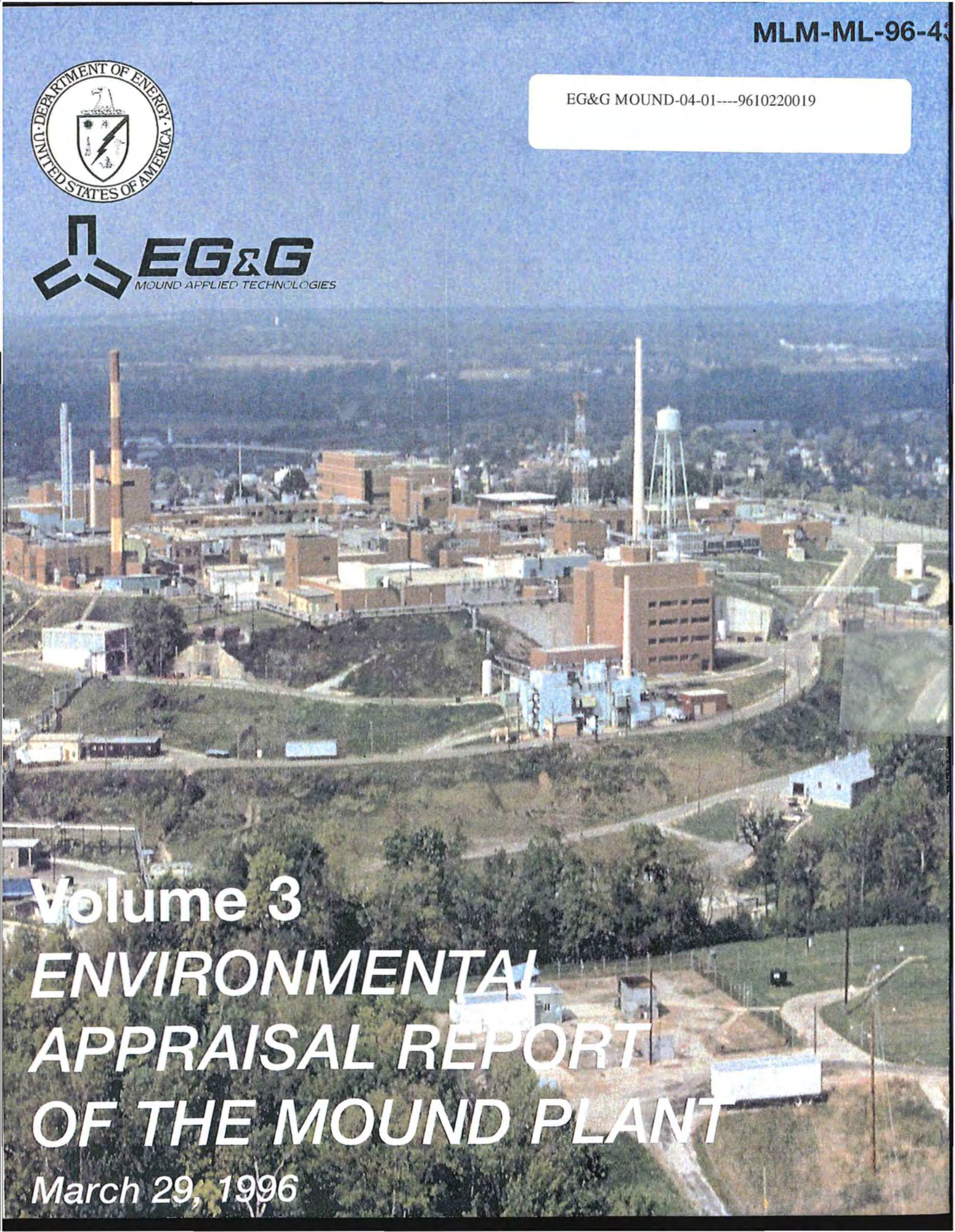
MLM-ML-96-4

EG&G MOUND-04-01----9610220019

EG&G
MOUND APPLIED TECHNOLOGIES



Volume 3
ENVIRONMENTAL APPRAISAL REPORT OF THE MOUND PLANT

March 29, 1996

MLM-ML-96-43-0001

ENVIRONMENTAL APPRAISAL REPORT OF THE MOUND PLANT

Volume 3

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

Environmental Appraisal of the Mound Plant
Table of Contents for Volume 3

Section	Title	Page
9.0	**BUILDING APPRAISALS**	
9.11	**Building GP-5**	**9.11-1**
9.11.1	Scope of Building GP-5 Report	9.11-1
9.11.2	Description of Building GP-5	9.11-1
9.11.3	Summary of Findings	9.11-1
9.11.4	Observations	9.11-1
9.11.5	Findings and Recommendations	9.11-3
9.11.6	Attachments	9.11-5
9.12	**Building GP-8**	**9.12-1**
9.12.1	Scope of Building GP-8 Report	9.12-1
9.12.2	Description of Building GP-8	9.12-1
9.12.3	Summary of Findings	9.12-1
9.12.4	Observations	9.12-1
9.12.5	Findings and Recommendations	9.12-3
9.12.6	Attachments	9.12-5
9.13	**Building GP-44**	**9.13-1**
9.13.1	Scope of Building GP-44 Report	9.13-1
9.13.2	Description of Building GP-44	9.13-1
9.13.3	Summary of Findings	9.13-1
9.13.4	Observations	9.13-2
9.13.5	Findings and Recommendations	9.13-4
9.13.6	Attachments	9.13-5
9.14	**Building GW**	**9.14-1**
9.14.1	Scope of Building GW Report	9.14-1
9.14.2	Description of Building GW	9.14-1
9.14.3	Summary of Findings	9.14-1
9.14.4	Observations	9.14-1
9.14.5	Findings and Recommendations	9.14-4
9.14.6	Attachments	9.14-5
9.15	**Building H**	**9.15-1**
9.15.1	Scope of Building H Report	9.15-1
9.15.2	Description of Building H	9.15-1
9.15.3	Summary of Findings	9.15-1
9.15.4	Observations	9.15-2
9.15.5	Findings and Recommendations	9.15-5
9.15.6	Attachments	9.15-7

Environmental Appraisal of the Mound Plant
Table of Contents for Volume 3

(Continued)

Page

9.16 Building HH 9.16-1
9.16.1 Scope of Building HH Report 9.16-1
9.16.2 Description of Building HH 9.16-1
9.16.3 Summary of Findings 9.16-1
9.16.4 Observations 9.16-2
9.16.5 Findings and Recommendations 9.16-5
9.16.6 Attachments 9.16-7

9.17 Building I 9.17-1
9.17.1 Scope of Building I Report 9.17-1
9.17.2 Description of Building I 9.17-1
9.17.3 Summary of Findings 9.17-2
9.17.4 Observations 9.17-2
9.17.5 Findings and Recommendations 9.17-5
9.17.6 Attachments 9.17-7

9.18 Building M 9.18-1
9.18.1 Scope of Building M Report 9.18-1
9.18.2 Description of Building M 9.18-1
9.18.3 Summary of Findings 9.18-1
9.18.4 Observations 9.18-2
9.18.5 Findings and Recommendations 9.18-6
9.18.6 Attachments 9.18-9

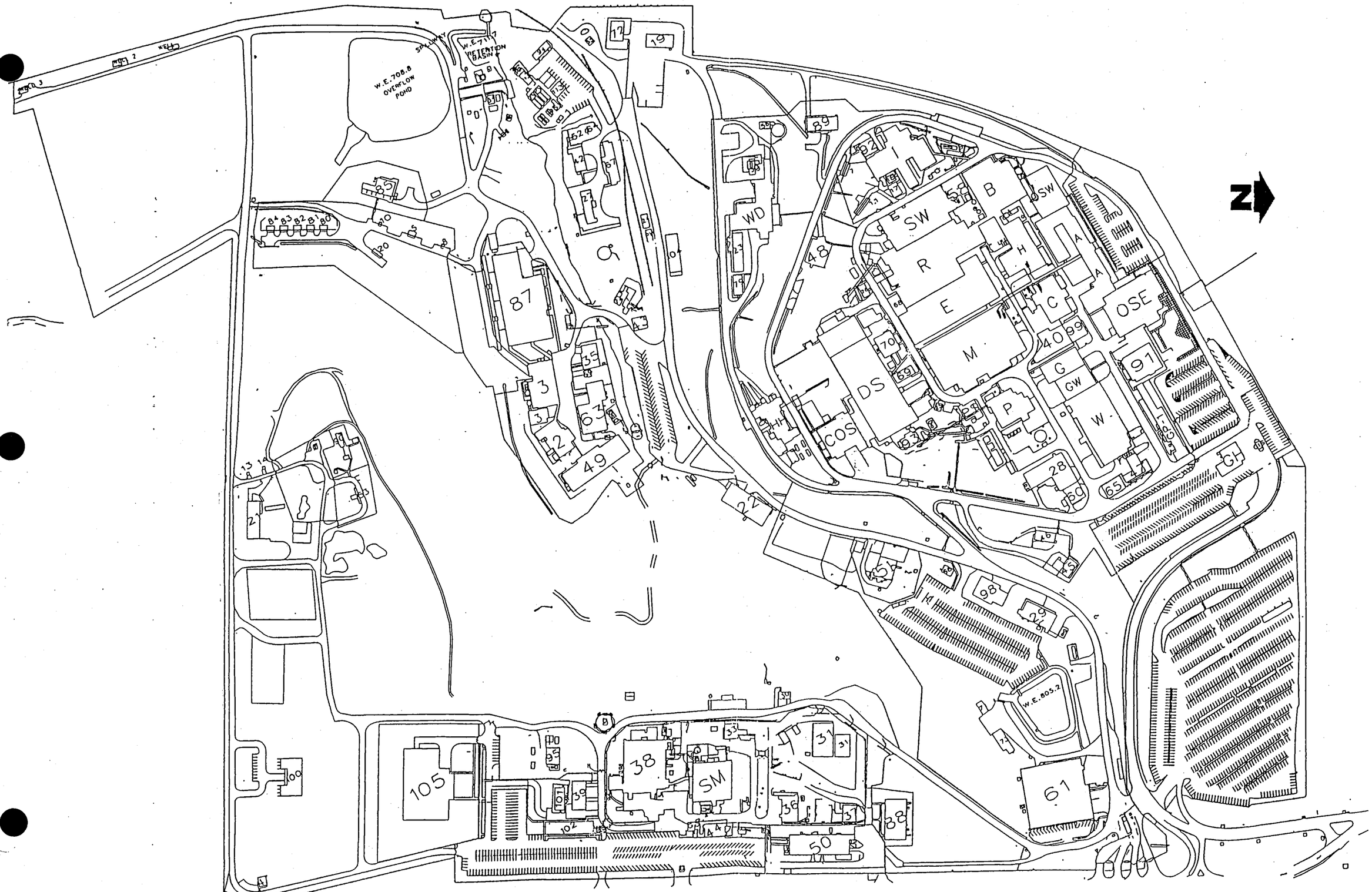
9.19 Building Modular 4 . . . . . 9.19-1
9.19.1 Scope of Building Modular 4 Report 9.19-1
9.19.2 Description of Building Modular 4 . . . . . 9.19-1
9.19.3 Summary of Findings 9.19-1
9.19.4 Observations 9.19-1
9.19.5 Findings and Recommendations 9.19-3
9.19.6 Attachments 9.19-5

9.20 Building OSE 9.20-1
9.20.1 Scope of Building OSE Report 9.20-1
9.20.2 Description of Building OSE 9.20-1
9.20.3 Summary of Findings 9.20-1
9.20.4 Observations 9.20-1
9.20.5 Findings and Recommendations 9.20-4
9.20.6 Attachments 9.20-5

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



BUILDING LOCATION MAP

9.11 BUILDING GP-5

9.11.1 Scope of Building GP-5 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 GP-5 on the morning of January 22, 1995. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is included as Attachment 1 (Section 9.11.6.1) was used to record findings. The appraisers were not accompanied by the building manager. Escorting the appraisers was a knowledgeable security person. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.11.6.2).

9.11.2 Description of Building GP-5

Building GP-5 is a one-story, 62.5-square-foot concrete block slab on grade structure with brick facing. Its location is shown in Attachment 3 (Section 9.11.6.3). The building is bordered by a sidewalk to the north, fencing to the south, Building 66 to the east, and Building 107 to the west. The roof is asphalt and metal built-up membrane. The building is serviced by packaged heat and air conditioning.

9.11.3 Summary of Findings

Building GP-5 was originally constructed as a guard post facility. The building is not being actively used. The building is well-maintained, with one issue of environmental concern identified during the walk-through and during review of reference materials.

9.11.4 Observations

9.11.4.1 Air Emissions

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

9.11.4.2 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

9.11.4.4 Chemical Storage and Hazardous Materials

There are no chemicals or hazardous materials stored in the building.

The building is no longer equipped with emergency response equipment. There is no Emergency Evacuation Plan, and no signs are posted in work areas, since the building is no longer in use.

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

It is suspected that asbestos-containing floor tiles or sheet goods exist in the building. Information about Building GP-5 is not included in the MD-10391, *Asbestos Program Manual*, 9-14-95. The building has not been tested for asbestos. There is no visual evidence of friable asbestos.

There are no capacitors or transformers containing polychlorinated biphenyls (PCB's) located in the building (1995 Annual PCB Document Log).

9.11.4.5 Solid, Hazardous, and Radioactive Wastes

There are no solid or hazardous wastes generated in the building.

9.11.5 Findings and Recommendations

Photographs were taken to document inspection findings. They are included as Attachment 5 (Section 9.11.6.5). The environmental appraisal of Building GP-5 indicates that the following action item should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

GP-5-1 Perform a survey to determine if asbestos is present. Include results in next revision of MD-10391, *Asbestos Program Manual.*

9.11.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name GUARD POST 5 (GP5)

Appraisers:

Name	Discipline
[illegible]	
Mary E Sizemore	
Terry L. Glandon	

Building Manager: JEFF BOSTON J Boston 4/22/96

Process Manager: RONALD L. PARR

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 A[illegible]aisal Checklist

Building Name: GP-5

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

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	
	Is the building in operation? What are the processes and where do they discharge to?	Y / N _____ _____	
	Do the floor drains, sinks & toilets appear to be draining properly?	Y / N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary Storm	
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	Y / N _____ _____ Y / N Y / N	
	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	

9.11-9

9.11-10

Environmental Appraisal Checklist

Building Name: GP-5

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

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	N/A
	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: GP-5

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

Date: 1/22/96

CAA Checklist N/A

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: _____

9.11-11

9.11-12

Environmental Appraisal Checklist

Building Name: GP-5

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

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 - N/A

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 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: GP-5

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

Date: 1/22/96

HM Checklist - N/A

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	
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	

9.11-13

Environmental Appraisal Checklist

Building Name: GP-5

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

Date: 1/22/96

HM Checklist - N/A

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

Source: _____

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore Date: 1/22/96

Safe Drinking Water Act (SDWA) Screening Checklist – N/A

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	

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead

Source: _____

9.11-15

9.11-16

Environmental Appraisal Checklist

Building Name: GP-5

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

Date: 1/22/96

RCRA Screening Checklist – N/A

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 charactarization 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	
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: GP-5

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

Date: 1/22/96

RCRA Checklist - N/A

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	Y / N Y / N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y / N	
	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	

9.11-17

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore 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:		
	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 / 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: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date: 1/22/96

RCRA Checklist -N/A

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	
	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	

9.11-19

9.11-20

Environmental Appraisal Checklist

Building Name: GP-5

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

Date: 1/22/96

RCRA Checklist - N/A

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:

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore Date: 1/22/96

Asbestos Screening Checklist

Does this facility contain ACBM?	UNKNOWN	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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?	Y / N	SINCE THE BUILDING WAS CONSTRUCTED IN 1949, it is SUSPECTED TO HAVE ACBM.
	If no for this building or area note this conclusion in the comment section.		
	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.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of 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	

9.11-21

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore 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	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	
	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	

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date: 1/22/96

TSCA Checklist – N/A

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	

9.11-23

9.11-24

Environmental Appraisal Checklist

Building Name: GP-5

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

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 capacitators 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: GP-5 Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore 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 – N/A

Regulatory Guideline	Question	Response	Comments
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	
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	

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore 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	
	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	

Building Name: GP-5

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

Date: 1/22/96

Low-Level Waste and Transuranic Waste Checklist – N/A

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date: 1/22/96

Low-Level Waste and Transuranic Waste Checklist -N/A

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 Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date: 1/22/96

Low-Level Waste and Transuranic Waste Checklist – N/A

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:

9.11-29

9.11-30

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date: 1/22/96

Waste Minimization/Pollution Prevention Activities Screening Checklist -N/A

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

Waste Minimiaztion/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: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date: 1/22/96

Waste Minimization/Pollution Prevention Activities Checklist - N/A

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	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	
METAL WASTES			
	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	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

9.11-31

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date: 1/22/96

Waste Minimization/Pollution Prevention Activities Checklist N/A

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	
CYANIDE AND REACTIVE WASTES			
	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	
VEHICLE MAINTENANCE			
	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: GP-5 Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore Date: 1/22/96

Waste Minimization/Pollution Prevention Activities Checklist — N/A

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	
OILS			
	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	

9-11-33

Environmental Appraisal Checklist

Building Name: GP-5 Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore Date: 1/22/96

Waste Minimization/Pollution Prevention Activities Checklist - N/A

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	
SOLVENT WASTES			
	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: GP-5 Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore 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	
	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.

9.11.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name GP-5 Building Manager: Jeff Boston Phone: 3262 Date: _
Alternate: _____ Phone: _____

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 a one-story, ft² concrete block structure with a brick face.

   Source: _____

5. Provide a drawing of the building.

6. What is the current building use?

   Not in service

   Source: _____

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

   Guard Post

   Source: _____

9.11-39

Building Manager's Questionnaire

Building Name GP-5 Building Manager: J.L. Boston Phone: 3262 Date: _
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: None

How Wastes Are Generated: None

Contact:
Phone #:

Source: _____
, (8-15-90).

9.11-40

Building Manager's Questionnaire

Building Name: GP-5 Building Manager: J.L. Boston Phone: 3262 Date: _
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? Yes (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: _____

Building Manager's Questionnaire

Building Name: GB-5 Building Manager: JL Boston Phone: 3267 Date: _
Alternate: _____ Phone: _____

11. Describe air pollution control equipment used to reduce emissions for each source. Non-applicable

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

Source: _____

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

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

Source: _____

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 No
What are the results?

Source: _____

9.11-42

Building Manager's Questionnaire

Building Name: GP-5 Building Manager: J.L. Boston Phone: 3262 Date: _
Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? Yes (No)

    Source: _____

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

    Source: _____

19. What chemicals are used or stored inside or outside of the building? Include compressed gasses not in large tanks. None

Chemical Name	State	Amount (MAX)

Source: _____

Building Manager's Questionnaire

Building Name: GPS Building Manager: J.L. Boston Phone: 3262 Date: _
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?

Non-applicable

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

None

23. Where do excess janitorial supplies go?

Non-applicable

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

9.11-44

Building Manager's Questionnaire

Building Name GP-5 Building Manager: J.L. Boston Phone: 3262 Date: _
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
				Y/N	
				Y/N	

Source: _____

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: _____

9.11-45

Building Manager's Questionnaire

Building Name: GP-5 Building Manager: J.L. Boston Phone: 3262 Date: _
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: _____

9.11-46

Building Manager's Questionnaire

Building Name: CP-5 Building Manager: J.L Boston Phone: 3262 Date: _
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: GP-5 Building Manager: J.L. Boston Phone: 3262 Date: _
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.

