monitoring been conducted in this area in accordance with DOE Order 5820.2A in order to evaluate the area against the performance standard?	Y / N	
	Based on field data, does the monitoring conducted in this area conform to the performance standard?	Y / N	

9.59-27

**Environmental Appraisal Checklist**

Building Name: *36*

Appraisers: *Paulick/Adkins/Parker*

Date: *2-26-96*

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A Chapter III, 3.d.	Based on field data, is the characterization of the materials in this area sufficient to assure proper segregation to assure proper segregation, treatment, storage, and disposal?	Y / N	<i>No Rad Waste</i>
	Based on field data does the characterization as documented at the time of generation of the waste ensure that the actual physical and chemical characteristics, and major radionuclide content of this material are recorded and known at all stages of the waste management process?	Y / N	
	Do characterization data include the following:		
	Physical and chemical characteristics of the waste?	Y / N	
	Volume of the waste (including solidification and absorbent material)?	Y / N	
	Weight of the waste (including solidification and absorbent material)?	Y / N	
	Major radionuclides and their concentrations?	Y / N	
	Packaging date, package weight, external volume?	Y / N	
	How were the concentration of radionuclides determined? Direct methods?	_____	
How were the concentrations of radionuclides determined? Indirect methods?	_____		
DOE Order 5820.2A Chapter III, 3.h	Is the storage configuration in long term storage sufficient to meet the performance standard?	Y / N	
	Are records maintained at the facility enabling this waste to be traced from its origin?	Y / N	

*36*

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

#### Low-Level Waste and Transuranic Waste Checklist

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

9.59-29

9.59-30

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: *Fauchock/Adkins/Parker*

Date: 2-26-96

#### Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A, Chapter II, 3.b	Has the TRU waste been assayed or otherwise evaluated to determine its radioactive content prior to storage?	Y/N	<i>No TRU Waste</i> ↓
	Has the TRU waste been characterized or otherwise evaluated to determine if hazardous waste is present?	Y/N	
	Has classified TRU waste been treated to destroy the classified characteristics?	Y/N	
DOE Order 5820.2A, Chapter II 3.d	Has all newly generated TRU waste been packaged in non-combustible packaging that meets DOT requirements?	Y/N	
	Have all Type A TRU waste packages been equipped with a method to prevent pressure buildup?	Y/N	
	Have all TRU packages been marked, labeled and sealed in accordance with 40 CFR 261 Subpart C and 49 CFR 172 Subparts D, E and 49 CFR 173 Subpart I?	Y/N	

**Environmental Appraisal Checklist**

Building Name: 36

Appraisers: *Roudeck/Adkins/Parker* Date: 2-26-96

Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

9.59-31

9.59-32

**Environmental Appraisal Checklist**

Building Name: 36

Appraisers: Paulick/Adkins/Parker

Date: 2-26-96

**Waste Minimization/Pollution Prevention Activities Screening Checklist**

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

**Waste Minimization/Pollution Prevention Activities Checklist**

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

### Environmental Appraisal Checklist

Building Name: *36*

Appraisers: *Paulick/Adkins/Arker*

Date: *2-26-96*

#### Waste Minimization/Pollution Prevention Activities Checklist

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

9.59-33

9.59-34

**Environmental Appraisal Checklist**

Building Name: *36*

Appraisers: *Faulkner/Adkins/Parker*

Date: *2-26-96*

Waste Minimization/Pollution Prevention Activities Checklist

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

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

#### Waste Minimization/Pollution Prevention Activities Checklist

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

9.59-35

9.59-36

**Environmental Appraisal Checklist**

Building Name: 36

Appraisers: Paubek/Parker/Adkins

Date: 2-26-96

Waste Minimization/Pollution Prevention Activities Checklist

*Page intentionally left blank*

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

### Environmental Appraisal Checklist

Building Name: 36

Appraisers: Pauckel/Adkins/Parker

Date: 2-26-96

#### Waste Minimization/Pollution Prevention Activities Checklist

*Page intentionally left blank*

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

9.59-37

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.59.6.2 Building Manager's Questionnaire**

02/26/96  
FHM

### Building Manager's Questionnaire

Building Name: 36 Building Manager: P.C. Mollov Phone: 3869 Date: 12-07-95  
Alternate: T.J. Gussner Phone: 5568

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

*None*

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

*Some areas safety glasses req'd.*

3. Are there any restricted areas?  Yes  No

Where are they?

*Clean-room 80-36 RM 2 access  
with 80 operations supervisor permission.*

4. Provide a physical description of the building.

Building 36 was built in 1968 and contains 4,255 ft<sup>2</sup>. It is constructed of concrete blocks with a BUM roof (asphalt). HVAC systems are central steam and chilled water. The one-story building has asbestos in the thermal insulation systems, but there is no contamination from radiological or energetic materials.

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

5. Provide a drawing of the building.

Attached.

6. What is the current building use?

The building supports the GPHS testing operations. <sup>*Two*</sup> ~~Three~~ high-temperature bake-out ovens, and a ~~long term temperature facility~~ ~~operate continuously~~. The building also houses a ~~degreasing~~ <sup>*Cleaning*</sup> facility (~~Clean-room~~ <sup>*clean room*</sup>)

Source: Mound Buildings, 5-9-95

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

Source: Mound Buildings, 5-9-95

# Building Manager's Questionnaire

Building Name: 36 Building Manager: P.C. Molloy Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process(es) Housed: Cleaning and baking heat source components, electronics shop

### How Wastes Are Generated:

In one portion of this building heat source components are baked in high-vacuum furnaces. No hazardous wastes are generated.

In another portion of the building, heat source components are cleaned. Some parts are cleaned by spraying them with Freon. The Freon usually evaporates and goes up the stack. Others are wiped clean with alcohol. The alcohol evaporates, and no liquid waste is generated. In some cases parts are cleaned in ultrasonic baths of methylene chloride. The methylene chloride is poured into waste containers and picked up by Waste Management.

*Preventive maintenance of vacuum pumps generates waste vac*  
~~The electronics shop does not generate any hazardous waste~~ *pump oil.*  
*Ethylene Glycol in existing chilled water system potential waste.*

Contact:  
Phone #:

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

## Building Manager's Questionnaire

Building Name: 36 Building Manager: P.C. Molloy Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

*All equipment in RM 4 & 5 has been removed.  
 Future plans include new equipment for RM 5.*

10. Does the building have air emission sources? Yes No

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
RTG Assembly	002	3600 20002	Y	Acetone (Voc) Ethanol PF-5052 (perfluora) Freon (113) Argon		.02 .076 .01 .001	416 158.08 208 2.08	
Safe Shutdown	003	3600 30001	Y	<i>Staging for sealed waste chemicals awaiting W.M. pickup.</i>		3.29 .001		
RTG Assembly	002	3600 20001	Y	Ethanol Freon <del>113</del> PF 5052		.076 .094	158.08 195.52	
Vac. Pumps	004 005		<u>Y</u> / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

## Building Manager's Questionnaire

Building Name: 36 Building Manager: P.C. Molloy Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Process Source	Emissions	Control Equipment	Functioning
			Y / N
			Y / N
			Y / N
			Y / N
			Y / N

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

13. Does the building have potable water?  Yes No

14. Does the building discharge to the storm sewer?  Yes No  
*Roof conduits*

15. Does the building discharge to the sanitary sewer?  Yes No  
*Restrooms.*

16. Has an asbestos survey been conducted? Yes  
 What are the results? Yes

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

## Building Manager's Questionnaire

Building Name: 36    Building Manager: P.C. Molloy    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

17. Does the building contain transformers or capacitors? ~~no~~ **yes**

Source: PCB ANNUAL DOCUMENT LOG

18. Has the building been identified as containing PCBs? **NO**

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
DUO SEAL PUMP OIL	L	5 GA
1 A Cylinder Argon / Hydrogen	G	(20 EA) estimated (1A)
1 A Cylinders Argon	G	Buy 2 instead, 16.5T as 6.6L
Ducite SC-1008		
ACTREL 1171L		

Source: Chemical Inventory 1994

ethyl alcohol

PF 5052

Dowtherm SR-1

See HAZ MAT #27 on pg 7.

## Building Manager's Questionnaire

Building Name: 36    Building Manager: P.C. Mollov    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

Chemical	Amount	Clean-up Measures
<i>Ethylene Glycol</i>	<i>~ 1 gal</i>	<i>Sub-all absorbent &amp; soap water mop &amp; floor up</i>
<i>- Dowtherm 512-1</i>		

Source: \_\_\_\_\_

21. Where do waste chemicals go?

*Transfer excess to waste incinerator.*

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

*General restroom / floor cleaning supplies  
(inside 80)*

23. Where do excess janitorial supplies go?

*Transfer excess to waste incinerator.*

Source: \_\_\_\_\_

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

Chemical	Amount	Chemical	Amount

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 36 Building Manager: P.C. Molloy Phone: \_\_\_\_\_ Date: 12-07-95  
 Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
<del>7440-37-1</del>	<del>Argon</del>	<del>01C</del>		<del>Y/N</del>	
<del>7440-37-1</del>	<del>Argon</del>	<del>01C</del>		<del>Y/N</del>	
	<u>BULK LIQ(N)</u>	<u>CK.</u>		<u>Y/N</u>	<u>Outside</u>