9.11-48

Building Manager's Questionnaire

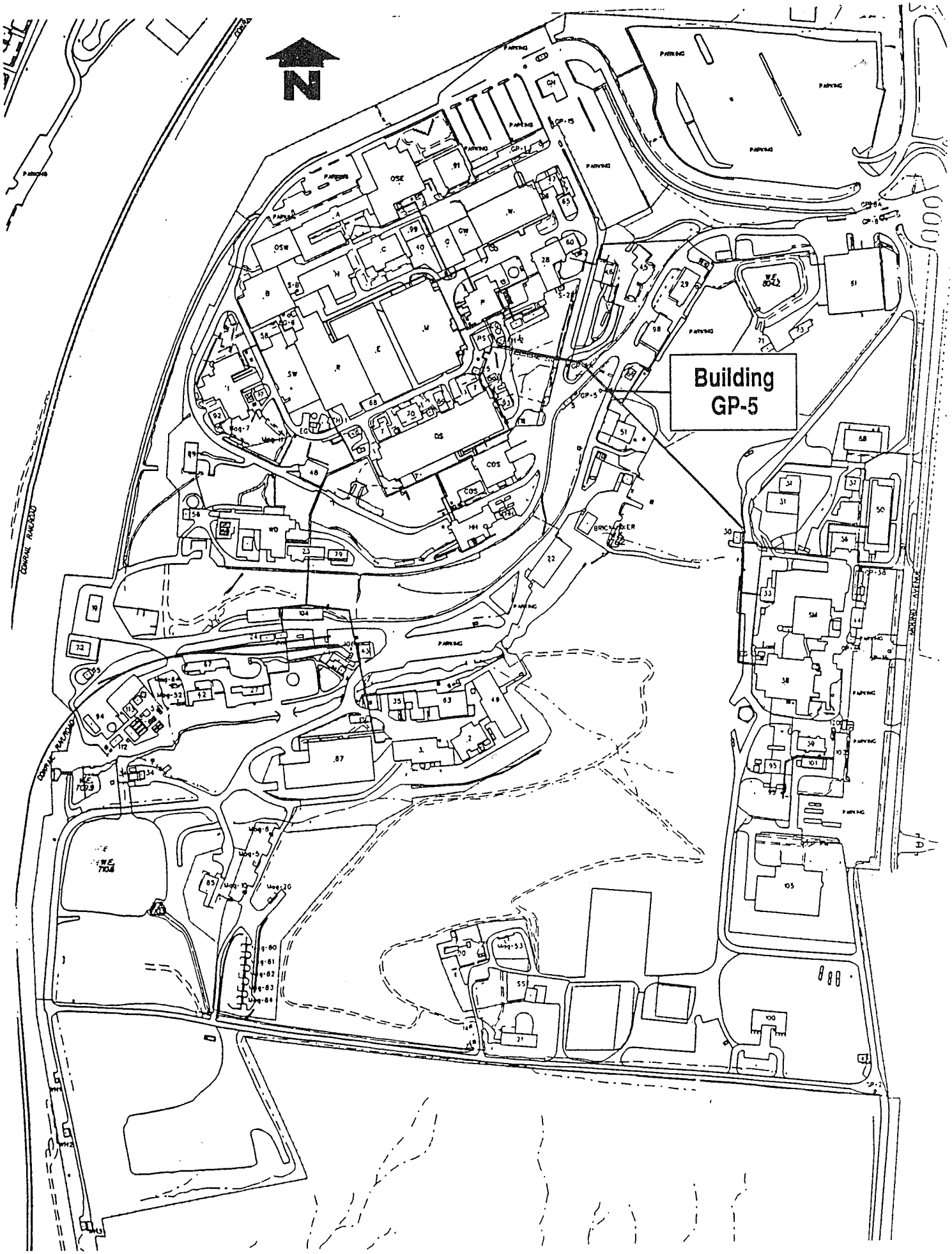
Building Name: GP-5 Building Manager: J.L. Boston Phone: 3262 Date: _
Alternate: _____ Phone: _____

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.

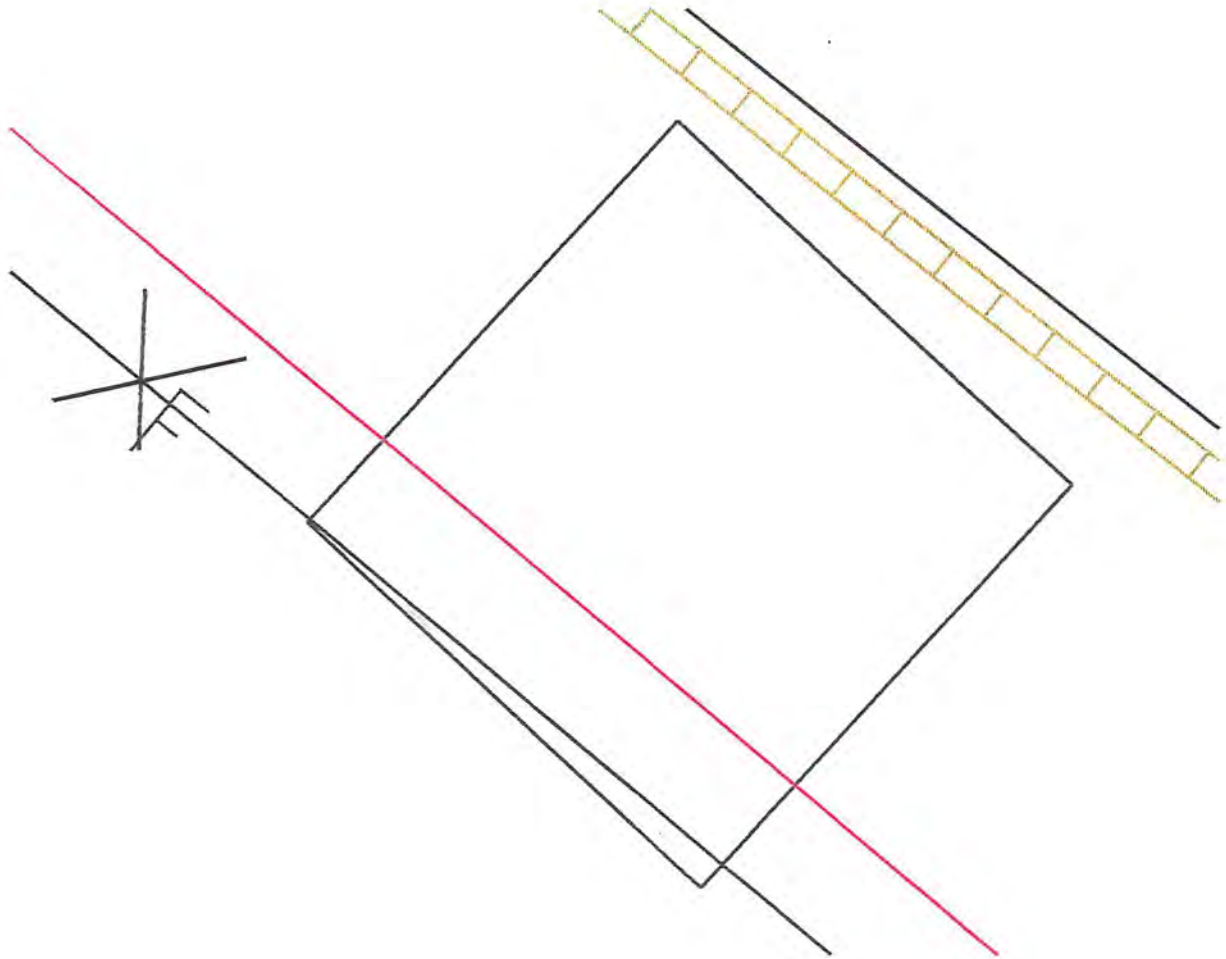
9.11.6.3 Location of Building GP-5



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

9 11 53

9.11.6.4 Underground Utility Lines



FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL

N

UNCLASSIFIED

E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
GP-05

DATE: 3-6-96

9.11.6.5 Photographs

Mound Plant Building GP-5

9.12 BUILDING GP-8

9.12.1 Scope of Building GP-8 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 GP-8 on the morning of February 7, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is included as Attachment 1 (Section 9.12.6.1). The appraisers were not accompanied by the building manager or the process manager. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.12.6.2).

9.12.2 Description of Building GP-8

Building GP-8 is a guard post. It is located along Mound Road at the east entrance to the Mound Plant, north of Building 61. Its location is shown in Attachment 3 (Section 9.12.6.3). The building is a 96-square-foot metal building with glass windows and a metal roof. There is electrical service of 240V. It was constructed in the early 1980s. Information about the building is not included in the *Capital Assets Management Program—CAMP Report, FY96* or site information documents.

9.12.3 Summary of Findings

Building GP-8 is in use. One finding of environmental concern was identified during the walk-through and review of reference documents. An asbestos survey should be conducted and information provided to personnel involved in removing the structure.

9.12.4 Observations

9.12.4.1 Air Emissions

There are no processes or fuel-burning units in the building. Heat is provided by electric resistance units. There are no sources of emissions. There is no fugitive dust. No air emission permit applications have been submitted to the Regional Air Pollution Control Agency (RAPCA) for activities in the building.

9.12.4.2 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.

9.12.4.2.1 Sanitary Wastewater

The building has sanitary service and a toilet. According to a diagram of underground utility lines, presented as Attachment 4 (Section 9.12.6.4), the building is serviced by a sanitary line.

9.12.4.2.2 Storm Wastewater

The building is not serviced by storm drains according to drawings presented in Attachment 4 (Section 9.12.6.4). 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.

9.12.4.2.3 Chemicals

No chemicals designated under the Clean Water Act (CWA) are used in the building, nor is there any evidence that any have entered the wastewater collection systems.

9.12.4.3 Potable and Service Water

Potable water is supplied to the building, according to information presented in the site drawing, shown as Attachment 4 (Section 9.12.6.4). Service water is not supplied to the building.

9.12.4.4 Chemical Storage and Hazardous Materials

There are no chemicals or hazardous wastes stored in the building, except for ordnance which is stored in a locked case. The ordnance consists of firearms ammunition. There are no janitorial supplies. There is a fire extinguisher.

There are no capacitors or transformers in the building. According to the 1995 PCB Annual Document Log, the building does not contain polychlorinated biphenyls (PCB's).

It is not known if asbestos-containing building materials are in the building. The building was not screened, according to MD-10391, *Asbestos Program Manual* (9-14-95). There was no visual evidence of friable asbestos, however, pipe lagging may be an asbestos material.

9.12.4.5 Solid, Hazardous, and Radioactive Wastes

Solid waste has been generated in the building. It is limited to paper and typical office waste. Solid waste is removed by janitorial personnel to a site collection point, then is shipped offsite to a local landfill by a contractor. Aluminum cans, glass, and cardboard are removed by janitorial personnel to specific collection points, then are sent offsite to be recycled by the same contractor. White paper is collected and sent offsite to be recycled by a service contractor. Waste Management maintains the contracts for these services.

There is no hazardous or radioactive wastes generated in Building GP-8 by any process. Although ordnance is stored in the building, it has not been used, according to a security guard who was interviewed. If ordnance were to be discarded, it would be taken to Building GP-1 for disposal there. The building appraisal report for Building GP-1 addresses disposal of ordnance.

9.12.4.6 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. Recycling is conducted for metals, and paper. Supplies and some equipment no longer required are returned to the warehouse for redistribution.

9.12.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 5 (Section 9.12.6.5). Findings related to the environmental appraisal of Building GP-8 indicates that the following action item should be planned and scheduled.

GP-8-1 A survey should be conducted to determine the asbestos content of the building. Based upon results of the survey, the appropriate requirements as defined in the Mound Asbestos Abatement Plan should be followed.

This page intentionally left blank.

9.12.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name GP-8

Appraisers:

Nancy Vigas
Name Discipline

John Hausfeld
Name Discipline

Mike Merker
Name Discipline

Name Discipline

Building Manager: Kathy Koehler

Process Manager:

Date: 2-7-96 am

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: GP 8 Appraisers: Vyas Hausfeld Merker Date: 2-7-96am

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?	Y / N	runs to ground 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	no chemicals or janitorial supplies
	Is the building in operation? What are the processes and where do they discharge to?	Y / N _____ _____	
	Do the floor drains, sinks & toilets appear to be draining properly?	Y / N	
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary ~~Storm~~	toilet to sanitary
	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	

9.12-9

9.12-10

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vyas Hausfeld Merkel Date: 2-7-96am

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: GP8 Appraisers: Vyas Hausfeld Merker Date: 2-7-96 am

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:_____

9.12-11

9.12-12

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vigas Hausfeld Merker Date: 2-7-96am

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 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: GP8 Appraisers: Vyas Hansford Merker Date: 2-7-96

NOT COMPLETED

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	
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	

9.12-13

GP8

9.12-14

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vyso Hausfeld Merker Date: 2-7-96am

NOT COMPLETED

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

Source: _____

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vigo Hausfeld Merker Date: 2-7-96

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 NA	
	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

Source: _____

~~Source~~ + potable water supplied to bldg.

Per site drawing facility is supplied with potable water. Water is not used for drinking but for

9.12-15

9.12-16

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vigas Hausfeld Merker Date: 2-7-96

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 charactarization 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	
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: GP8 Appraisers: Vyas Hansfeed Merker Date: 2-7-96

NOT COMPLETED

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	Y / N Y / N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y / N	
	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	

9.12-17

9.12-18

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vigo Hawfield Merker Date: 2-7-96

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 / 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: GP8 Appraisers: Vyas Hansford Merker Date: 2-7-96

NOT COMPLETED

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	
	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	

9.12-19

9.12-20

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vijay Hallsfeed Merker Date: 2-7-96

NOT COMPLETED

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:

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vyas Hauspeed Merker Date: 2-7-96

Asbestos Screening Checklist

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

Asbestos Checklist NOT KNOWN

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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos? If no for this building or area note this conclusion in the comment section.	Y / N	
	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.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of 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	

NO EVIDENCE OF FRIABLE ASBESTOS · PIPE LAGGING MAY BE ASBESTOS MATERIAL

Not surveyed for asbestos in Asbestos Screening Manual

9.12-22

Environmental Appraisal Checklist

Building Name: GPS Appraisers: Vigo Hausfeld Merkel Date: 2-7-96 am

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

Does this facility potentially contain any PCB's or PCB contaminated equipment?	Y / 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	
	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	

~~Note~~ No PCBs in Annual Document Log

Environmental Appraisal Checklist

Building Name: GPS Appraisers: Vogs Hausfeld Merker Date: 2-7-96 am

NOT COMPLETED

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 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	

9.12-23

9.12-24

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vyas Hausfeld Merker Date: 2-7-96

NOT COMPLETED.

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators 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: GP8 Appraisers: Vigs Hauefeld Merker Date: 2-7-96

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	
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	

9.12-25

9.12-26

Environmental Appraisal Checklist

Building Name: GP 8 Appraisers: Vyas Hansfeld Merker Date: 2-7-96

Low-Level Waste and Transuranic Waste Checklist

NOT COMPLETED

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: GP8 Appraisers: Vyas Hansfeed Merker Date: 2-7-96 am

NOT COMPLETED

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

9.12-27

9.12-28

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vyas Hausfeld Merker Date: 2-7-96

NOT COMPLETED

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 Appraisal Checklist

Building Name: GP8 Appraisers: Vyas Hausfeld Merker Date: 2-7-96

NOT COMPLETED

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:

9.12-29

9.12-30

Environmental Appraisal Checklist

Building Name: GPS

Appraisers: Vyas Hansfield Merker

Date: 2-7-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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: GP8 Appraisers: Vyno Hauefeld Merker Date: 2-7-96

NOT COMPLETED

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	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	
METAL WASTES			
	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	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

9.12-31

9.12-32

Environmental Appraisal Checklist

Building Name: GP8 Appraisers: Vyas Hausfeld Meiker Date: 2-7-96

NOT COMPLETED

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	
CYANIDE AND REACTIVE WASTES			
	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	
VEHICLE MAINTENANCE			
	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: GP8 Appraisers: Vijay Thurgood Kerber Date: 2-7-96

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	
OILS		NA	
	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	

9.12-33

9.12-34

Environmental Appraisal Checklist

Building Name: GP8

Appraisers: Vegas Hausfeld Merker Date: 2-7-96

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	
SOLVENT WASTES		NA	
	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: GP8 Appraisers: Vegas Hausfeld Merker Date: 2-7-96

NOT COMPLETED

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?	_____ _____	

9.12-35

This page intentionally left blank.

M o u n d Electronic Message/AOS

From :John Hausfeld
HAUSJR

Dept. :ES&H

Tel. No :4216

Date :14-Feb-1996 07:23am EST

Subject :Env. Appraisal

TO :Katherine Koehler (KOEHKG)

CC :Eunice Warmoth(NANCY VYAS) (WARMEM)

CC :Michael Merker (MERKMJ)

CC :Susan Cloud (CLOUSA)

CC :Alton Brown (BROWAW)

Kathy,

Mike Merker, Nancy Vyas and I visited several buildings last Wednesday, February 7, completing the areas that you serve as building manager. They were: GH, GP-1, GIS, GP-8, Modular 4, and Building 100. Our recommendations are as follows:

<u>GH building</u>

Bob Race answered whatever questions we had. The building was very orderly and extremely clean. Heat and lights are turned off every night. Asbestos insulation on pipes was well labeled. The only action item discovered during

the tour is that the transformers on the roof needed to be labeled that they do not contain PCB's.

GP-1

Alton Brown accompanied us during the tour of GP-1. Overall, the building was in great condition. The items in the flammable cabinet were neatly stored and labeled. All areas were well labeled with their appropriate signs, including all trash receptacles. The janitors closet was very orderly, but did not contain any MSDS sheets for their supplies. Alton's MSDS's were readily available and he appears to be very conscious on Waste Minimization.

A couple of questions did arise. 1) In the utility room, room 119, is there a back-flow preventer on the system? 2) Is the sump in the firing range, rooms 23 & 24, active; and if so, when and where is it pumped? 3) Also, the lead dust that is vacuumed from the firing range is combined with the solvent rags. Our recommendation is that the two be separated so that the rags could possibly be sent out for recycling.

:IS

No problems.

GP-8

Could use some general housekeeping. Fire extinguisher needs up-dated tag -

9.12.6.2 Building Manager's Questionnaire

Building Managers Questionnaire

Building Name: GP-8 Building Manager: Kathy Koehler Date: 3-4-96

If Yes, Please Describe.

1. What are the access requirements? None

2. What protective equipment is required to enter the building? None

3. Are there any restricted areas? Yes (No)

~~4.~~ Provide a physical description of the building.

Source: _____

~~5.~~ Provide a drawing of the building.

Source: _____

*6. What is the current building use? Access control to Mound (Guard Post)

Source: _____

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

None

Source: _____

Building Managers Questionnaire

Building Name: Guard Post 8 Contact: Ron Parr Date: 3-4-86

*8. ① What are ongoing operations or processes? ② What are the raw materials and waste streams from each process? Who is the best contact for each process?

*1 ACCESS CONTROL TO ENTER THE PLANT

*2 NORMAL OFFICE WASTE (PAPER, POPCANS, ECT)

9.12-42

Building Managers Questionnaire

Building Name: GP-8 Contact: PARC Date: _____

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 emission sources? Yes No

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

Source: _____

Building Managers Questionnaire

Building Name: GP-8 Contact: Pater Date: _____

*11. Describe air pollution control equipment used to reduce emissions for each source.