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

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

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / N			Y / N	Y / N

Source: \_\_\_\_\_

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

Materials	Amount
Actrel 1171	31.1
Actrel 1171	24.1
Actrel 1171	16.1
Actrel 1171 Cleaner	32.9
Actrel 1171L	33.3
Actrell	24.3
Alumina	7.9
Aluminum Silicate	8.2
Ascorbic Acid	1.0
Calcium Carbonate	2.1
Calcium Chloride	1.2
Calcium Sulfite	3.5
Carbon	0.2
Colloidal Silica Gel	1.4
Dowtherm Antifreeze Waste	276.0
Durite SC-1008	17.2
Durite SC-1008	17.2

## Building Manager's Questionnaire

Building Name: 36    Building Manager: P.C. Molloy    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

Materials	Amount
Durite SC-1008	20.9
Durite, Graphite Mix	3.3
Ethanol	23.4
Ethanol	19.3
Ethanol	28.3
Ethyl Acetate	33.1
Ethyl Alcohol	16.2
Ethyl Alcohol	7.0
Ethylene Glycol, Water Waste	20.2
Ethylene Glycol, Water Waste	20.0
Ferric Nitrate	1.0
Freon	20.0
Freon	25.0
Freon	45.8
Freon	9.7
Freon TF	9.0
Hydrofluoric Acid	0.7
Insta Gel XF	44.6
Mercury Thermometers	0.1
Mercury Thermometers	2.2
Nitric Acid	14.7
Oil Waste	412.5
Oil Waste	464.5
Oil Waste, Hydraulic Oil	252.0
Performance Fluid PF-5052	30.7
Potassium Carbonate	1.7
Potassium Hydroxide	0.7
Sulfamic Acid	20.8
Trichloroethane	0.5

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

*- New chemical inventory was recently completed. (SFC E. Howell) 02/26/96.*

## Building Manager's Questionnaire

Building Name: 36    Building Manager: P.C. Molloy    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.?    Yes    No
29. Is waste material stored in or around the building for more than 90 days?    Yes    No
30. Has the building been identified as a 90 day waste accumulation area?    Yes    No
31. Has any area in the building been identified as a satellite accumulation area?    Yes    No
32. Is mixed waste generated, stored, or disposed of from the building? Yes No  
 Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 36    Building Manager: P.C. Molloy    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

33. Is TRU radioactive waste generated, stored, or disposed of from the building?

Yes      No

Where are logs found?

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

Source: \_\_\_\_\_

## Building Manager's Questionnaire

Building Name: 36    Building Manager: P.C. Mollov    Phone: \_\_\_\_\_    Date: 12-07-95  
 Alternate: \_\_\_\_\_    Phone: \_\_\_\_\_

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

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

Source: \_\_\_\_\_

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

# Building Manager's Questionnaire

Building Name: 36 Building Manager: P.C. Mollov Phone: \_\_\_\_\_ Date: 12-07-95  
Alternate: \_\_\_\_\_ Phone: \_\_\_\_\_