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

Source: _____

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

Process Source	Permit	Log	Conditions Met	Comments
	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: _____

13. Does the building have potable water? Yes (No)

14. Does the building discharge to the storm sewer? Yes No
WHERE? DON'T KNOW

*15. Does the building discharge to the sanitary sewer? (Yes) No

*16. Has an asbestos survey been conducted? Yes No
What are the results? Yes No Suspected Assumed
DON'T KNOW

Source: _____

9.12-44

Building Managers Questionnaire

Building Name: GP-8 Contact: PARR Date: _____

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

Source: _____

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

Source: _____

*19. What chemicals are used or stored inside or outside of the building? Include compressed gases.

Chemical Name	State	Amount
NONE		

Source: _____

20. What janitorial supplies are stored inside or outside of the building? NONE

Source: _____

Building Managers Questionnaire

Building Name: GC-8 Contact: Pare Date: _____

*21. 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: _____

22. Where do waste chemicals go?

N/A

23. Where do excess janitorial supplies go?

N/A

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

Chemical	Amount	Chemical	Amount

Source: _____

9.12-46

Building Managers Questionnaire

Building Name: GP-8 Contact: PARR Date: _____

*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
				Y / N
				Y / N
				Y / N
				Y / N
				Y / N

Source: _____

*26. Are there storage ponds around the building? Yes No

27. 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
Y / N			Y / N

Source: _____

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

Process	Waste	Amount	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		Y / N
			Y / N		Y / N
			Y / N		Y / N

Source: _____

Building Managers Questionnaire

Building Name: GP - 8 Contact: PARR Date: _____

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

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

31. Has the building been identified as a waste accumulation area? Yes (No)

32. Has the building been identified as a satellite accumulation area? Yes (No)

33. 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: _____

9.12-48

Building Managers Questionnaire

Building Name: GP-8 Contact: PARR Date: _____

34. 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 Name: GP-8 Contact: PACR Date: _____

35. 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: _____

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

Building Managers Questionnaire

Building Name: GP-8 Contact: Lee Date: _____

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

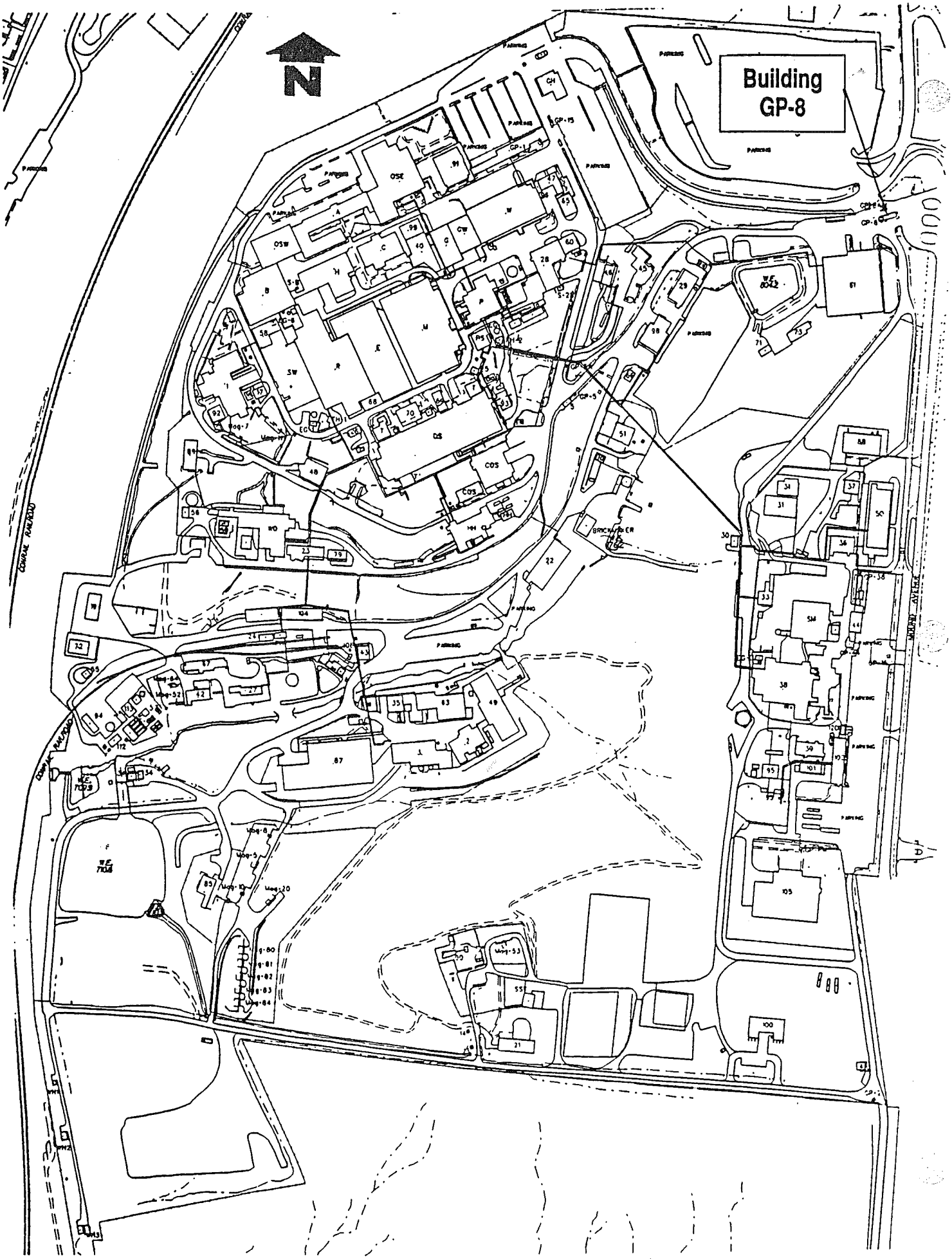
Paper

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

* existing data

This page intentionally left blank.

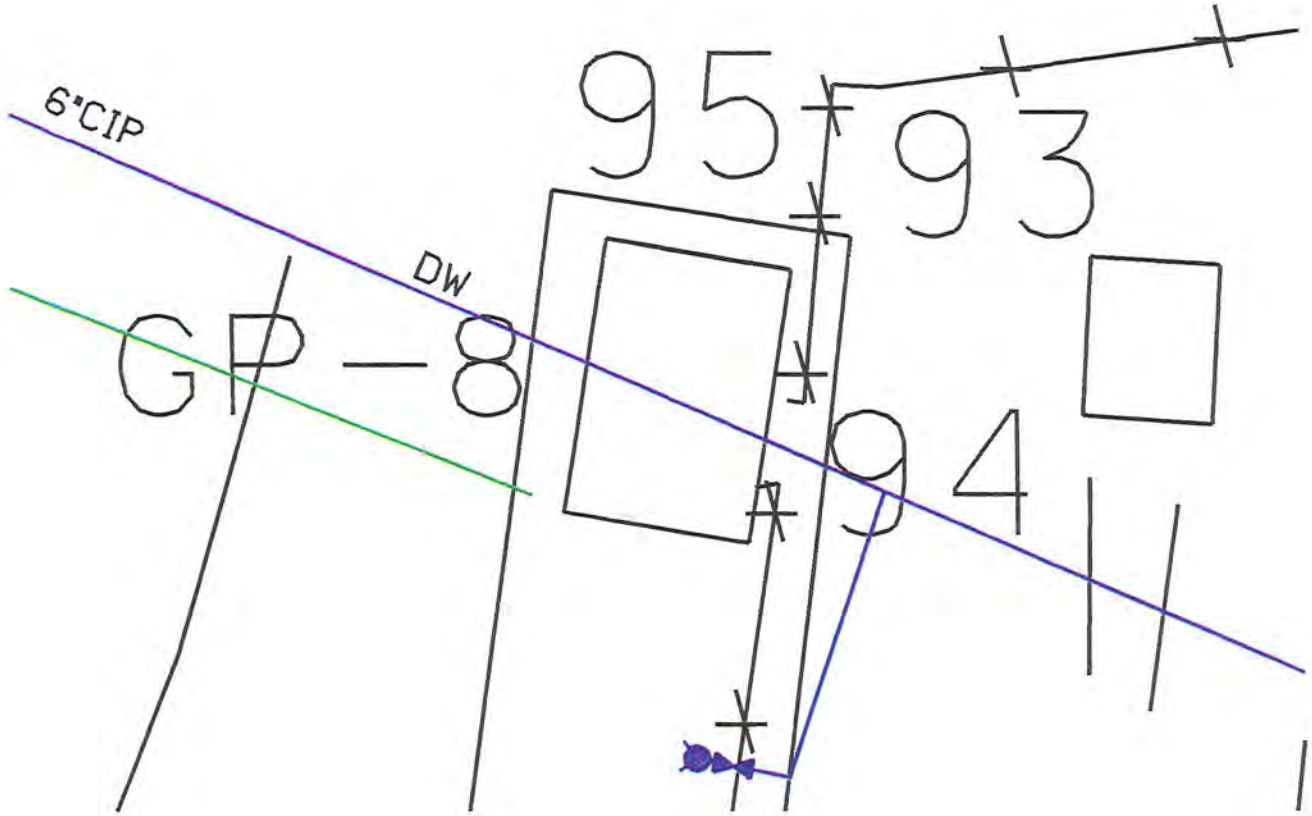
9.12.6.3 Location of Building GP-8



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

This page intentionally left blank.

9.12.6.4 Underground Utility Lines



FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL

N

UNCLASSIFIED

E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
GP- 8

DATE: 3-4-96

9.12.6.5 Photographs

Mound Plant Building GP-8

9.13 BUILDING GP-44

9.13.1 Scope of Building GP-44 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 GP-44 on the mornings of January 29 and February 6, 1996. The Environmental Appraisal Checklist (EAC) (Attachment 1—Section 9.13.6.1) was used to record findings. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9..6.2). The appraisers were accompanied by the building manager on the January 29 visit. Keys to the Decontamination and Decommissioning (D&D) clothing storage area were subsequently obtained and the walk-through on February 6 was conducted without the building or process managers.

9.13.2 Description of Building GP-44

Building GP-44, a former guard post, is a 365-square-foot, one-story structure. It is of concrete block construction, has a built-up membrane coaltar roof, with a slab-on-grade foundation. Its location is shown in Attachment 3, Section 9.13.6.3. The building is surrounded by Building 44 to the northeast, a parking lot to the east, Building SW to the southwest, and a roadway to the west. The building is serviced by potable water and electric service of 240V (*Mound Facility Physical Characterization*, 12-1-93). Electric space heaters and window air conditioners are installed.

Building GP-44 was constructed in 1964 (MD-10391, *Asbestos Program Manual*, 9-14-95). Floor plans are presented as Attachment 4, Section 9.13.6.5. Building GP-44 is programmed for Safe Shutdown but has been assigned low priority. The building contains an equipment room, the former guard office (Rooms 1 and 2), and clothing storage in Room 4, and unused (new) D&D personnel clothing supplies. Except for one chair and desk in Room 1, all furnishings, including the washer and dryer, have been removed; Room 3 is empty. When GP-44 was an active guard post, Room 4 was used for uniform storage and Room 3 was used as a laundry room for security uniforms.

9.13.3 Summary of Findings

One issue of concern was identified during the walk-through and during review of reference materials. The building is not occupied one a regular basis.

9.13.4 Observations

9.13.4.1 Air Emissions

There have been no fumehoods in the building. There are no fuel-burning units in the building. There is no evidence of fugitive dust. No air emissions permit applications have been submitted to Ohio Environmental Protection Agency for activities in the building.

9.13.4.2 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.

9.13.4.2.1 Sanitary Wastewater

The building has sanitary services. According to a diagram of underground lines, presented as Attachment 6, the building is serviced by a sanitary line. There are no lavatory facilities. The single interior sanitary drain is located in Room 3 and was used for the formerly installed washing machine. 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 onsite tertiary wastewater treatment facility, and subsequently discharged (after treatment) to the Great Miami River. There is no monitoring of building effluent. Based upon discussions with the building manager, effluent from Building GP-44 did not deviate from that expected by the sanitary treatment plant manager.

9.13.4.2.2 Storm Wastewater

The one interior floor drain and the exterior of the building are serviced by a storm line. The interior drain and 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.

9.13.4.2.3 Process Wastewater

Wastewater contaminated with radioactive materials was not generated in the building, as only security personnel uniforms and not soiled D&D clothing were washed in the building.

9.13.4.2.4 Chemicals

Washing detergents and janitorial supplies have not been stored in the building for over two years, according to the process manager. No chemicals of any type were found in the building during the site visit.

9.13.4.3 Potable and Service Water

Potable water is supplied to the building and the only outlet appeared to have serviced the washer. The water heater was removed. No backflow prevention device is installed. There is no visible point of a potential cross connection. There is no fountain or bottle water fixtures. Service water is not supplied nor distributed within the building.

9.13.4.4 Chemical Storage and Hazardous Materials

Chemicals are not stored in the building.

The building is not equipped with appropriate fire extinguishers. One should be installed inside the building entrance to Room 3, since the storage room is still occupied.

There was no Emergency Evacuation Plan, and signs were not posted within the spaces. The appraisal team believes neither are required because of the building status.

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 has been tested and it is assumed that it contains asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). Visual inspection revealed that such material is most probable within the floor tiles.

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

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

9.13.4.5 Solid, Hazardous, and Radioactive Waste

Solid wastes generated is primarily cardboard boxed. Solid wastes are removed by D & D personnel and taken to Building 120 (process manager's office) where they are removed by janitorial personnel to a local collection point, then shipped offsite to a local landfill by a contractor. The disposal permit is maintained by the Waste Management Group. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

9.13.4.6 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. There does not appear to be additional opportunitites for waste minimization activities within Building GP-44.

9.13.5 Findings and Recommendations

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.13.6.6). The environmental appraisal of Building GP-44 indicates that the following action item should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

GP-44-1 As long as the building is being used for storage, it should be equipped with an appropriate fire extinguisher.

9.13.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name GP-44

Appraisers:
Team #4

Name	Discipline
MARK GILLIAT	Engineer
MARSHA VANNET	CHEMIST
MYRON SMITH Jr.	Engineer
—	

Building Manager: Bob Ward (x-3821)

Process Manager: RAYMOND MARTIN (x-5557)

Date: 29 JANUARY & 6 MARCH 1996

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: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	NONE
	Is the building in operation? What are the processes and where do they discharge to?	(Y)/ N NONE	STORAGE ONLY
	Do the floor drains, sinks & toilets appear to be draining properly?	(Y)/ N	FLOOR DRAIN ONLY
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary Storm	FLOOR DRAIN TO STORM UNUSED DRAIN TO SANITARY
	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	

9.13-9

Environmental Appraisal Checklist

Building Name: GP-44 Appraisers: TEAM #4 Date: 1/29 & 3/6 1996

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: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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:

9.13-11

9.13-12

Environmental Appraisal Checklist

Building Name: GP-44 Appraisers: Team 4 Date: 1/29 & 3/6 1996

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	Blank
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: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	Blank
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	

9.13-13

9.13-14

Environmental Appraisal Checklist

Building Name: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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
			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

Source: _____

Environmental A[illegible]aisal Checklist

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	N/A
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	Y / N	NONE
	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
			Blank

Source: _____

9.13-15

9.13-16

Environmental Appraisal Checklist

Building Name: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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 charactarization 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 step here. If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.	Y / N	

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 2/6 1996

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area?	Y / N	
	Is it treated as such?	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	N/A
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y / N	Blank
	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	

9.13-17

Environmental Appraisal Checklist

Building Name: Appraisers: Date: 1/29 & 3/6 1996

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:		Blank
	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 / N	
	If no go to next section.		
	If yes, note.		
	For Building 23, Building 72 & Burn Area use special checklist.		

Environmen[illegible] Appraisal Checklist

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	Blank
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:

Environmental Appraisal Checklist

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	
	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	

Blank

Environmental Appraisal Checklist

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?	(Y) / N	
	If no for this building or area note this conclusion in the comment section.		
	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.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACBM during the removal.	Y / N	Blank
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	

Environmental Appraisal Checklist

Building Name: 6P-44 Appraisers: TEAM 84 Date: 1/29 & 3/6 1996

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	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?	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	

Building Name: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	Blank
	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	

9.13-23

Environmental Appraisal Checklist

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators 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	Blank
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:

Building Name: 6P-44 Appraisers: Team #4 Date: 1/24 & 3/6 1996

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	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?	Y / N	
	Based on field data, does the monitoring conducted in this area conform to the performance standard?	Y / N	

9.13-25

Environmental Appraisal Checklist

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	Blank
	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	

Building Name: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	Blank
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

9.13-27

9.13-28

Environmental Appraisal Checklist

Building Name: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	Blank
	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: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

9.13-29

Environmental Appraisal Checklist

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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	

Blank

Environmental Appraisal Checklist

Building Name: 6P-44 Appraisers: Team # 4 Date: 1/29 & 3/6 1996

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	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	Blank
	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	
METAL WASTES			
	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	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

9.13-31

Environmental Appraisal Checklist

Building Name: GP-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	
CYANIDE AND REACTIVE WASTES			
	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	
VEHICLE MAINTENANCE			
	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	

Blank

Building Name: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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	Blank
OILS			
	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	

9.13-33

Environmental Appraisal Checklist

Building Name: 6P-44 Appraisers: Team # 4 Date: 1/29 & 3/6 1996

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	
SOLVENT WASTES			
	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	

Blank

Environmental A[illegible]aisal Checklist

Building Name: 6P-44 Appraisers: Team #4 Date: 1/29 & 3/6 1996

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

9.13-35

This page intentionally left blank.

9.13.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: GP-44 Building Manager: R.A. Ward Phone: 3821 Date: 12-07-95
Alternate: K. KOEHLER Phone: 4886

1. What are the access requirements (training, requirements, 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 GP-44 is a 365-ft² structure of concrete blocks with brick facing. It has a BUM roof (asphalt), electrical heat, and window air conditioning. Building is not contaminated with any 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?

Two-thirds of the building is used for uniform storage, laundry, and issue. The remainder is used for security records storage.

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: GP-44 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: Storage and laundry

How Wastes Are Generated:

No details on waste generation available.

Contact:
Phone #:

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

Building Manager's Questionnaire

Building Name: GP-44 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

Building Manager's Questionnaire

Building Name: GP-44 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? ASSUMED

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

Building Manager's Questionnaire

Building Name: GP-44 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: GP-44 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?