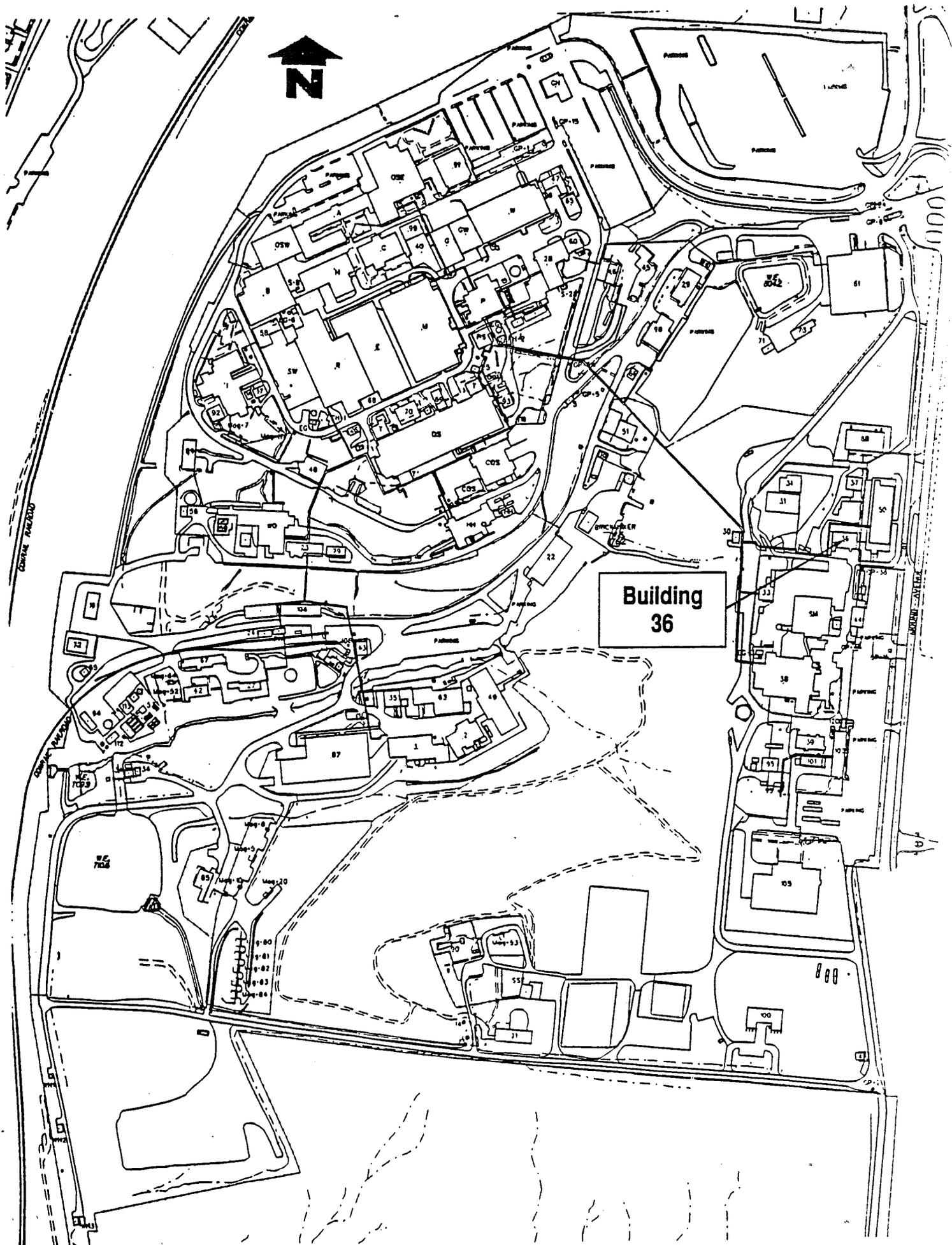
36. Is there a waste minimization program in the building?  Yes  No  
Discuss your ideas about how to minimize waste.

*> presently reducing excess equipment/materials  
from 80.*

37. Has a pollution prevention program been developed for the building? Yes  No