NONE

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: GP-44 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: _____

9.13-45

Building Manager's Questionnaire

Building Name: GP-44 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: GP-44 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: GP-44 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

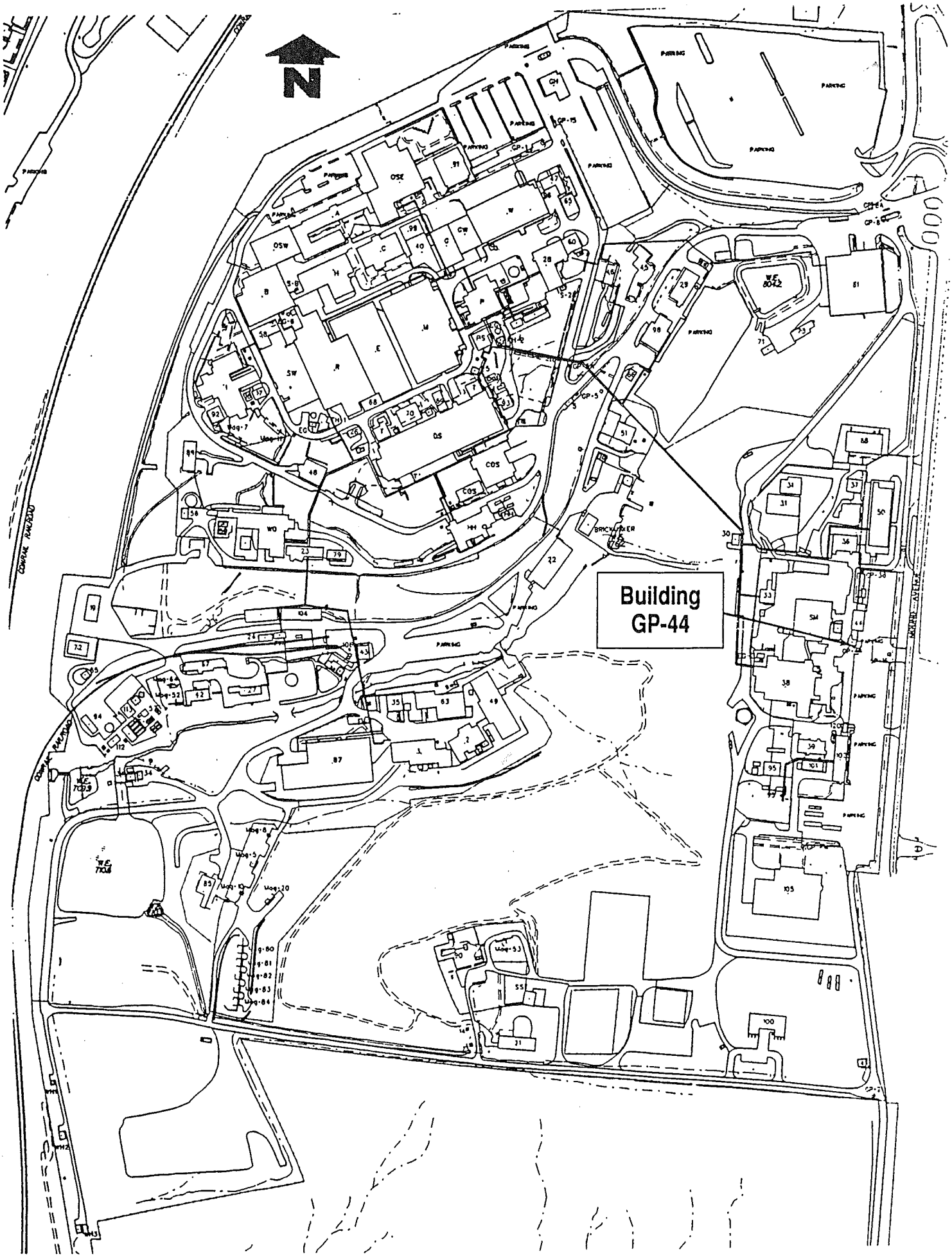
Building Name: GP-44 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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.

9.13.6.3 Location of Building GP-44

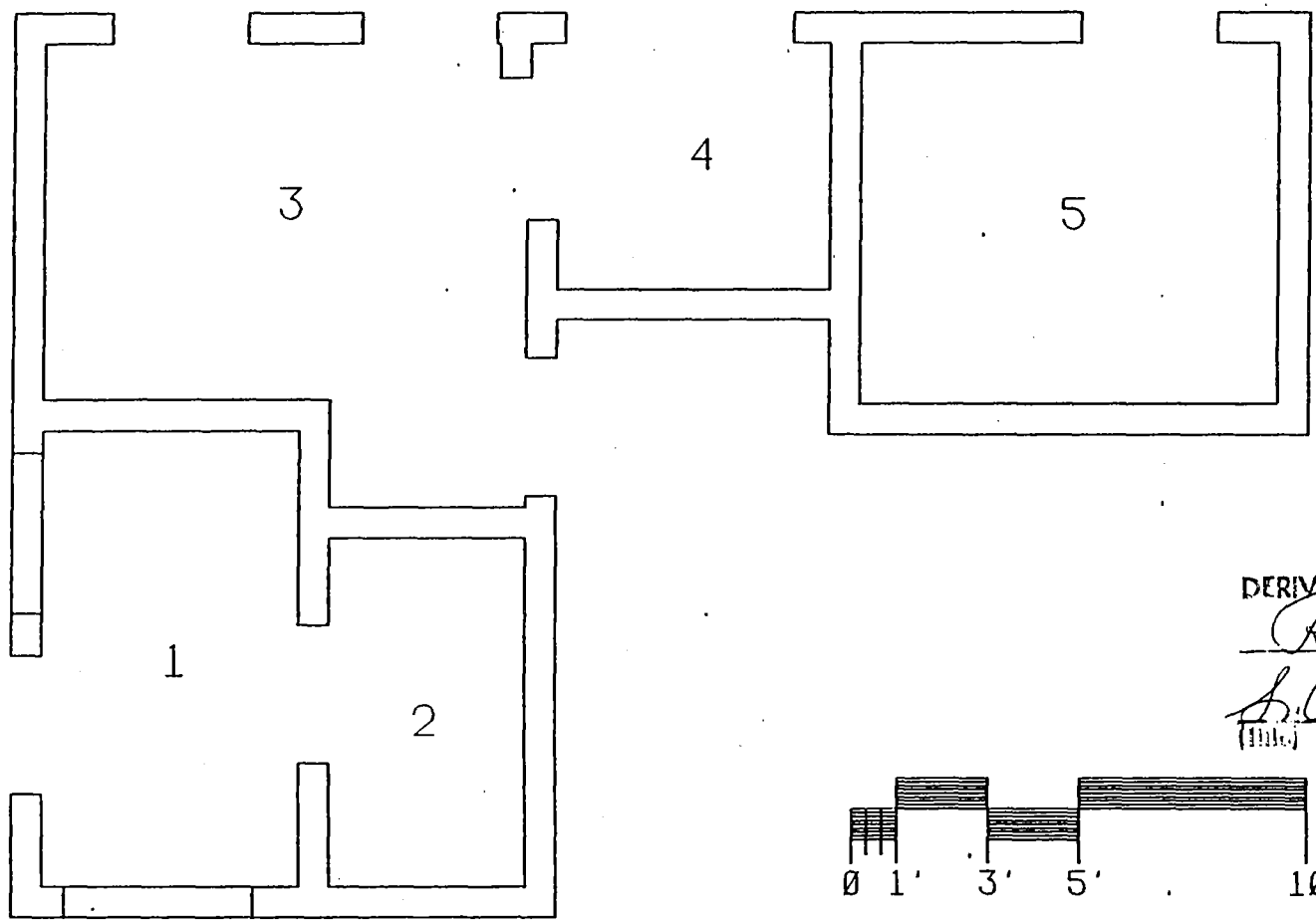


SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

This page intentionally left blank.

9.13.6.4 Floor Plans for Building GP-44

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



UNCLASSIFIED

DERIVATIVE CLASSIFIER

R D Myers
(Name)

S. Class Anal 2/29/96
(Title) (Date)

BLDG GP-44
FIRST FLOOR
BLDG CODE:3533

APPROVALS: DATE:
SAFETY COMMITTEE REQUIRED:
___NONE ___TRUEDOC ___TEGOC ___EHGOC
TECH. REP. ___ ___
BR. MGR. ___ ___
TRUEDOC ___ ___
TEGOC ___ ___
EHGOC ___ ___

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 ENG | PROJ MGR
SPONS | ENG SUPV
LP & QC | PROD REV
ENG REP
APVD | DATE

SHEET	1	2	3	4	5	6
ISSUE	0					

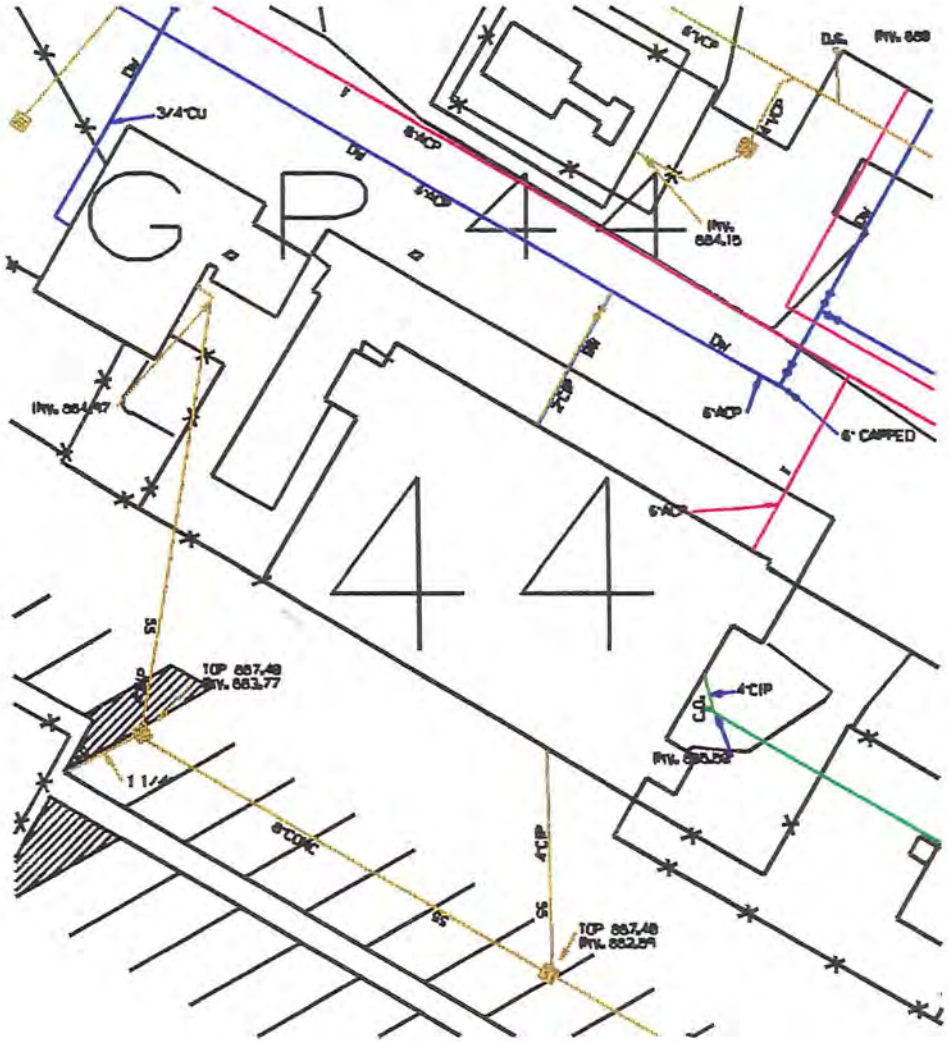
PART CLASSIFICATION

TITLE (U) TITLE CLASSIFICATION
BLDG GP-44
FLOOR PLANS

DRAWING CLASSIFICATION: UCNI
SIZE: C
DRAWING NUMBER: FSC911310
JOB NUMBER: 12335
DWG TYPE: SFP | PROJ: BLDG GP-44 | CHGC: 14065 | SCALE: AS NOTED | SHEET 1 OF 1
STATUS: MO-REL-12/12/91 | ORIGIN: MO-BR3-V3.0

9.13-57

9.13.6.5 Underground Utility Lines



FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL

N

E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
GP-44

DATE: 2/29/96

UNCLASSIFIED

9.13.6.6 Photographs

Mound Plant Building GP-44

A storage area in GP-44 has no fire extinguisher. One is needed.

9.14 BUILDING GW

9.14.1 Scope of Building GW 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.

A team of environmental professionals performed a walk-through of Building GW on February 22, 1996. The Environmental Appraisal Checklist was used to record findings. The checklist is included as Attachment 1 (Section 9.14.6.1). Escorting the appraisers were 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 9.14.6.2).

9.14.2 Description of Building GW

Building GW is a two-story 9,782-square-foot reinforced concrete building with brick facing and a built-up membrane roof. Location is shown in Attachment 3 (Section 9.14.6.3). The building is bordered by Building P to the south, Building W to the east, Building G to the west and Building 91 to the north. Floor plans for the building are presented in Attachment 4 (Section 9.14.6.4). The building is serviced by central steam for heat, chilled water and electrical service. The building has a fire sprinkler system (*Mound Facility Physical Characterization*, 12-1-93).

Building GW was constructed in 1968. According to the *Mound Facility Physical Characterization* report, the building is not contaminated with radioactive or energetic materials.

9.14.3 Summary of Findings

Building GW contains office areas and long-term record storage. The building was originally built to house offices, bonded stores, and receiving/inspection for weapons programs. The building is well-maintained, but has several issues of environmental concern identified during the walk-through and review of reference materials.

9.14.4 Observations

9.14.4.1 Air Emissions

The building contains one walk-in refrigeration unit. The refrigeration unit is used for storing medical x-rays. Due to past storage practices, some of the x-rays have deteriorated and are emitting acetic acid fumes through the decay process. An engineering plan is currently in process to vent the acetic acid fumes. Further investigation needs to be done to verify if an air permit

application is required. There are no fuel-burning units in the building. There is no evidence of fugitive dust.

9.14.4.2 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.

9.14.4.2.1 Sanitary Wastewater

The building does have sanitary services. According to a diagram of underground lines, presented as Attachment 6 (Section 9.14.6.6), 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, neither dye tests nor 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 on operations data supplied by the process owner, effluent from Building GW does not deviate from that expected by the sanitary treatment plant manager.

9.14.4.2.2 Storm Wastewater

The building is serviced by storm drains according to the utilities diagram in Attachment 5 (Section 9.14.6.5). There were floor drains in the bathrooms and janitorial closet. 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.

9.14.4.2.3 Chemicals

Janitorial supplies are stored and used in Building GW. Chemical storage and handling procedures are in place for proper disposal of chemicals. A list of chemicals residing in Building GW 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. There have been no reported spills from Building GW.

9.14.4.3 Potable and Service Water

Potable water is supplied to the building. There is one water fountain (Halsey-Taylor) located on the first floor; it has not been tested for lead. According to EPA protocol, annual sampling criteria do not require testing of each fountain.

9.14.4.4 Chemical Storage and Hazardous Materials

Chemicals used in janitorial services are stored in Building GW. Chemicals are stored in the building in accordance with applicable standards. MSDS's were not readily available in the building.

The building is equipped with appropriate emergency response equipment such as fire extinguishers and sprinklers. There is an emergency evacuation plan, and signs were posted in the areas.

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

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

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

9.14.4.5 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.

The processes that generated hazardous wastes are no longer in operation.

9.14.4.6 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. Current programs for waste minimization in place include aluminum can and white paper recycling.

9.14.5 Findings and Recommendations

The environmental appraisal of Building GW 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. Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.14.6.6).

GW-1 In accordance with OAC 3745-31, the process of storing medical x-rays needs to be reviewed to determine if an air permit application is required. Determination should be documented.

GW-2 In accordance with 29 CFR 1910.1200, MSDS's 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.

9.14.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name GW

Appraisers:

Mary E Sizemore
Name Discipline

Name Discipline

Name Discipline

Terry L Glander
Name Discipline

Building Manager: JEFFREY L. BOSTON

Process Manager: CHERYL A. KIRKWOOD

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: GW

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

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	ONLY JANITORIAL CHEMICALS ARE USED
	Is the building in operation? What are the processes and where do they discharge to?	(Y) / N _____ _____	THE BUILDING IS USED FOR OFFICES AND RECORDS 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)	
	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	FLOOR DRAINS IN BATHROOMS N/A

9.14-9

9.14-10

Environmental Appraisal Checklist

Building Name: GW

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

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	
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	However, plans exist to vent refrigerator to the outside. Determination needs to be made if permit is required
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: GW

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

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					

Source: _____

9.14-11

9.14-12

Environmental Appraisal Checklist

Building Name: GW

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

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	JANITORIAL SUPPLIES ONLY
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	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)	

Environmental Appraisal Checklist

Building Name: GW

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

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	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	

9.14-13

9.14-14

Environmental Appraisal Checklist

Building Name: GW

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

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	N/A
	Is there a liquid bulk transfer area?	Y / N	N/A
	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
				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: GW

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

Date: 1/22/96

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	NA
	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	UNKNOWN - SEE SURVEY RESULTS

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
GW	1ST FLOOR	WM8A	HALSEY TAYLOR S/N 489087

Source: _____

9.14-15

9.14-16

Environmental Appraisal Checklist

Building Name: GW

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

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	Has any material generated been characterized RCRA hazardous?	Y / N	JANITORIAL CHEMICALS ONLY
	Was charactarization by analysis or by process knowledge?	analysis / process	N/A
	Are lab results or documentation of process knowledge readily available?	Y / N	N/A
	Note any uncharacterized material in comment section. Is it waste?	Y / N	N/A
	If yes, proceed with next section.		
OAC 3745 52-11	Are any of the materials noted RCRA hazardous waste?	Y / N	
	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.		

Environmental Appraisal Checklist

Building Name: GW

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

Date: 1/22/96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	Y / N Y / N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y / N	
	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	

9.14-17

9.14-18

Environmental Appraisal Checklist

Building Name: GW

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

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:		
	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 / 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: GW

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

Date: 1/22/96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	
	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	

9.14-19

9.14-20

Environmental Appraisal Checklist

Building Name: GW

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

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	
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:

Environmental Appraisal Checklist

Building Name: GW

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

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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?	Y / N	INSPECTION/ANALYSIS
	If no for this building or area note this conclusion in the comment section.		
	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.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of 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	

9.14-21

9.14-22

Environmental Appraisal Checklist

Building Name: GW. Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore 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)	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	
	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	

Environmental Appraisal Checklist

Building Name: GIU

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

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	
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	

9.14-23

9.14-24

Environmental Appraisal Checklist

Building Name: G10

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

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 capacitators 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: GLU

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

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	
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	

9.14-25

9.14-26

Environmental Appraisal Checklist

Building Name: GW

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

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	
	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: GW

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

Date: 1/22/96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

9.14-27

Environmental Appraisal Checklist

Building Name: GW

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

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	
	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: GW

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

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	
	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:

9.14-29

9.14-30

Environmental Appraisal Checklist

Building Name: GW

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

Date: 1/22/96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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)	WHITE PAPER RECYCLING ONLY
	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: GW

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

Date: 1/22/96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	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	
METAL WASTES			
	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	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

9.14-32

Environmental Appraisal Checklist

Building Name: GW

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

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	
	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	
CYANIDE AND REACTIVE WASTES			
	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	
VEHICLE MAINTENANCE			
	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: GW

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

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	
	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	
OILS			
	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	

9.14-33

Environmental Appraisal Checklist

Building Name: GW

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

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?		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	
SOLVENT WASTES			
	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: GW

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

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	
	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?	_____ _____	

9.14-35

This page intentionally left blank.

9.14.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: GW Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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 a two-story, 9,782-ft² concrete block structure with a brick face and a BUM roof (coal tar). HVAC services are central steam and chilled water.

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

5. Provide a drawing of the building.

No drawing provided.

6. What is the current building use?

First floor-~~receiving/inspection for weapons program~~
Second floor-~~chemical storage~~ (one-third); offices (two-thirds)
Long term Storage for Record Management

Source: Mound Buildings, 5-9-95

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

Previously used as office space for uncleared employees, part-time employees, and new employees. Planned for conversion to its present use in January of 1994.

Office Space & bonded Stores Area

Source: Mound Buildings, 5-9-95

Building Manager's Questionnaire

Building Name: GW 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: Long Term Records - Boxes ~~Manufacturing~~ support, ~~bonded stores~~, offices

How Wastes Are Generated:

~~Materials that have been tested and approved~~ for use in manufacturing are ~~stored in GW~~. ~~If the time~~ period for which a particular material was approved ~~ends and the material is not~~ recertified, Waste Management is called to pick it up. ~~Materials that are~~ not acceptable or are no longer needed may also be picked up.