# **Environmental Appraisal of the Mound Plant**

## **9.59.6.3 Location of Building 36**



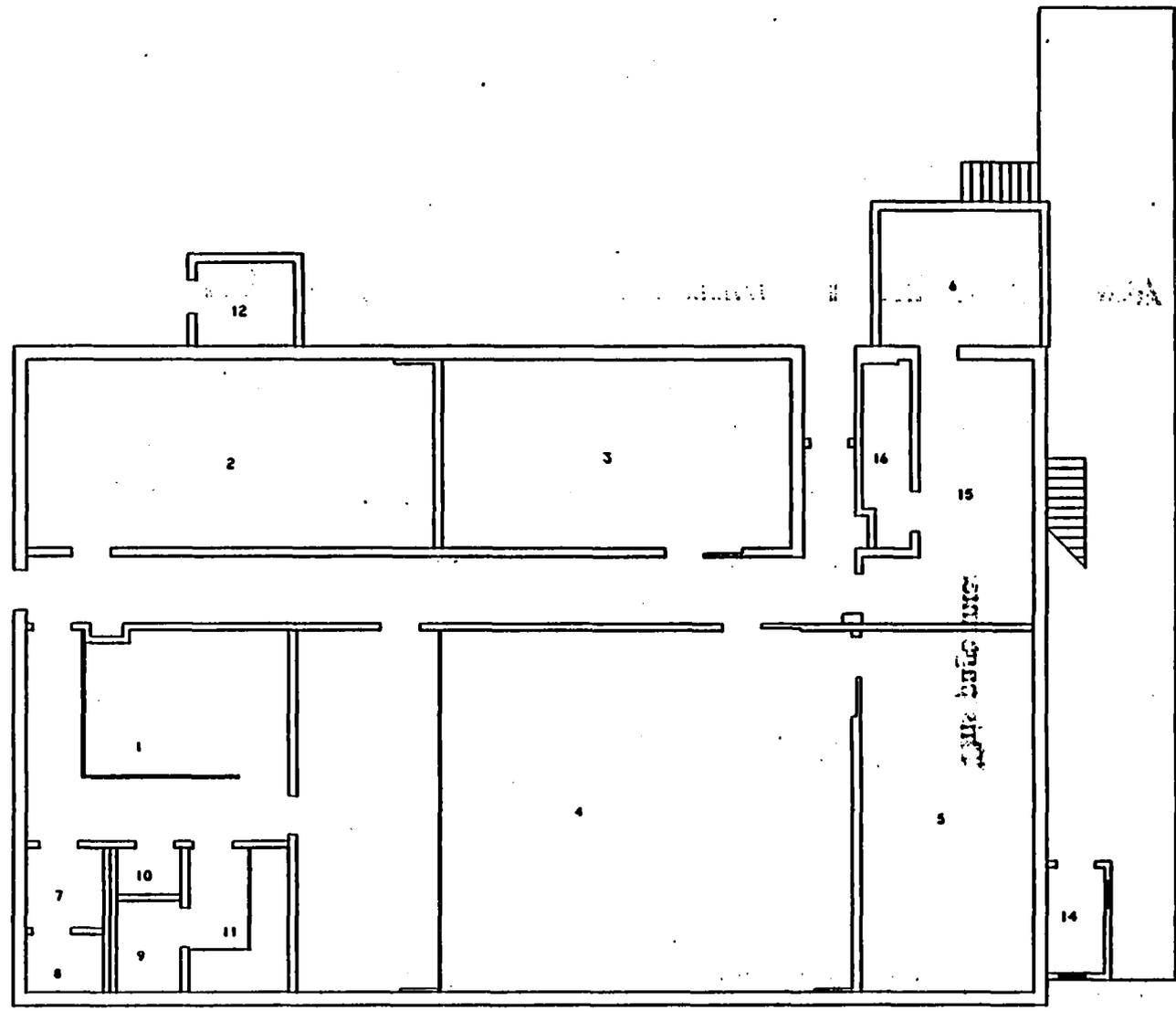
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.59.6.4 Floor Plans for Building 36**