Contact:
Phone #:

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

Building Manager's Questionnaire

Building Name: GW 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: GW 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? Yes No

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

15. Does the building discharge to the sanitary sewer? Yes No N/A
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

9.14-42

Building Manager's Questionnaire

Building Name: GW 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)
DAP 306	S	25/LB
DAP Short Glass 5201 Part #A15371	S	500/LB
Defoamer Resin Part #4582	G	360/OZ
Dextrose Powder Part 3027	S	19/LB
Dimer Parylene Part 2434	S	1/LB
Dimer Parylene Part 2434	L	17/LB
Dye Gard 184 Part 4318	L	22/KG
Dye Zuler Blue Part 2410	S	3/LB
Epon 828 Part 4036	L	26/L
Epon 828 Resin	L	20/QT
Ester Alcohol Part 2398	L	1/GA
Flux Part 4194	L	15/PT
Flux Supr #30 Part 4550	L	14/PT
Flux Type B Part 5343	L	5/QT
Gold Brightner Part 3450	L	39/L
Gold Stripper 14254	L	1 GA
Graphite	S	70/OZ
Hexane Reagent Part 4459	L	19/L
Hydrofluric Acid	L	10/LB
Isocut Fluid	L	9/QT
Magnesium Oxide Part 2279	S	6/LB
Markem Cleaner	L	24/QT
Methyl Alcohol Part 5031	L	30/L
Methyl Orange Solution Part 3850	L	2/L
Mold Whiz P-9 Part 4864	L	13/GA
Oxidizers, Chromic Acid Part 5379	S	250/G
Permabond 910	L	28/OZ
Polysacharride Part 2955	S	6/GA

Building Manager's Questionnaire

Building Name: GW Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

Chemical Name	State	Amount (MAX)
Potassium Perchlorate Part 2409	S	1/GA
Replenisher Gold Part 3451	L	9/GA
RTV 630 A&B	S	1/LB
Silver Flake MK Part 4025	L	375/OZ
Silver Paint Part 2994	L	625/G
Sodium Bicarbonate	S	30/LB
Sodium Carbonate Part 5097	S	11/LB
Sodium Dichromate Part 5136	S	625/G/
Sodium Potassium Tartarate	S	15/LB
Solder	S	5/OZ
Solder Resin Core Part 5414	S	20/OZ
Solution 7.0 Part 5130	L	3/L
SS4144 Primer	L	21/PT
Stir Epoxy Part A&B Part 4179	L	40/LB
Test Solution Part 5283	L	8/QT
TIH3 (Titanium Tri-hydride)	S	805/LB
Trephenyl Phosphate	L	23/LB
Triphenyl Penyl Part 4541	L	10/LB
Ultra Carbon Graphite Part 5015	S	278/OZ
Alconox Detergent	S	130/LB
Aluminum Alloy #2203	S	63/LB
Aluminum Alloy #2204	S	63/LB
Aluminum Oxide Part #13814	S	20/LB
Antifoam Type 11 Part 3581	L	8/GA
Blue Dap Short #4747	S	63/LB
Blue Paste Part 4325	S	3/GA
Boact EC 7 Part 5317	L	310/GA
Boron Powder Part 2408	S	6/LB
Calcium Sterate Part 5029	S	53/KG
Castone	S	31/LB
Chaner Markem Part 2310	L	8/QT
Cimstar Metal Working Fluid	L	6/GA
Clean Powder Part 3466	S	480/OZ
Cleaning Powder-3	S	12/LB
Compressed Air Duster Aerosol	G	210/OZ

Source: Chemical Inventory 1994

9.14-44

Building Manager's Questionnaire

Building Name: GW Building Manager: J.L. Boston 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?

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

Janitors Closet inside (1st floor)

23. Where do excess janitorial supplies go?

Waste Management

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

9.14-45

Building Manager's Questionnaire

Building Name: GW 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
ATTACHED	

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

GW BLDG	AEROJET ACCELERATOR ATC-3	D007	31.4
GW BLDG	ALCOHOL	D001	0.3
GW BLDG	ALCONOX	NONE	31.3
[illegible]LDG	ALKYL SULPHANOTE	D002	2.1
[illegible] BLDG	ALLYL GLYCIDYL ETHER	D001	1.6
GW BLDG	ALLYL GLYCIDYL ETHER	D001	1.8
GW BLDG	ALLYL GLYCIDYL ETHER	D001	14.0
GW BLDG	ALODINE 1200S	D001 D007	4.0
GW BLDG	ALODINE 1200S	D001	10.8
GW BLDG	ALODINE 1201	D007	9.0
GW BLDG	ALUMINA C	NONE	1.0
GW BLDG	ALUMINUM OXIDE	NONE	137.5
GW BLDG	ALUMINUM OXIDE	NONE	1.0
GW BLDG	ALUMINUM OXIDE	NONE	5.5
GW BLDG	ALUMINUM OXIDE	NONE	6.6
GW BLDG	ALUMINUM OXIDE	NONE	0.1
GW BLDG	ALUMINUM OXIDE	NONE	16.5
GW BLDG	AMDRY CEMENT	D001	16.2
GW BLDG	AMMONIUM IODIDE	NONE	1.1
GW BLDG	AMMONIUM PHOSPHATE	NONE	1.1
GW BLDG	AMMONIUM PHOSPHATE, MONOBASIC	NONE	8.8
GW BLDG	ANCO A-8007	NONE	70.0
GW BLDG	ANTIMONY	NONE	0.5
GW BLDG	AP-20	NONE	12.2
GW BLDG	AXEL MOLD RELEASE P-9	D001 F002 F003 F005	8.4
GW BLDG	BARIUM FLUORIDE	D003 D005	0.1
GW BLDG	BARIUM FLUORIDE	D003 D005	0.1
GW BLDG	BIPHENYL	NONE	0.1
[illegible]LDG	BLUE PASTE 2301	NONE	0.9
[illegible] BLDG	BORIC ACID	NONE	32.2
GW BLDG	BORIC ACID, SOLID	NONE	13.0
GW BLDG	BORON POWDER	D001 D003	6.5
GW BLDG	BORON REFERENCE SOLUTION	NONE	6.7
GW BLDG	BRIGHTENER E3	NONE	71.9
GW BLDG	BX 20101 PART B	NONE	1.6
GW BLDG	CAB-O-SIL	NONE	11.7
GW BLDG	CABOSIL	NONE	0.2
GW BLDG	CABOSIL	NONE	1.0
GW BLDG	CALCIUM NICKEL	NONE	1.5
GW BLDG	CALCIUM STEARATE	NONE	129.1
GW BLDG	CALCIUM STEARATE	NONE	13.6
GW BLDG	CASTONE BUFF	NONE	25.6
GW BLDG	CAYTUR 21	D001	2.4
GW BLDG	CGE 100 ETCHANT	D002	11.5
GW BLDG	CHLOROFORM	D001 D022	3.0
GW BLDG	CHROMIUM ETCHANT	D002 D007	17.6
GW BLDG	CHROMIUM TRIOXIDE	D001 D007	0.5
GW BLDG	CHROMIUM TRIOXIDE	D001 D007	1.0
GW BLDG	CITRATE SOLUTION	NONE	1.0
GW BLDG	CITRIC ACID	NONE	9.8
GW BLDG	CITRIC ACID MONOHYDRATE	NONE	13.0
GW BLDG	CLEANER	NONE	1.0
GW BLDG	CLEANING POWDER 2	NONE	15.1
[illegible] BLDG	CLEANING POWDER 3	NONE	11.5
[illegible]LDG	CLEAR ARCRYLIC	D001	48.0

GW BLDG	COMPONENT A	NONE	12.0
GW BLDG	COMPONENT B	NONE	12.0
GW BLDG	CONAP AD1146	D001 F005	28.4
[illegible]DG	CONAP CONATHANE EN7-A	NONE	8.3
GW BLDG	CONAP CONATHANE EN7-B	NONE	1.9
GW BLDG	CONAP DS 1834	D003 D006	20.0
GW BLDG	CONAP EN7 PART A	NONE	1.8
GW BLDG	CONAP EN7 PART A	D001 F005	3.0
GW BLDG	CONAP EN7 PART A	D001 F005	29.2
GW BLDG	CONAP EN7 PART A	NONE	3.5
GW BLDG	CONAP EN7 PART B	NONE	0.5
GW BLDG	CONAP EN7 PART B	NONE	0.4
GW BLDG	CONAP EN7 PART B	NONE	0.7
GW BLDG	CONAP EN7 PART B	NONE	6.5
GW BLDG	CONAP EN7 PART B	NONE	0.8
GW BLDG	CONAP EN8 PART A	D003	1.5
GW BLDG	CONAP EN8 PART B	NONE	0.4
GW BLDG	CONAP S-1	D001 F005 U220	17.1
GW BLDG	CONATHANE EN7 PART A	D003	1.6
GW BLDG	CONATHANE EN7 PART A	NONE	1.7
GW BLDG	CONATHANE EN7 PART B	NONE	0.3
GW BLDG	CONDUCTOR COMPOSITION	D001 D011	1.3
GW BLDG	CONTACT CEMENT	D001 F002 F005	2.1
GW BLDG	COPPER FLUORIDE	NONE	0.1
GW BLDG	CORROCOAT 1295	D001 D003 F003	0.2
GW BLDG	CORROCOAT 1295	D001 D003 F003	0.9
GW BLDG	CORROCOTE THINNER WITH TOLUENE 2,4 DIISOCYANATE	D003 F003	2.0
[illegible]LDG	CPVC	D001	3.0
[illegible]LDG	CTBN EPOXY	NONE	39.5
GW BLDG	CURING AGENT	D001	0.1
GW BLDG	CYANIDE PIT WASTE RAGS	F007 F009	1.2
GW BLDG	CYANOCURE	NONE	2.7
GW BLDG	DAP BLUE FIBERGLASS	NONE	6.4
GW BLDG	DE-OX-ID	D001	0.4
GW BLDG	DEXTROSE	NONE	23.8
GW BLDG	DIAALYL PHTHALATE	NONE	39.6
GW BLDG	DIALLYL PHTHALATE	NONE	294.9
GW BLDG	DIALLYL PHTHALATE	NONE	339.0
GW BLDG	DIALLYL PHTHALATE	NONE	135.3
GW BLDG	DIALLYL PHTHALATE	NONE	1.0
GW BLDG	DIALLYL PHTHALATE	NONE	6.6
GW BLDG	DIALLYL PHTHALLATE COMPOUND	NONE	74.3
GW BLDG	DIALYL PHTHALLATE	NONE	22.8
GW BLDG	DIAMINOBENZENE (1,3)-4,4 METHYLENEDIANILINE	NONE	10.7
GW BLDG	DIBUTYL TIN DILAURATE	NONE	0.1
GW BLDG	DIBUTYL TIN DILAURATE	NONE	0.4
GW BLDG	DIBUTYL TIN DILAURATE	NONE	0.8
GW BLDG	DIBUTYL TIN DILAURATE	NONE	0.1
GW BLDG	DIBUTYL TIN DILAURATE	NONE	0.1
GW BLDG	DIETHYL AMINE	D001	25.0
GW BLDG	DIETHYLAMINO ETHANOL	D001	85.3
GW BLDG	DIETHYLENE GLYCOL	D001	1.3
[illegible]LDG	DIETHYLENE GLYCOL BUTYL ETHER ACETATE	D001	0.9

p7b

Bldg. 61

GW BLDG	DIMEHTYLFORMAMIDE	NONE	77.0
GW BLDG	DIMETHOXY-PHENYLACETOPHENASE	NONE	1.0
[illegible]BLDG	DIPHENYL METHANE 4,4 DIISOCYANATE	D001 D003	1.0
[illegible]DG	DOW 1200 PRIME COAT	D001	0.8
GW BLDG	DOW 1200 PRIME COAT	D001	0.8
GW BLDG	DOW 1200 PRIME COAT	D001	9.0
GW BLDG	DOW 1204 PRIME COAT	D001	0.8
GW BLDG	DOW 1204 PRIME COAT	D001	0.8
GW BLDG	DOW 3140	NONE	1.0
GW BLDG	DOW 3140	NONE	1.0
GW BLDG	DOW 3140 RTV	NONE	1.1
GW BLDG	DOW CORNING 3140 RTV COATING	NONE	3.8
GW BLDG	DOW PRIME COAT 1204	D001	2.7
GW BLDG	DUPONT CONDUCTER	D001 D011	0.2
GW BLDG	DYNAMARK 8500	D001	0.5
GW BLDG	DYNATRONIX ACIDIC SOLUTION	D002	14.3
GW BLDG	E SOLDER A	D008	1.0
GW BLDG	E SOLDER B	D008	1.1
GW BLDG	E-SOLDER 3012	D011	2.9
GW BLDG	EGMB ETHER,FORMALDEHYDE,DIETHYL ETHANOLAMINE	D001	26.8
GW BLDG	ENTHONE ENPLATE NI-416M	NONE	53.8
GW BLDG	EPON 815	NONE	2.5
GW BLDG	EPON 815	D001	2.5
GW BLDG	EPON 828	NONE	4.0
GW BLDG	EPON 828	NONE	1.3
GW BLDG	EPON CURING AGENT U	D002	33.6
[illegible]W BLDG	EPON CURING AGENT U	D002	2.4
[illegible]LDG	EPON CURING AGENT U	D002	20.0
[illegible]LDG	EPON CURING AGENT U	D002	22.8
GW BLDG	EPON RESIN 815	NONE	0.0
GW BLDG	EPON RESIN 828	NONE	2.4
GW BLDG	EPON RESIN 828	NONE	1.1
GW BLDG	EPON RESIN 828	NONE	2.4
GW BLDG	EPON RESIN 828	NONE	4.8
GW BLDG	EPON RESIN 828	NONE	125.1
GW BLDG	EPON U	D002	2.0
GW BLDG	EPOXY 8822 PART A	NONE	1.5
GW BLDG	EPOXY 8822 PART B	NONE	0.5
GW BLDG	EPOXY RESIN	NONE	22.6
GW BLDG	EPOXY RESIN	NONE	1.5
GW BLDG	EPOXY RESIN	NONE	30.0
GW BLDG	EPOXY RESIN	D001	0.7
GW BLDG	EPOXY RESIN	NONE	102.0
GW BLDG	EPOXY RESIN	D001	3.5
GW BLDG	EPOXY RESIN	D001	1.7
GW BLDG	EPOXY RESIN	D001	4.4
GW BLDG	EPOXY RESIN	D001	2.0
GW BLDG	EPOXY RESIN	D001	3.0
GW BLDG	EPOXY RESIN	D001	1.6
GW BLDG	EPOXY RESIN	D001	1.0
GW BLDG	EPOXY RESIN	D001	2.8
[illegible]W BLDG	EPOXY RESIN	D001	4.0
[illegible]W BLDG	EPOXY RESIN	D001	1.0
[illegible]LDG	EPOXY RESIN	D001	1.0

PTC

GW
Bldg.

GW BLDG	EPOXY RESIN	D001	2.0
GW BLDG	EPOXY RESIN,METHYLENE BIPHENYL ISOCYANATE	D003	1.9
[illegible] LDG	EPOXY RESIN,POLYPROPYLENE TRIOL	NONE	1.5
GW BLDG	EPOXY RESIN,TALC	NONE	1.5
GW BLDG	EPOXY RESIN,TALC	NONE	5.7
GW BLDG	EPOXY SRIS	NONE	4.0
GW BLDG	EPOXYLITE 8822 PART A	NONE	7.0
GW BLDG	EPOXYLITE 8822 PART A	NONE	71.0
GW BLDG	EPOXYLITE 8822 PART A	NONE	10.5
GW BLDG	EPOXYLITE 8822 PART A	NONE	26.0
GW BLDG	EPOXYLITE 8822 PART A	NONE	22.5
GW BLDG	EPOXYLITE 8822 PART A	NONE	9.5
GW BLDG	EPOXYLITE 8822 PART A	NONE	6.0
GW BLDG	EPOXYLITE 8822 PART A	NONE	6.9
GW BLDG	EPOXYLITE 8822 PART A	NONE	7.3
GW BLDG	EPOXYLITE 8822 PART A	NONE	26.7
GW BLDG	EPOXYLITE 8822 PART A	NONE	3.7
GW BLDG	EPOXYLITE 8822 PART A	NONE	6.2
GW BLDG	EPOXYLITE 8822 PART A	NONE	1.6
GW BLDG	EPOXYLITE 8822 PART A	NONE	12.2
GW BLDG	EPOXYLITE 8822 PART A	NONE	2.8
GW BLDG	EPOXYLITE 8822 PART A	NONE	9.2
GW BLDG	EPOXYLITE 8822 PART A	NONE	20.2
GW BLDG	EPOXYLITE 8822 PART A	NONE	11.8
GW BLDG	EPOXYLITE 8822 PART A	NONE	1.0
GW BLDG	EPOXYLITE 8822 PART A	NONE	13.7
GW BLDG	EPOXYLITE 8822 PART A	NONE	1.3
[illegible] LDG	EPOXYLITE 8822 PART A	NONE	1.5
[illegible] LDG	EPOXYLITE 8822 PART A	NONE	12.3
GW BLDG	EPOXYLITE 8822 PART A	NONE	5.4
GW BLDG	EPOXYLITE 8822 PART A	NONE	14.4
GW BLDG	EPOXYLITE 8822 PART A	NONE	3.0
GW BLDG	EPOXYLITE 8822 PART A	NONE	9.9
GW BLDG	EPOXYLITE 8822 PART A	NONE	4.7
GW BLDG	EPOXYLITE 8822 PART A	NONE	1.5
GW BLDG	EPOXYLITE 8822 PART B	NONE	25.0
GW BLDG	EPOXYLITE 8822 PART B	NONE	2.6
GW BLDG	EPOXYLITE 8822 PART B	NONE	4.1
GW BLDG	EPOXYLITE 8822 PART B	NONE	9.0
GW BLDG	EPOXYLITE 8822 PART B	NONE	7.5
GW BLDG	EPOXYLITE 8822 PART B	D002	2.0
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	2.7
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	2.5
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	9.9
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	0.7
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	1.3
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	2.2
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	3.3
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	4.3
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	6.6
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	4.8
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	1.1
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	1.0
[illegible] LDG	EPOXYLITE 8822 PART B	D002 D003	5.0

p7d

GW Bldg. E

GW BLDG	EPOXYLITE 8822 PART B	D002 D003	0.6
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	2.0
GW BLDG	EPOXYLITE 8822 PART B	D002	4.5
GW BLDG	EPOXYLITE 8822 PART B	D002	0.3
GW BLDG	EPOXYLITE 8822 PART B	D002	1.0
GW BLDG	EPOXYLITE 8822 PART B	D002	5.3
GW BLDG	EPOXYLITE 8822 PART B	D002	1.7
GW BLDG	EPOXYLITE 8822 PART B	D002	3.6
GW BLDG	EPOXYLITE 8822 PART B	D002	0.6
GW BLDG	EPOXYLITE 8822 PART B	D002 D003	1.0
GW BLDG	EPOXYPOLYMIDE,TRIPHENYLPHOSPHITE,MAGNESIUM OXIDE,PIGMENT	D001	9.0
GW BLDG	ETHACURE	NONE	2.8
GW BLDG	ETHACURE	NONE	17.1
GW BLDG	ETHACURE 100	NONE	2.8
GW BLDG	ETHOCURE	NONE	3.0
GW BLDG	ETHYLCYANOCRYLATE,HYDROQUINONE	D001	1.2
GW BLDG	ETHYORTHOSILICATE,TETRABUTYTITONEET,PETROLEUM DISTILLATES	D001	1.0
GW BLDG	EUROPIUM HYDRIDE	D003	0.1
GW BLDG	EUROPIUM HYDRIDE	D003	0.1
GW BLDG	EUROPIUM METAL	D003	0.2
GW BLDG	EXTERNAL MOLD RELEASE	D001	82.6
GW BLDG	FERRIC CHLORIDE	NONE	3.6
GW BLDG	FLUORENE	NONE	0.1
GW BLDG	FOAM SUPPRESSANT	NONE	52.0
GW BLDG	FORMIC ACID	D002	6.6
GW BLDG	FORMICA 100	NONE	1.0
GW BLDG	GE BLUE PRIMER SS4155	D001	1.5
GW BLDG	GE PRIMER BLUE SS4155	D001	1.1
GW BLDG	GE RTV 630 PART A	NONE	2.5
GW BLDG	GE RTV 630 PART A	NONE	0.8
GW BLDG	GE RTV 630 PART B	F005	0.2
GW BLDG	GE RTV 630 PART B	F005	0.1
GW BLDG	GE RTV 630A SILICONE	NONE	2.0
GW BLDG	GE RTV 630B CURING AGENT	NONE	2.0
GW BLDG	GE RTV II	NONE	293.0
GW BLDG	GE RTV SILICONE	NONE	4.8
GW BLDG	GE SILICONE	D001	9.9
GW BLDG	GE SILICONE	D001	1.4
GW BLDG	GE SILICONE	D001	2.6
GW BLDG	GE SILICONE A	NONE	0.9
GW BLDG	GE SILICONE B	D001	0.1
GW BLDG	GE SILICONE BLUE- SS 4155	D001	4.4
GW BLDG	GE SILICONE PRIMER BLUE	D001	1.5
GW BLDG	GE SILICONE RTV 11	NONE	9.3
GW BLDG	GE SILICONE RTV 630 PART A	NONE	2.8
GW BLDG	GE SILICONE RTV 630 PART B	NONE	0.3
GW BLDG	GE SILICONE RTV 63DA	NONE	1.0
GW BLDG	GE SILICONE RTV 63DB	NONE	0.1
GW BLDG	GE SILICONE SS-4155	D001	2.9
GW BLDG	GE SILICONE SS4155	D001	4.3
GW BLDG	GE SILICONE SS4155	D001	4.3
GW BLDG	GE SILICONE SS4155	D001	25.5
GW BLDG	GE SILICONE SS4155	D001	27.4