NO.	DATE	REVISION	BY	CHK	CHK	CHK	APVD	BY
0	12/12/91	ASBUILT ISSUE						



DERIVATIVE CLASSIFIER

*[Signature]*  
 Sr. Class. Anal. 2/20/96  
 (Title) (Date)



**BLDG #36**  
**FIRST FLOOR**  
**BLDG CODE:3036**

**NOT FOR PUBLIC DISSEMINATION**  
 MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
TECH. REP.	
DR. PER.	
TRACOC	
TRACOC	
DRAC	

ISSUED	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION
ISSUED	0	0					BLDG #36	
ISSUED							FLOOR PLANS	
ISSUED							ORIGIN	ORIGIN
ISSUED							C	FSC911247
ISSUED							NO. 12335	
ISSUED							DRG TYPE	SFP
ISSUED							FROM	BLDG #36
ISSUED							CASE	14845
ISSUED							SCALE	AS NOTED
ISSUED							SHEET	1 OF 2
ISSUED							STATUS	NO-REL-12/12/91
ISSUED							ORIGIN	MO-BR3-V3.2

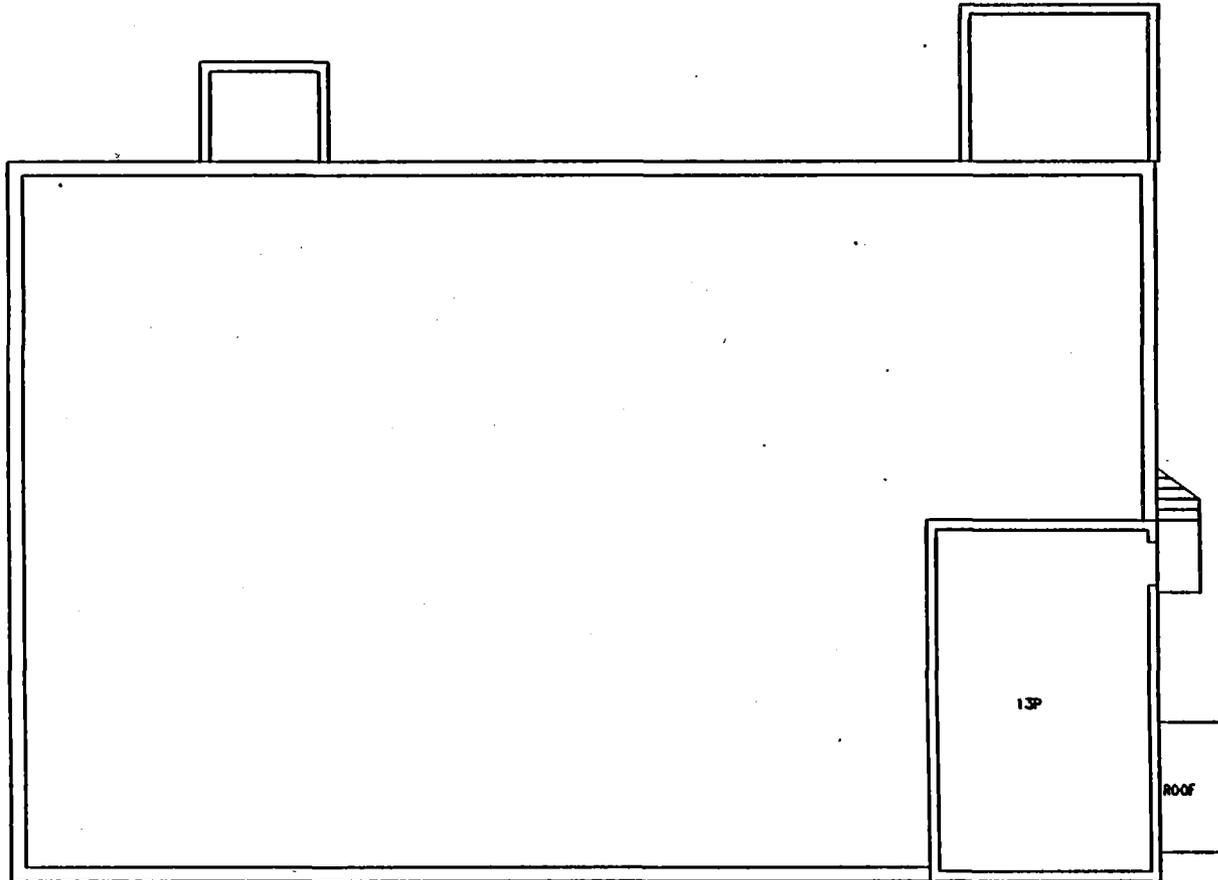
9.59-59

**This page intentionally left blank.**

UNCLASSIFIED

DERIVATIVE CLASSIFIER

*R. Myers*  
in am  
*M. Class* *Ornel* *2/20/96*  
(Title) (Date)



**BLDG #36  
PENTHOUSE  
BLDG CODE:3036**

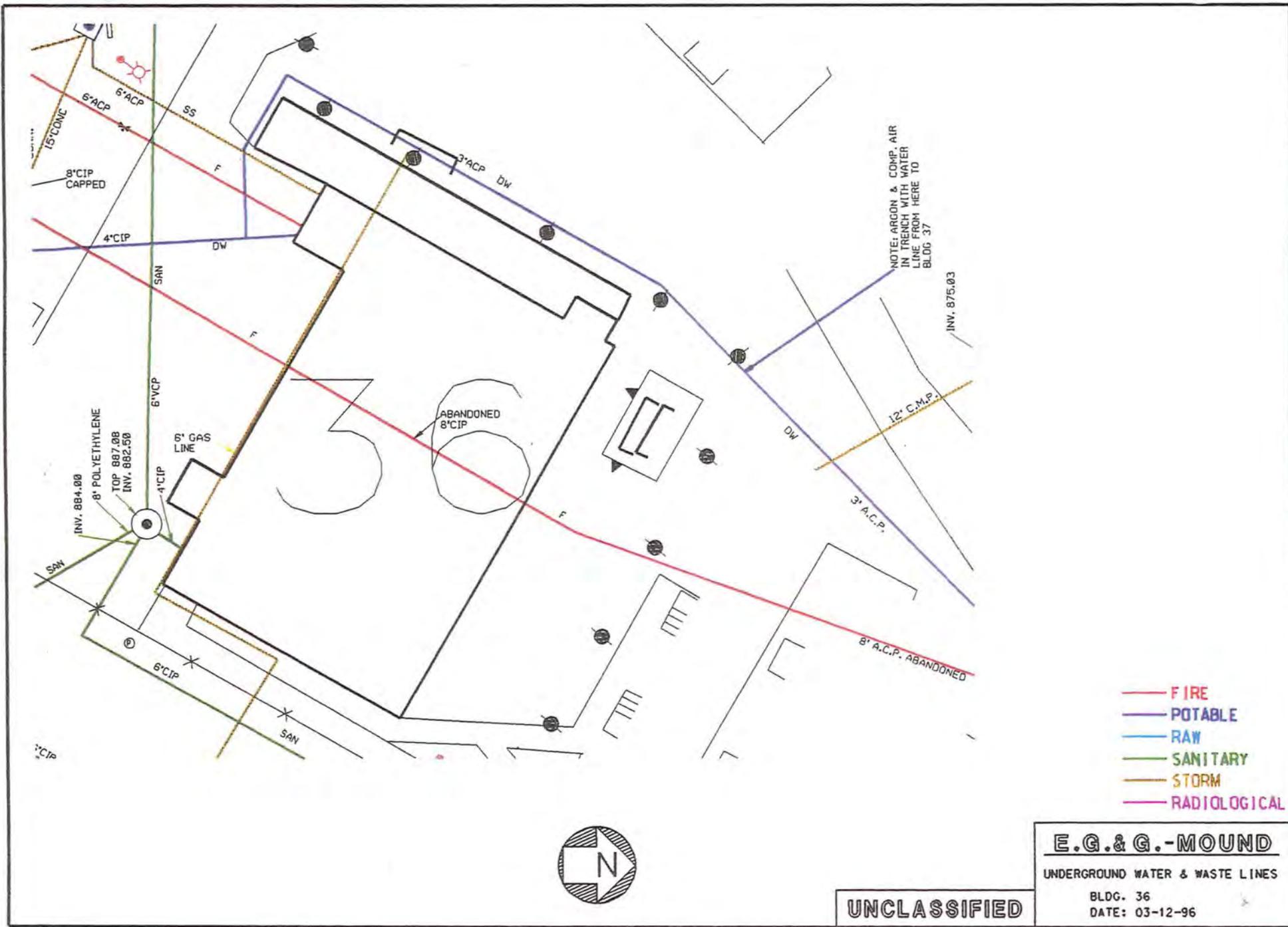
NOT FOR PUBLIC DISSEMINATION		CHANGE NUMBER	JOB NUMBER
MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.		FSC911247	12335
		CLASSIFICATION	
		UNCL	
SIZE	DATE	SCALE	AS NOTED
C	1/4/85		
	FOUR 8		SHEET 2
STANDARD MD-REL-12/12/91			

9.59-61

**This page intentionally left blank.**

# **Environmental Appraisal of the Mound Plant**

## **9.59.6.5 Underground Utility Lines**



NOTE: ARGON & COMP. AIR  
IN TRENCH WITH WATER  
LINE FROM HERE TO  
BLDG 37

INV. 875.03

12' C.M.P.

3' A.C.P.

8' A.C.P. ABANDONED

- FIRE
- POTABLE
- RAW
- SANITARY
- STORM
- RADIOLOGICAL



**E.G.&G.-MOUND**

UNDERGROUND WATER & WASTE LINES

BLDG. 36

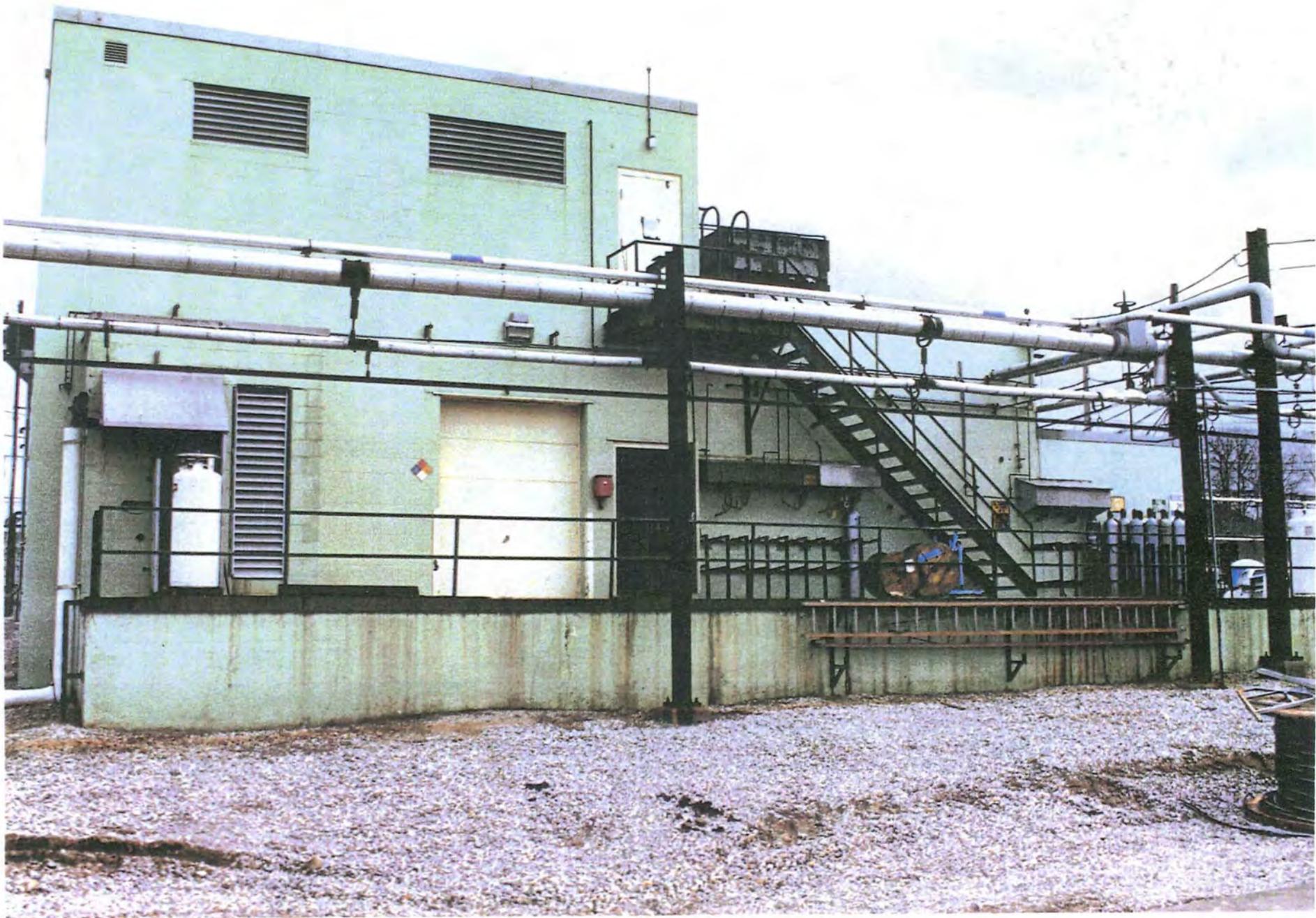
DATE: 03-12-96

**UNCLASSIFIED**

# **Environmental Appraisal of the Mound Plant**

## **9.59.6.6 Photographs**

Mound Plant Building 36



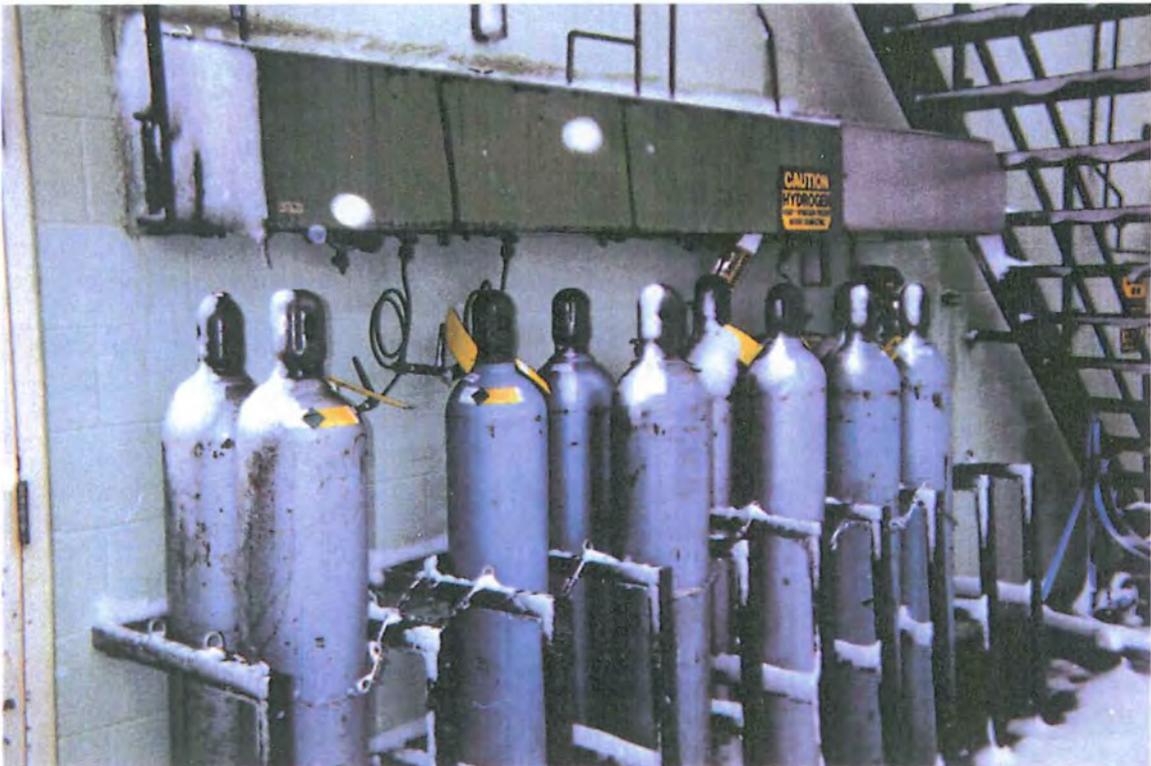
9.59-69



Drinking fountain in Building 36 needs to be removed because of suspected lead contamination.



Unidentified drum near Building 36.



Full and empty compressed gas cylinders stored together.