GW

P7e

9.14-51 Bldg

GW BLDG	GE SS4155	D001	1.0
GW BLDG	GE SS4155	D001	1.0
GW BLDG	GE SS4155	D001	1.2
GW BLDG	GE SS4155	D001	1.3
GW BLDG	GE SS4155 BLUE PRIMER	D001	1.4
GW BLDG	GE SS4155 BLUE PRIMER	D001	2.0
GW BLDG	GE SS4155 PRIMER	D001	1.4
GW BLDG	GE SS4155 PRIMER	D001	7.0
GW BLDG	GLACIAL ACETIC ACID	D001 D002	5.7
GW BLDG	GLASS BEADS	NONE	22.7
GW BLDG	GLASS BEADS	NONE	20.0
GW BLDG	GLYCERIN	NONE	1.3
GW BLDG	GOLD ETCH	D002	31.0
GW BLDG	GOLD SALT 9NT	NONE	161.1
GW BLDG	GOLD STRIPPER	D002	49.0
GW BLDG	GRAPHITE POWDER	NONE	33.2
GW BLDG	GREEN GLUE	NONE	1.0
GW BLDG	GREEN GLUE	NONE	1.5
GW BLDG	GREEN GLUE	NONE	1.2
GW BLDG	GREEN GLUE	NONE	1.2
GW BLDG	GREEN GLUE	NONE	3.7
GW BLDG	GREEN GLUE	NONE	5.0
GW BLDG	GREEN GLUE	NONE	1.2
GW BLDG	GREEN GLUE	NONE	1.0
GW BLDG	GREEN GLUE	NONE	6.3
GW BLDG	GREEN GLUE EPOXY	NONE	1.3
GW BLDG	GREEN GLUE EPOXY	NONE	6.3
GW BLDG	HACH EDTA SALT	NONE	0.5
GW BLDG	HALTHANE 7200 PART A	D001	0.4
GW BLDG	HALTHANE 7200 PART B	D008	0.4
GW BLDG	HALTHANE 73-18 CURING AGENT	NONE	3.4
GW BLDG	HALTHANE 73-18 RESIN	NONE	5.1
GW BLDG	HALTHANE 7318	NONE	0.5
GW BLDG	HALTHANE 88-3 CURING AGENT	NONE	0.4
GW BLDG	HALTHANE 88-3 CURING AGENT	NONE	0.3
GW BLDG	HALTHANE 88-3 RESIN	NONE	0.4
GW BLDG	HALTHANE 88-3 RESIN	NONE	0.9
GW BLDG	HALTHANE CURING AGENT	NONE	1.0
GW BLDG	HALTHANE CURING AGENT 73-18	NONE	0.4
GW BLDG	HALTHANE CURING AGENT 73-18	NONE	1.1
GW BLDG	HALTHANE CURING AGENT 73-18	NONE	0.2
GW BLDG	HALTHANE CURING AGENT 88-3	NONE	2.0
GW BLDG	HALTHANE CURING AGENT 88-3	NONE	0.2
GW BLDG	HALTHANE RESIN	NONE	1.0
GW BLDG	HALTHANE RESIN 73-18	NONE	0.7
GW BLDG	HALTHANE RESIN 73-18	NONE	2.1
GW BLDG	HALTHANE RESIN 73-18	NONE	0.2
GW BLDG	HALTHANE RESIN 88-3	D001	4.6
GW BLDG	HALTHANE RESIN 88-3	D001	0.6
GW BLDG	HERESITE CSE6006	D001	3.0
GW BLDG	HEXANE	D001	40.9
GW BLDG	HEXANE WASTE	D001	1.0
GW BLDG	HYDROFLUORIC ACID	D002 U134	9.3
GW BLDG	HYDROFLUORIC ACID 49%	D002 U134	1.1
GW BLDG	HYDROXYPROPYL (2)-ETHYLENE DIAMINE	D001	4.0

p7f

GW bldg. 61

GW BLDG	HYSOL 934 PART A	NONE	72.0
GW BLDG	HYSOL 934 PART B	NONE	24.0
GW BLDG	HYSOL A	NONE	17.1
[illegible]LDG	HYSOL B	D001	11.2
[illegible]BLDG	HYSOL EE-4169 CASTING COMPOUND	NONE	42.2
GW BLDG	HYSOL PART A	NONE	1.5
GW BLDG	HYSOL PART B	NONE	0.5
GW BLDG	INSTAGEL XF	D001	48.0
GW BLDG	IRGACURE 651	NONE	6.0
GW BLDG	IRON POWDER	D003	12.5
GW BLDG	ISO VERRE STRIPPER	D002 F002	1.1
GW BLDG	ISO VERRE STRIPPER	F002	34.0
GW BLDG	ISOPROPANOL	D001	0.3
GW BLDG	ISOPROPYL, BROMOCRESOL, POTASSIUM HYDROXIDE	D001	2.5
GW BLDG	J.R. ACCELERATOR POLYSULFIDE	D001	0.4
GW BLDG	J.R. BASE POLYSULFIDE	D001 F005	2.1
GW BLDG	JAGUAR C13	NONE	11.7
GW BLDG	JOINT SEALANT	D001 D005 D008	11.0
GW BLDG	KESTER FLUX 197	D001	10.0
GW BLDG	KESTER RESIN AP-20	F002	67.8
GW BLDG	KESTER SOLDER FLUX	D001	1.5
GW BLDG	KODAK INDUSTREX DEVELOPER PART A	D002	286.3
GW BLDG	KODAK TRIPHENYL PHOSPHITE	NONE	43.2
GW BLDG	LACQUER	D001	6.0
GW BLDG	LANTHANUM HYDRIDE	D003	0.1
GW BLDG	LANTHANUM METAL	D003	0.5
GW BLDG	LANTHANUM NICKEL ALUMINUM	NONE	0.1
[illegible]LDG	LANTHANUM NICKEL HYDRATE	D001	0.1
[illegible]BLDG	LEAD DIOXIDE	D001 D008	1.9
GW BLDG	LEAD DIOXIDE PART B	D008	4.0
GW BLDG	LEAD OCTOATE WITH SYRINGES	D008	5.0
GW BLDG	LEAD OXIDE- RED	D001 D008	9.5
GW BLDG	LEAD ZIRCONATE TITANATE	D008	5.7
GW BLDG	LECTROLESS NICKEL MAKEUP	D008	201.0
GW BLDG	LIMONENE	D001	37.2
GW BLDG	LITHIUM CARBONATE	NONE	13.7
GW BLDG	LITHIUM CARBONATE	NONE	2.3
GW BLDG	LITHIUM CARBONATE	NONE	17.0
GW BLDG	LITHIUM HYDRIDE	D003	0.1
GW BLDG	LITHIUM HYDRIDE	D003	0.2
GW BLDG	LITHIUM HYDRIDE, BERRYLIUM HYDRIDE	D003	0.1
GW BLDG	LITHIUM HYDRIDE, BERYLLIUM HYDRIDE	D003	0.1
GW BLDG	LITHIUM MAGNESIUM HYDRIDE	D003	0.2
GW BLDG	LITHIUM PHOSPHATE	NONE	11.0
GW BLDG	LOCTITE 271	D001	1.0
GW BLDG	M-PYROL	NONE	1.0
GW BLDG	MAGNESIUM NICKEL	D003	0.1
GW BLDG	MAGNESIUM NICKEL	D003	0.1
GW BLDG	MAGNESIUM NICKEL	D003	0.1
GW BLDG	MAGNESIUM NICKEL HYDRIDE	D003	0.1
GW BLDG	MAGNESIUM OXIDE	NONE	1.1
GW BLDG	MAGNESIUM OXIDE	NONE	1.5
[illegible] BLDG	MAGNESIUM OXIDE	NONE	9.0
[illegible]LDG	MANNITOL	NONE	8.0

p 7g

GW

Bldg. G

GW BLDG	MANNITOL	NONE	15.3
GW BLDG	MARKEM 207 CLEANER	F002	56.8
GW BLDG	MARKEM 320	D001	2.0
GW BLDG	MARKEM 320	D001	11.5
GW BLDG	MARKEM 7132 BLACK INK	NONE	3.0
GW BLDG	MARKEM 8639 BLACK INK	NONE	1.1
GW BLDG	MARKEM 8639 BLACK INK	NONE	0.9
GW BLDG	MARKEM 8639 BLACK INK	NONE	0.7
GW BLDG	MARKEM BLACK 8829	NONE	0.3
GW BLDG	MARKEM CLEANER 320	D001 F003	13.1
GW BLDG	MECURY THERMOMETERS	D009	2.1
GW BLDG	MEK, ACETONE, 1,1,1-TRICHLOROETHANE, PETROLEUM HYDROCARBONS	D035 F001 F003 F005	336.6
GW BLDG	MERCURY	D009	0.2
GW BLDG	METHANOL	D001 F003 U154	14.7
GW BLDG	METHYL ETHYL KETONE	D001 D035 F005	46.0
GW BLDG	METHYL ETHYL KETONE	D001	0.5
GW BLDG	METHYL ETHYL KETONE	D001 D035 F005 U159	119.8
GW BLDG	METHYL ORANGE	NONE	5.5
GW BLDG	METHYL PYRROLIDONE	NONE	0.9
GW BLDG	METHYLENE BIS-PHENYL ISOCYANATE	D001	1.0
GW BLDG	METHYLENE BIS-PHENYL ISOCYANATE	D001	1.0
GW BLDG	MOUND GREEN GLUE	NONE	5.8
GW BLDG	MOUND GREEN GLUE	NONE	3.8
GW BLDG	MOUND GREEN GLUE	NONE	2.5
GW BLDG	NADIC METHYL ANDHYDRIDE	NONE	5.3
GW BLDG	NADIC METHYL ANHYDRIDE,EPOXY RESIN	NONE	10.0
GW BLDG	NICKEL CARBONATE	NONE	40.7
GW BLDG	NICKEL STANDARD	D002	25.0
GW BLDG	NICKEL SULFAMATE SOLUTION	NONE	159.8
GW BLDG	NICKEL SULFATE	NONE	8.8
GW BLDG	NITRIC ACID	D001 D002	9.3
GW BLDG	ORGANIC INK	D001	1.0
GW BLDG	ORGANIC INK	D001	1.8
GW BLDG	ORGANIC ISOCYANATE	D003	1.0
GW BLDG	ORGANIC RESIN	NONE	1.9
GW BLDG	PARYLENE	NONE	1.3
GW BLDG	PCB OIL >500PPM	PCB2	0.5
GW BLDG	PDI BLUE 2301	NONE	2.8
GW BLDG	PDI BLUE EPOXY	NONE	19.6
GW BLDG	PDI BLUE PASTE	NONE	9.8
GW BLDG	PDI EPOXY	NONE	80.0
GW BLDG	PDI EPOXY 22-38010	NONE	9.4
GW BLDG	PDI EPOXY BLUE 22-38010	NONE	0.9
GW BLDG	PDI YELLOW	D001	22.2
GW BLDG	PDI YELLOW 22-20480	NONE	11.5
GW BLDG	PDI YELLOW PASTE	NONE	43.4
GW BLDG	PDI YELLOW PASTE	NONE	35.0
GW BLDG	PDI YELLOW PASTE 22-2048	NONE	78.6
GW BLDG	PETROLEUM DISTILLATES	D001	3.0
GW BLDG	PETROLEUM DISTILLATES	D001	1.0
GW BLDG	PETROLEUM DISTILLATES	D001	1.0
GW BLDG	PETROLEUM DISTILLATES	D001	2.0
GW BLDG	PHENOLIC MICROBALLOONS	NONE	1.0

p 7h

GW Bldg. 61

GW BLDG	PHENOLIC RESIN	NONE	21.6
GW BLDG	PHOSPHORIC ACID	D002	2.9
GW BLDG	PLASTISIL ADHESIVE	D001 F003 F005	0.4
GW BLDG	PLASTISIL BASE	NONE	1.3
GW BLDG	PLASTISIL CATALYST	NONE	1.0
GW BLDG	POLISHING POWDER	NONE	1.6
GW BLDG	POLYAMID RESIN	D001	11.0
GW BLDG	POLYAMIDE RESIN,TRIMETHYLENE TETRAMINE	D001	1.0
GW BLDG	POLYSULFIDE PART A	D003 F005	11.0
GW BLDG	POLYSULFIDE PART A	D001 F005	21.0
GW BLDG	POLYSULFIDE PART B	D001 D008	6.0
GW BLDG	POTASSIUM CHLORIDE	NONE	2.0
GW BLDG	POTASSIUM IODIDE	NONE	4.4
GW BLDG	POTASSIUM PERCHLORATE	D001	10.6
GW BLDG	POTASSIUM PHOSPHATE	NONE	2.0
GW BLDG	POTASSIUM SULFATE	NONE	1.0
GW BLDG	PRC 1201QA	D008	0.4
GW BLDG	PRC 1201QB	D001	2.2
GW BLDG	PRC A	D001	0.3
GW BLDG	PRC B	D001	1.3
GW BLDG	PRIME COAT	NONE	0.8
GW BLDG	PRIME COAT 1200	D001	10.8
GW BLDG	PRIME COAT 1200	D001	4.8
GW BLDG	PRIME COAT 1204	D001	0.8
GW BLDG	PRIMER	D001	6.8
GW BLDG	PRIMER	D001	0.9
GW BLDG	PRIMER SIL	D001	4.6
GW BLDG	PURA GOLD CONDUCTING SALT	NONE	150.0
GW BLDG	Q DOPE	D001 F005	0.9
GW BLDG	Q DOPE	D001 F005	1.0
GW BLDG	RAYCOHESIVE B-84	F002	4.0
GW BLDG	RC-20	D001	20.0
GW BLDG	RESIN	D003	3.0
GW BLDG	RESIN,ISOPROPANOL,TURPENTINE	D001	5.0
GW BLDG	RTV 11	NONE	1.0
GW BLDG	RTV 3145	NONE	0.1
GW BLDG	RTV 511 SILICONE	NONE	1.2
GW BLDG	RTV 511 SILICONE	NONE	1.2
GW BLDG	RTV 511 SILICONE RUBBER COMPOUND	NONE	84.1
GW BLDG	RTV 630 A	NONE	2.7
GW BLDG	RTV 630 A	NONE	0.9
GW BLDG	RTV 630 A	NONE	11.0
GW BLDG	RTV 630 B	D001	0.3
GW BLDG	RTV 630 B	D001	0.1
GW BLDG	RTV 630 B	NONE	1.0
GW BLDG	RTV 630 PART A	NONE	0.9
GW BLDG	RTV 630 PART A	NONE	3.0
GW BLDG	RTV 630 PART A	NONE	0.9
GW BLDG	RTV 630 PART A	NONE	1.3
GW BLDG	RTV 630 PART A	NONE	20.6
GW BLDG	RTV 630 PART B	NONE	0.2
GW BLDG	RTV 630 PART B	D001	0.1
GW BLDG	RTV 630 PART B	F005	0.1
GW BLDG	RTV 630 PART B	F005	6.8

PTi

9.14-55

GW Bldg. 6

GW BLDG	RTV F	NONE	2.1
GW BLDG	RTV-11	NONE	1.0
GW BLDG	RUGER TRITON	NONE	1.0
[illegible]DG	SAES GETTERS	D001 D003	1.0
GW BLDG	SCOTCH ELECTRICAL RESIN PART A	NONE	22.0
GW BLDG	SCOTCH ELECTRICAL RESIN PART B	NONE	22.0
GW BLDG	SCOTCH WELD EPOXY ADHESIVE 2214	D003	3.1
GW BLDG	SCOTCHCAST ELECTRICAL RESIN 8 PART A	NONE	4.3
GW BLDG	SCOTCHCAST ELECTRICAL RESIN 8 PART B	NONE	4.4
GW BLDG	SCOTCHCAST RESIN PART B	NONE	10.0
GW BLDG	SCOTH WELD 2214 ADHESIVE	D003	2.0
GW BLDG	SCOTHCAST RESIN PART A	NONE	10.0
GW BLDG	SILICA	NONE	6.6
GW BLDG	SILICA	NONE	10.0
GW BLDG	SILICA	NONE	10.0
GW BLDG	SILICA	NONE	4.0
GW BLDG	SILICA	NONE	2.0
GW BLDG	SILICA	NONE	2.0
GW BLDG	SILICA POWDER	NONE	0.5
GW BLDG	SILICON DIOXIDE WASTE (CABOSIL)	NONE	78.4
GW BLDG	SILICON OXIDE, LITHIUM	D003	0.1
GW BLDG	SILICONE	D001	2.0
GW BLDG	SILICONE	D001	0.9
GW BLDG	SILICONE	D001	0.1
GW BLDG	SILICONE BLUE PRIMER SS4155	D001	4.2
GW BLDG	SILICONE CURING AGENT	D001	2.0
[illegible]LDG	SILICONE CURING AGENT	D001	0.9
[illegible]LDG	SILICONE CURING AGENT	D001	0.2
GW BLDG	SILICONE ELASTOMER	NONE	8.5
GW BLDG	SILICONE ELASTOMER	D001	1.1
GW BLDG	SILICONE RUBBER	D001	1.0
GW BLDG	SILICONE RUBBER RTV 630A	NONE	0.6
GW BLDG	SILICONE RUBBER RTV 630B	F005	0.1
GW BLDG	SILICONE RUBBER,TOLUENE	NONE	0.1
GW BLDG	SILVER EPOXY	D011	0.9
GW BLDG	SILVER EPOXY	D011	0.9
GW BLDG	SILVER FLAKES	D011	23.3
GW BLDG	SILVER METAL	D011	0.1
GW BLDG	SILVER PAINT	D001 D011	1.5
GW BLDG	SILVER PAINT	D001 D011	1.7
GW BLDG	SLYGARD 184 CURING AGENT	NONE	0.1
GW BLDG	SLYGARD 184 CURING AGENT	NONE	0.3
GW BLDG	SLYGARD 184 CURING AGENT	NONE	5.9
GW BLDG	SLYGARD 184 CURING AGENT	NONE	0.1
GW BLDG	SLYGARD 184 CURING AGENT	NONE	0.1
GW BLDG	SLYGARD 184 CURING AGENT	NONE	4.9
GW BLDG	SLYGARD 184 ELASTOMER	NONE	1.0
GW BLDG	SLYGARD 184 ELASTOMER	NONE	0.6
GW BLDG	SLYGARD 184 ELASTOMER	NONE	0.2
GW BLDG	SLYGARD 184 ELASTOMER	NONE	26.8
GW BLDG	SLYGARD 184 PART A	NONE	39.2
GW BLDG	SLYGARD 184 PART A	NONE	10.0
[illegible]LDG	SLYGARD 184 PART A	NONE	23.0

P 7y

GW
Bldg. G

GW BLDG	SLYGARD 184 PART A	NONE	52.0
GW BLDG	SLYGARD 184 PART B	NONE	2.3
GW BLDG	SLYGARD 184 PART B	NONE	2.3
GW BLDG	SLYGARD 184 PART B	NONE	12.5
GW BLDG	SLYGARD 184 SILICONE	NONE	47.0
GW BLDG	SLYGARD 186 CURING AGENT	NONE	0.2
GW BLDG	SLYGARD CURING AGENT	D001	0.1
GW BLDG	SLYGARD CURING AGENT	NONE	39.2
GW BLDG	SLYGARD CURING AGENT 184	NONE	0.1
GW BLDG	SLYGARD ELASTOMER	NONE	0.6
GW BLDG	SLYGARD ELASTOMER 184	NONE	1.0
GW BLDG	SLYGARD PRIME COAT	D001	1.0
GW BLDG	SLYGARD PRIME COAT	D001	1.0
GW BLDG	SLYGARD PRIME COAT	D001	57.0
GW BLDG	SLYGARD PRIME COAT	D001	1.0
GW BLDG	SODIUM BICARBONATE	NONE	3.6
GW BLDG	SODIUM BICARBONATE	NONE	8.7
GW BLDG	SODIUM CARBONATE	NONE	10.8
GW BLDG	SODIUM DICHROMATE	D001 D007	1.0
GW BLDG	SODIUM DICHROMATE	D007	0.9
GW BLDG	SODIUM HYDROXIDE	D002	5.7
GW BLDG	SODIUM HYDROXIDE	D002	1.2
GW BLDG	SODIUM HYDROXIDE	NONE	6.0
GW BLDG	SODIUM HYDROXIDE	NONE	2.1
GW BLDG	SODIUM HYDROXIDE	NONE	65.1
GW BLDG	SODIUM HYDROXIDE PELLETS	NONE	6.9
GW BLDG	SODIUM HYPOCHLORITE	D002	37.0
GW BLDG	SODIUM NITRATE	D001	1.2
GW BLDG	SODIUM NITRATE	D001	26.2
GW BLDG	SODIUM NITRATE	D001	4.0
GW BLDG	SODIUM POTASSIUM TARTRATE	NONE	13.6
GW BLDG	SODIUM SULFATE	NONE	3.0
GW BLDG	SODIUM SULFATE ANHYDROUS	NONE	1.0
GW BLDG	SOLDER FLUX 135	D001	6.3
GW BLDG	SPAN 80	NONE	8.6
GW BLDG	SPAN-80	NONE	1.0
GW BLDG	SRIR EPOXY PART A	NONE	1.0
GW BLDG	SRIR EPOXY PART B	NONE	1.0
GW BLDG	SS 4155	D001	2.0
GW BLDG	SS 4155	D001	3.0
GW BLDG	SULFURIC ACID	NONE	4.0
GW BLDG	SUPERIOR FLUX 30	D002	25.5
GW BLDG	SYNKOOL M173	NONE	8.0
GW BLDG	SYNKOOL SS311	D002	7.0
GW BLDG	TACPAC ACCELLERATOR	D001	4.7
GW BLDG	TETRA ETCH	D001	24.5
GW BLDG	TEXANOL ESTER ALCOHOL	NONE	8.8
GW BLDG	TITANIUM COPPER DIOXIDE	D003	0.3
GW BLDG	TITANIUM COPPER HYDRATE	D003	0.1
GW BLDG	TITANIUM COPPER OXIDE	D003	0.1
GW BLDG	TITANIUM IRON	D003	0.1
GW BLDG	TITANIUM NICKEL HYDRATE	D003	0.1
GW BLDG	TITANIUM OXIDE	D003	0.1
GW BLDG	TITANIUM POWDER	D003	0.1
LDG	TITANIUM POWDER	D003	0.1

P7K

9.14-57

GW
bldg tl

GW BLDG	TITANIUM POWDER	D003	3.4
GW BLDG	TITANIUM POWDER	D003	5.5
GW BLDG	TITANIUM POWDER	D001 D003	33.8
GW BLDG	TITANIUM, OSMIUM	D003	0.5
GW BLDG	TOLUENE DIISOCYANATE	D003	4.1
GW BLDG	TOLUENE DIISOCYANATE	D001 D003	1.0
GW BLDG	TOLUENE DIISOCYANATE	D001	1.0
GW BLDG	TRIBUTYLPHOSPHITE	D001	1.3
GW BLDG	TRICHLOROETHANE (1,1,1-)	D001	1.0
GW BLDG	TRICHLOROETHANE (1,1,1-)	F002	82.0
GW BLDG	TRICHLOROETHANE (1,1,1-)	F002	6.2
GW BLDG	TRIPHENYL PHOSPHITE	D001	13.4
GW BLDG	TRIPHENYL PHOSPHITE	D001	4.0
GW BLDG	TRIPHENYL PHOSPHITE	NONE	15.5
GW BLDG	TRIPHENYL PHOSPHITE	NONE	5.2
GW BLDG	TRITON N-101	NONE	1.1
GW BLDG	TRITON X-100	NONE	14.7
GW BLDG	URETHANE 7200 A	D003	6.9
GW BLDG	URETHANE 7200 B	D008	6.9
GW BLDG	UVITHANE 783	NONE	10.0
GW BLDG	VANADIUM HYDRIDE	NONE	0.5
GW BLDG	VERSAMID 125	NONE	25.4
GW BLDG	VERSAMID 140	NONE	1.0
GW BLDG	VERSAMID 140	NONE	1.2
GW BLDG	VERSAMID 140	NONE	1.3
GW BLDG	VERSAMID 140	NONE	6.3
GW BLDG	VERSAMID 140	NONE	50.2
GW BLDG	VERSIMID	D001	2.5
GW BLDG	VERSIMID 125	NONE	2.0
GW BLDG	VERSIMID 140	NONE	1.0
GW BLDG	VERSIMID 140	NONE	1.2
GW BLDG	VEX CONCENTRATE	D002	9.0
GW BLDG	VIDEOJET 16	D001 F003 F005	31.0
GW BLDG	VIDEOJET 2600	D001	12.0
GW BLDG	VINYL (N) -2-PYRROLIDONE	NONE	7.2
GW BLDG	WELD-ON CEMENT 16	D001 D035 D040 F002 F005 U080	0.8
GW BLDG	WESGO 532	D001	14.0
GW BLDG	XYLENE,ALUMINUM,EPOXY RESIN	D003	0.5
GW BLDG	ZINC OXIDE	NONE	5.3
GW BLDG	ZIRCONIUM CHROMATE	D001 D007	0.1
GW BLDG	ZIRCONIUM OXIDE	D003	0.1
GW BLDG	ZIRCONIUM POWDER	D003	1.0
GW BLDG	ZULU BLUE	NONE	2.8
GW BLDG-ETSC	TERT- BUTYL PEROXY BENZOATE, FORMERLY LP92-400	D001	4.0
GW BLDG-ETSC	TERT- BUTYL PEROXY BENZOATE, FORMERLY LP92-400	D001	4.0
GW BLDG-ETSC	TERT- BUTYL PEROXY BENZOATE, FORMERLY LP92-400	D001	4.0
GW BLDG-ETSC	TERT- BUTYL PEROXY BENZOATE, FORMERLY LP92-400	D001	4.0
GW BLDG-ETSC	TERT- BUTYL PEROXY BENZOATE, FORMERLY LP92-400	D001	4.0
GW BLDG-ETSC	TERT- BUTYL PEROXY BENZOATE, FORMERLY LP92-420	D001	8.0

ML

GW Bldg

BLDG	186 CURING AGENT	D001	0.1
GW BLDG	186 SILICONE	NONE	0.9
GW BLDG	520 ADHESIVE	D001 F003 F005	2.0
GW BLDG	7200 CURING AGENT	D008	1.3
GW BLDG	7200 RESIN	D001 D003	1.3
GW BLDG	8822 EPOXY PART A	NONE	32.0
GW BLDG	8822 EPOXY PART B	D002	10.5
BLDG	A2 ADHESIVE	NONE	1.0
BLDG	ABRASIVE POWDER 9	NONE	26.2
GW BLDG	ABRASIVE POWDER 9	NONE	25.0
GW BLDG	ACME E SOLDER 3025 PART A	D011	2.8
GW BLDG	ACME E SOLDER 3025 PART B	D008	2.7
GW BLDG	ACTIVATOR A	D001	0.6
GW BLDG	ADIPRENE 100	NONE	215.0
GW BLDG	ADIPRENE 100	NONE	216.0
GW BLDG	ADIPRENE L-100	NONE	2.1
GW BLDG	ADIPRENE L-100	NONE	2.3
GW BLDG	ADIPRENE L-100	NONE	50.0
GW BLDG	ADIPRENE L-100	NONE	42.0
GW BLDG	ADIPRENE L-100	NONE	25.0
GW BLDG	ADIPRENE L-100	NONE	50.0
GW BLDG	ADIPRENE L-100	NONE	30.0
GW BLDG	ADIPRENE L-100	NONE	50.0
GW BLDG	ADIPRENE L-100	NONE	42.0
BLDG	ADIPRENE L-100	NONE	50.0
BLDG	ADIPRENE L-100	NONE	55.4
GW BLDG	ADIPRENE L-100	NONE	12.0
GW BLDG	ADIPRENE L-100	NONE	10.0
GW BLDG	ADIPRENE L-100	NONE	10.0
GW BLDG	ADIPRENE L-100	NONE	10.0
GW BLDG	ADIPRENE L-100	NONE	5.0
GW BLDG	ADIPRENE L-100	NONE	16.0
GW BLDG	ADIPRENE L100	NONE	34.1
BLDG	ADSTART	D002	28.0

p7

Bldg GW

p7m

Building Manager's Questionnaire

Building Name: GW 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: _____

9.14-60

Building Manager's Questionnaire

Building Name: GW Building Manager: J.L. Boston 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: GW 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

9.14-62

Building Manager's Questionnaire

Building Name: GW 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.

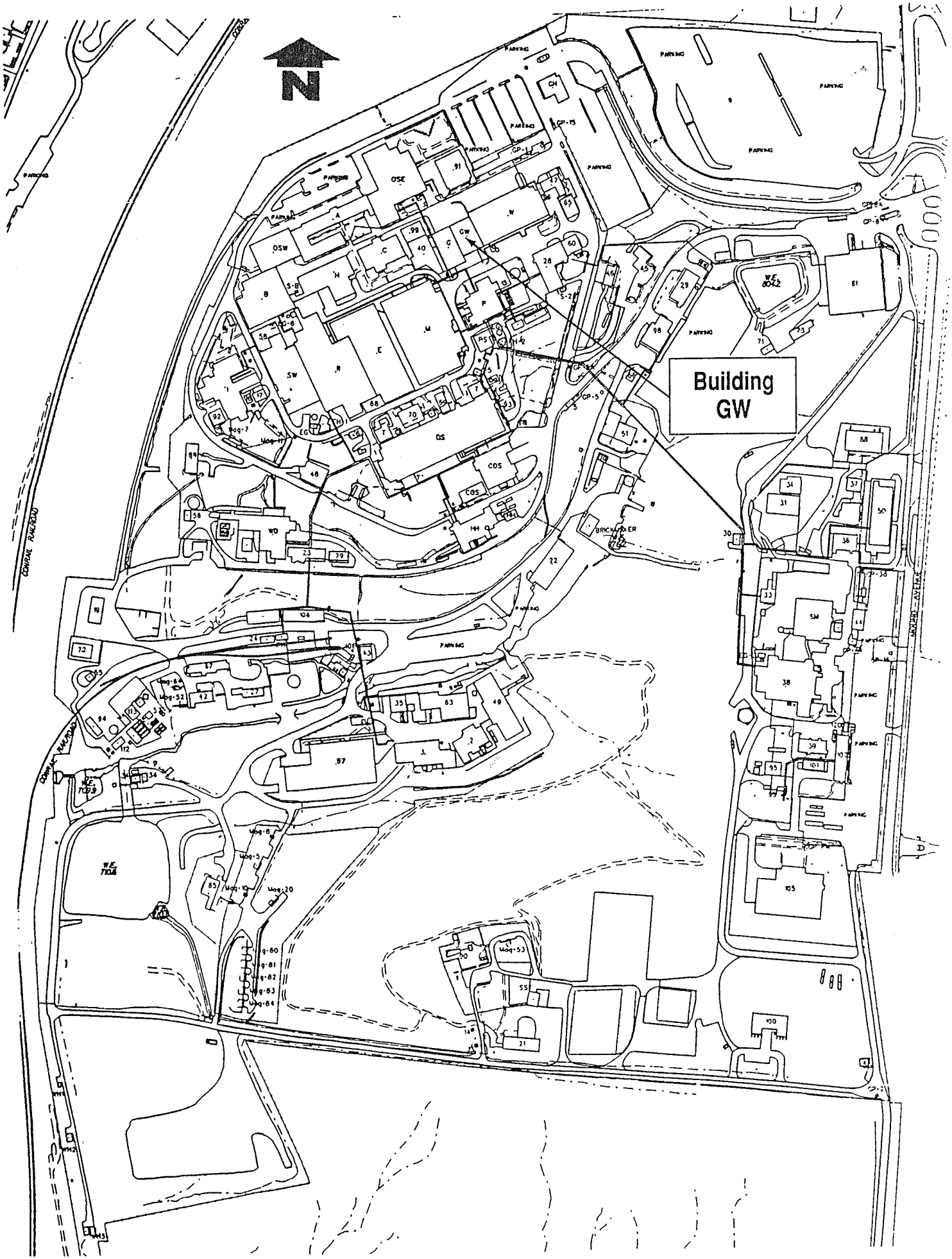
Recycle paper

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

N/A

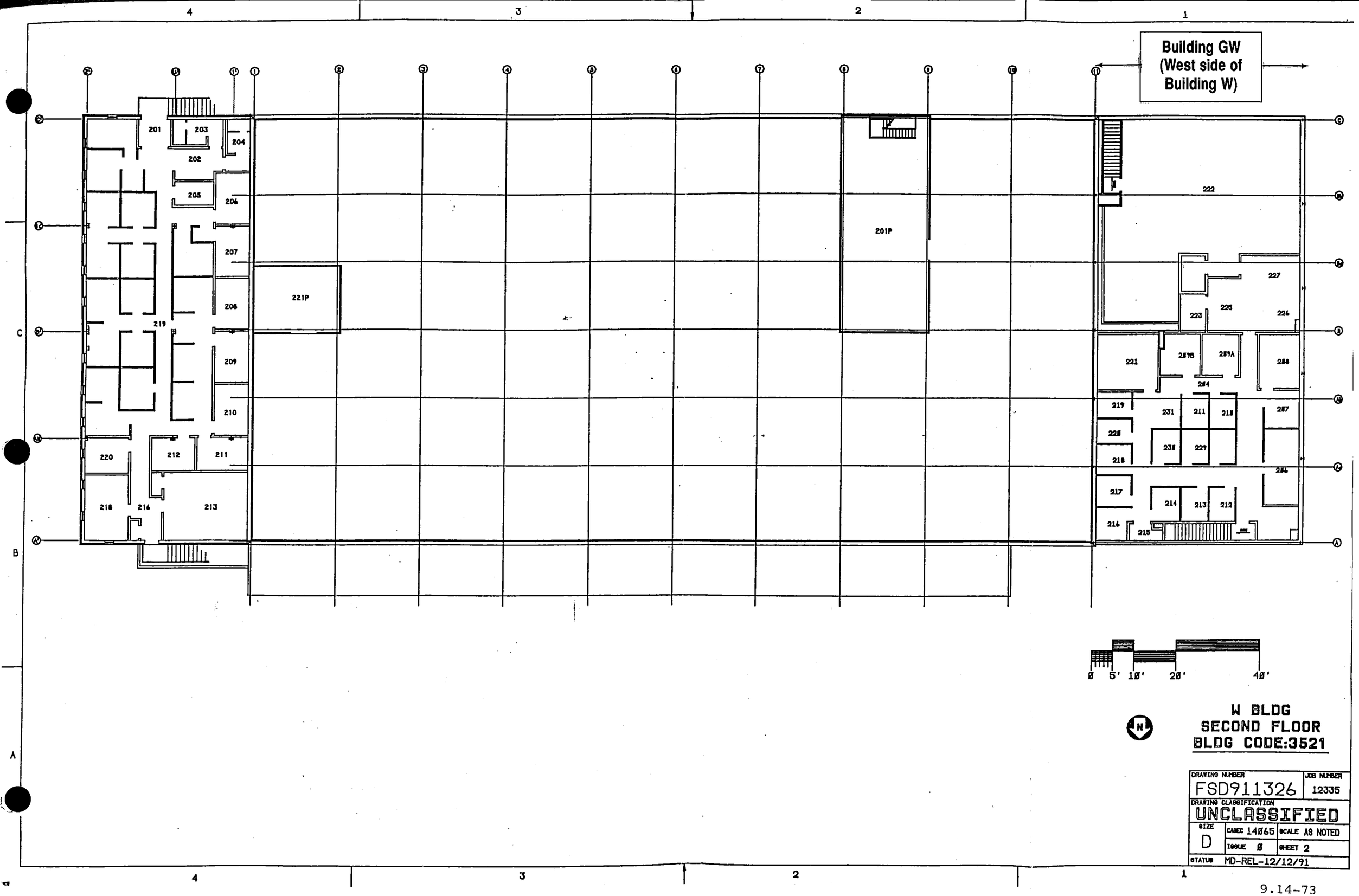
This page intentionally left blank.

9.14.6.3 Location of Building GW

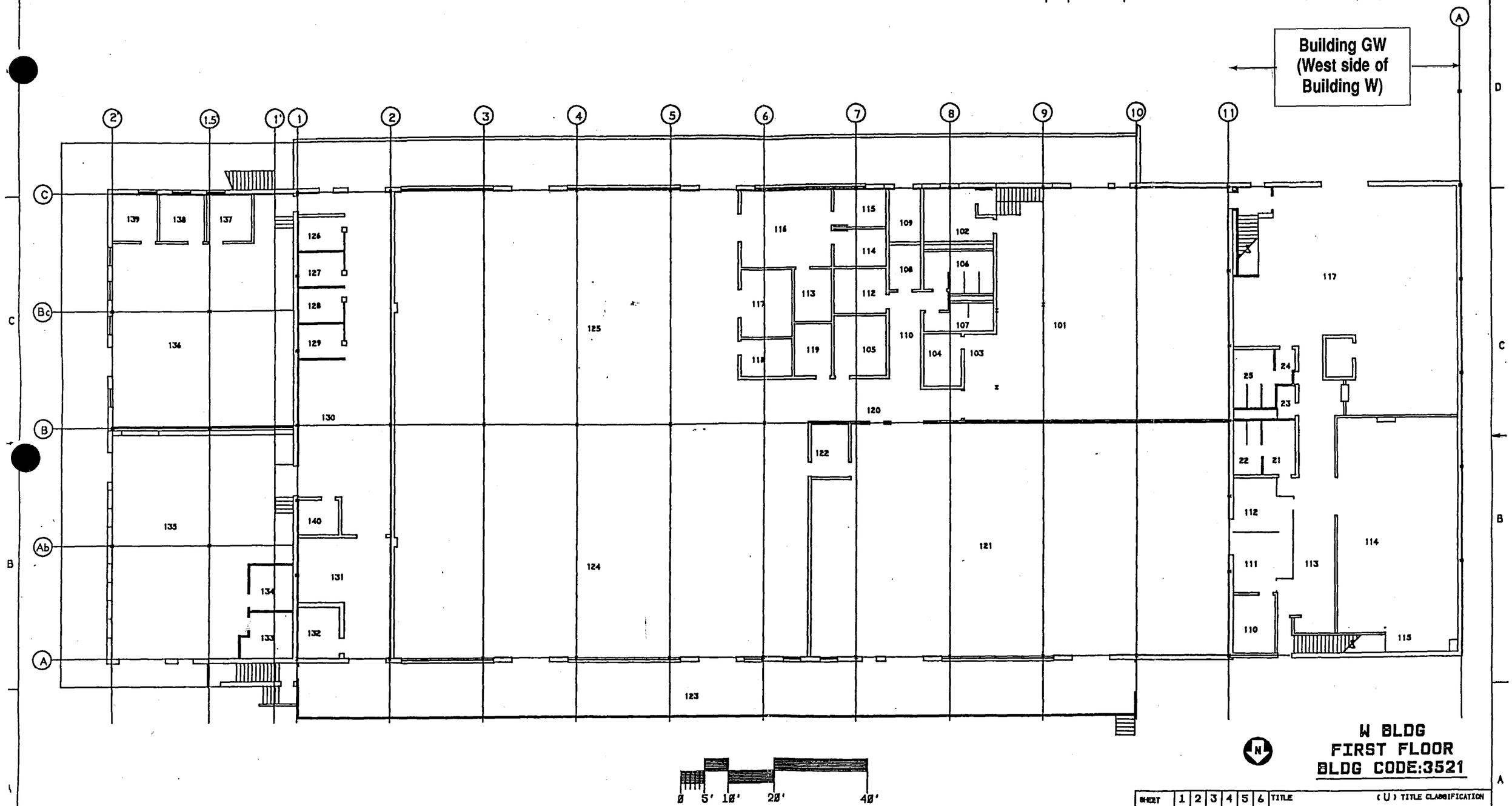


SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92

9.14.6.4 Floor Plans for Building GW


Building GW
(West side of
Building W)
201
203
204
202
205
206
207
208
219
221P
209
210
220
212
211
218
216
213
201P
222
227
223
225
226
221
287B
289A
288
284
219
231
211
218
287
228
238
229
218
284
217
214
213
212
214
215
Ø 5' 1Ø' 2Ø' 4Ø'
N
W BLDG
SECOND FLOOR
BLDG CODE:3521
DRAWING NUMBER
FSD911326
JOB NUMBER
12335
DRAWING CLASSIFICATION
UNCLASSIFIED
SIZE
D
CADD: 14065
SCALE AS NOTED
ISSUE Ø
SHEET 2
STATUS MD-REL-12/12/91

ISS	DATE	REVISION	BY	CHKR	ENG	LPMGT	APVD	M
Ø	12/12/91	ASBUILT ISSUE	DCW				DVD	



W BLDG
FIRST FLOOR
BLDG CODE:3521

Ø 5' 1Ø' 2Ø' 4Ø'

APPROVAL:	DATE:
COMMITTEE REQUIRED:	
ME ___TRUEBOC ___TEBOC ___EMBOC	
TECH. REMP.	
GR. MGR.	
TRUEBOC	
TEBOC	
EMBOC	

DESIGN ENG	PROJ MGR
SPONS	ENG SUPV
LP & EC	PEER REV
ENG MGR	
APVD	DATE

SHEET	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION
ISSUE	Ø	Ø					W BLDG FLOOR PLANS	
PART CLASSIFICATION								
DRAWING CLASSIFICATION: UNCLASSIFIED			SIZE: D	DRAWING NUMBER: FSD911326			JOB NUMBER: 12335	
DWG TYPE: SFP	PROM: W BLDG		CAGEC: 14065	SCALE: AS NOTED	SHEET 1 OF 2			
STATUS: MD-CHK-12/12/91			ORIGIN: MD-BR3-V3.Ø					

9 14-71

9.14.6.5 Underground Utility Lines

FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL

N

UNCLASSIFIED

E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
GW BLDG.

DATE: 3-4-96

9.14-77

9.14.6.6 Photographs

Mound Plant Building GW

Requirements for air emissions permits for the refrigeration unit must be determined.

A Freon cylinder is stored properly in Building GW.

9.15 BUILDING H

9.15.1 Scope of Building H 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 H on January 17, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.15.6.1). Escorting the appraisers were 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 9.15.6.2).

9.15.2 Description of Building H

Building H is a 17,334-square-foot, reinforced concrete block building with face brick and a built-up membrane roof. The building consists of one story with a penthouse. The location is shown in Attachment 3 (Section 9.15.6.3). The building is bordered by Building A to the north, Building B to the west, Building E to the south, and Building C to the east. Floor plans are presented as Attachment 4 (Section 9.15.6.4). The building is serviced by central steam for heat, chilled water, and electrical service (*Mound Facility Physical Characterization*, 12-1-93).

Building H was constructed in 1948. . Some parts of the building have been used for the same purpose since construction. Building H houses the laundry facilities for both uncontaminated (cold) and historically contaminated (hot) clothing for Mound. All of the water generated from the laundry was collected in a holding tank on the "hot side" of the building. Then the water was drained through a pipe to a lift station at Building SW. In 1993, Building H discontinued the washing of contaminated clothes. These washable clothes were replaced with disposable clothing and wastewater was then diverted to the sanitary disposal plant, Building 57. Building H previously held a small maintenance shop. The maintenance shop has been removed and is currently used by the bioassay laboratories as a storage area. The building is known to be contaminated with radioactive materials *(Site Scope Report: Vol. 7 - Waste Management,* 7-92).

9.15.3 Summary of Findings

Building H currently houses a laundry, bioassay laboratories, a credit union, change rooms for men and women, and office space. The building is old and has many of the problems inherent in old buildings at Mound. There were several issues of environmental concern identified during the walk-through or review of reference materials. Chemical and waste handling problems were identified on the initial visit. Two days later these problems remained, and again two weeks from the initial visit these problems still existed.

9.15.4 Observations

9.15.4.1 Air Emissions

There are 10 air emission sources are identified on the EAC, Attachment 1 (Section 9.15.6.1). The process hoods are identified in the air permit application submitted to the Ohio Environmental Protection Agency (OEPA) in 1992. There are emission sources in Building H that are not identified on the air emission inventory. Use of the old hot laundry has been discontinued. Vents and ducts have been blocked and there are no discharges to the stack. Monitoring of the stack was discontinued following the removal of the hot laundry service. The stack No. H-EF-1 is still considered an active minor release point under the National Emission Standards for Hazardous Air Pollutants (NESHAPS) Federal Facility Compliance Agreement Compliance Work Plan, February 1995. Spent solution of approximately 5 milliliters of toluene occur in solvent extraction processes and evaporate under the hood. The use of toluene has increased to 2,000 milliliters per year. There are also hoods identified in the air permit application that are no longer active. There is no evidence of fugitive dust.

9.15.4.2 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.

9.15.4.2.1 Sanitary Wastewater

The building does have sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.15.6,5), 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, neither dye tests nor or smoke tests were conducted. In 1992, an engineering project capped the lines to the sump and diverted the water to the sanitary treatment plant.

9.15.4.2.2 Storm Wastewater

The building does appear to be serviced by storm drains according to Attachment 5 (Section 9.15.6.5). 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.

9.15.4.2.3 Chemicals

A list of chemicals found in Building H is included in the BMQ, Attachment 2 (Section 9.15.6.2). 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. Hydrochloric and nitric acids, used to process samples for plutonium analyses, are neutralized and flushed down the drain.

There is asbestos in the building. Asbestos is identified as a Clean Water Act (CWA) toxic pollutant. Chemical storage and handling procedures are in place for proper disposal of chemicals. There is no evidence that chemicals stored in the building have entered the wastewater collection system. There have been no reported spills from Building H.

9.15.4.2.3 Process Wastewater

Radioactive wastewater originated from the operation of the hot laundry. Water that could contain low levels of alpha contamination was generated in the laundry. Two hundred gallons of water is required for each load. Water from all washers was discharged to a sump in the floor of Building H. From there it is pumped to Building WD for treatment via physical-chemical treatment. The sump is doubled-contained, but is no longer used. Removal of the sump and lines are part of an active decontamination and decommissioning (D&D) project.

9.15.4.3 Potable and Service Water

Potable water is supplied to the building. Backflow prevention devices are in place at visible potential cross-connections. There are two water fountains located in the building. Their location and brand names are on the EAC which is presented as Attachment 1 (Section 9.15.6.1). The fountain which supplies drinking water may not have been tested for lead. According to Environmental Protection Agency (EPA) protocol, annual sampling criteria do not require testing of each fountain. There are two safety shower/eyewash stations. They are in working order.

9.15.4.4 Chemical Storage and Hazardous Materials

There are a lot of CWA priority pollutant chemicals and chemicals identified as being hazardous to human health and the environment used in the analytical laboratory. The assessment team reviewed the use of these chemicals for compliance with 29 CFR 1910, and MD-10405, *Mound's*

Chemical Hygiene Plan, storage and handling procedures, and waste disposal procedures. In each of these areas, procedures were outdated and activities did not conform with procedures and requirements. Processes including preparing samples of urine, feces, water, tissue, etc. for counting. Ultima Gold is the chemical used in counting some of these solutions. A process using DuPont's Atomlight has been discontinued; however, neither the procedures nor the BMQ were revised to reflect the change. Other types of samples are put on slides and rinsed with ethyl alcohol. Toluene is used in some solvent extractions. Benzene had previously been used in a distillation process but its use has been discontinued. Procedures for this process remain in the laboratory procedural manual. Other chemicals included hydrochloric and nitric acids used to process samples for plutonium analyses. Quantities of acids vary but generally exceed 6 pounds per week. Containers were stored or not marked in accordance with the Mouhd Chemical Hygiene Plan or with 29 CFR 1910.

There are some flammable storage cabinets which meet standard National Fire Protection Association (NFPA) requirements. There is an acid storage cabinet for storage of acids. Chemicals stored in the laboratory appear to need processes reviewed and chemicals reevaluated to determine if they are still needed since processes have been modified or discontinued. Material Safety Data Sheets (MSDS's) were available in the laboratory areas, however they were not available in janitorial supply cabinets or in the laundry. The appraisal team did not verify if piping was either operating or had been flushed, sampled or blocked if no longer in use. Piping in Room 104 which opened into a vented hood could not be identified. The line was tagged at the ceiling but illegible from the floor.

The building is equipped with appropriate emergency response equipment such as an eyewash, safety shower, 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 associated with Building H. There are two sumps in the building, one located in the corridor which is used in conjunction with the heating and air conditioning system and collects steam condensate. The other sump is located in the laundry. Water that could contain low levels of alpha contamination had been generated in the laundry. Two hundred gallons of water were required for each load. Water from all washers was discharged to a sump in the floor of Building H. From there it was pumped to Building WD for treatment via physical-chemical treatment.. The sump is doubled-contained, but is no longer used. The sump and lines are to be removed as part of a D&D project of the hot laundry.

The building was tested and does contain asbestos-containing building material (ACBM) (MD-10391, *Asbestos Program Manual*, 9-14-95). There was evidence of friable asbestos. Pipe lagging was not intact in some places. Since this is a ACBM, periodic surveillances are required *(Characterization of Mound's Hazardous, Radioactive, and Mixed Wastes*, 8-15-90).

There are no capacitors or transformers containing polychlorinated biphenyls (PCB's) located in the building (1995 PCB Annual Document Log).

9.15.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes generated are primarily paper, glass, aluminum cans, white styrofoam packing and cardboard boxes. Solid wastes are removed by janitorial personnel to a site collection point, then shipped offsite to a local landfill by a contractor. Aluminum cans, glass and cardboard are removed by janitorial personnel to specific collection points, then sent offsite to be recycled by a contractor. White paper is collected, compacted and sent offsite for recycling by a contractor. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

Hazardous wastes generated in the building are not clearly managed in a Satellite Accumulation Area (SAA). The waste generators were unclear what the waste stream was, how it should be stored , and how it was disposed. There was no characterization data available in the area. One solid waste stream was identified as a low level waste (LLW) stored in a gray can. The gray can was not an appropriate container for this waste stream, if indeed it was LLW. Personnel operating in the area were unaware of satellite area rules. Waste chemicals were stored among process chemicals. The samples of urine, water, etc. prepared for counting, generally contain pico-curies of activity, a level so low that the samples are not classified as radioactive. However, the waste generator identified this waste stream as a LLW. Ultima Gold is the scintillation solution used in counting some samples. After use, vials of these samples are put in a waste drum for non-radioactive vials. Ethyl alcohol, used for rinsing slides, is flushed with water down the laboratory sink drain. Liquid hazardous wastes generated by the bioassay process are stored in a SAA located adjacent to the building in a 55-gallon drum that is kept locked except when adding wastes. Procedures and storage of hazardous waste do not appear to conform with Resource Conservation and Recovery Act (RCRA) requirements. Wastes are collected and transported by a representative of the EG&G Waste Management Group, and are stored in Building 72 for ultimate disposal. There is no onsite treatment of waste. All are disposed of under a contract with Rollins. Waste disposal manifests and Certificates of Disposal are maintained by the EG&G Waste Management Group.

9.15.4.6 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.

9.15.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.15.6.6).

The environmental appraisal of Building H 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.

H-1 Activities in the building which generate waste streams do not conform with requirements in Mound's MD-70523, *Management of Hazardous Waste, Radioactive Mixed Waste, Trash and Recyclable Metals* or with MD-81070, *Mound Plant Waste Acceptance Criteria.* Procedures should be developed and additional training provided to generator's on how to characterize, store, and dispose of their waste streams.

H-2 Evaluate air sources that are not permitted and submit appropriate documentation to the Regional Air Pollution Control Agency (RAPCA).

H-3 Determine if the air permit application needs to be revised to reflect the increased usage of toluene.

H-4 Activities in the building do not conform with MD-10347, *Chemical Hygiene Plan* and 29 CFR 1910. Review processes and procedures and ensure that the procedures are updated or rewritten for new or modified processes. Review process for neutralizing chemicals to ensure that acids are not being disposed of in the drain prior to neutralization. Evaluate chemical storage and reduce the amount stored to a limited supply.

H-5 Verify piping in laboratories is either operating or has been sampled and blocked if closed and all unused chemical lines are flushed.

H-6 Ensure that ducts and exhausts are evaluated for radioactive contamination.

H-7 Line management did not respond to issues that were identified during the appraisal or during two follow-up visits.

9.15.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name H

Appraisers:

Name Mary E Sigmond Discipline

Name Discipline

Name Mary-Louise Hagland Discipline

Name Discipline

Building Manager: W. H. WHITELOW

Process Manager: B. BARTON EXT. 4270

B HOWARD - LAUNDRY

STEVE WETZEL

Date: 1/17/96

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: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY CLANDOR

Date: 1/17/96

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	CHEMICAL LIST NEEDS UPDATED WHEN PROPERLY STORED IN CAB.
	Is the building in operation? What are the processes and where do they discharge to?	(Y)/ N BIOASSAY LABS LAUNDRY	 SANITARY 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	NEEDS TO BE VERIFIED WHERE - VERIFIED BY MARY SIZEMORE.
	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	HOT LAUNDRY SUMP H CORRIDOR (STEAM CONDENSATE)
	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	SOME DRAINS IN LAB ARE NOT PLUGGED. FLOOR DRAIN IN 107

NOTE: PROCESS FOR LAUNDERING OF CLOTHES HAS BEEN DISCONTINUED AND IS IN PROCESS OF SHUTDOWN.

9.15-12

Environmental Appraisal Checklist

Building Name:

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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	104, 106, 103A, 103B, 103
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	SEE CHART
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: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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
STORAGE	103	10304	Y / (N)	(Y) / N	HCl HNO3 NH4OH	VARIES	NONE	2304	NEG
STORAGE		1030005	Y / (N)	(Y) / N	HNO3 NH4OH	VARIES		2304	NEG
HOOD BIOASSAY	103	WEST	(Y) / N	(Y) / N		NOTE 1		2304	NOTE 2
HOOD BIOASSAY	103	MIDDLE	(Y) / N	(Y) / N				2304	
HOOD BIOASSAY	103	EAST	(Y) / N	(Y) / N				2304	

Source: C. PHILLIPS

PATTY McKNIGHT IS UPDATING.

NOTES:

1- BIOASSAY LAB USED ABOUT 950 L HNO_3 (~3000 lbs) AND 790 L HCl (~2500 lb) IN 1995

2- WHAT IS NOT NEUTRALIZED BY NH_4OH IS ASSUMED TO BE EMITTED. EXACT AMOUNTS NOT AVAILABLE AT TIME OF APPRAISAL

9.15-14

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIGSMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GANDER

Date: 1/17/96

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
FURNACE	106		Y / (N)	(Y) / N	AS SAMPLES		NONE	100h/yr.	NEG.
HOOD BIOASSAY	106	0001	(Y) / N	(Y) / N	SAMPLES	NOTE 1		2304	NOTE 2
HOOD BIOASSAY	106	0002	(Y) / N	(Y) / N				2304	
HOOD BIOASSAY	106	0001	(Y) / N	(Y) / N				2304	
HOOD BIOASSAY	106	0001	(Y) / N	(Y) / N				2304	

Source: C. PHILLIPS

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDEK

Date: 1/17/96

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)	SOME CONTAINERS ARE OUTDATED AND STRATIFIED (1978 CONTAINER) RM 106
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	HOUSEKEEPING AND STORAGE COULD BE IMPROVED.
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	SULFURIC ACID STORED WITH OTHER ACIDS - HCL, NITRIC
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	N/A

NOTE: PROCESS LINES IN 103 - ONE IS TAGGED NEAR THE CEILING. SHOULD BE EVALUATED. NOT KNOWN BY PROC. MGR OR SUPV -

9.15-16

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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	UNITS ARE TESTED QUARTERLY AND WERE TESTED DURING THE APPRAISAL.
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	

NOTE: EYEWASH/EMERGENCY SHOWERS ARE NOT INSPECTED WEEKLY AS SPECIFIED IN ANSI Z358.1-1990

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCICETTI, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	Y / N	BIOASSAY LABS -
	Does it have proper containment?	Y / N	CONTAINMENT IN CABINETS ONLY
	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
	N	A		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: _____

9.15-17

9.15-18

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY Jitemore, John Puckett, Terry Glander

Date: 1/17/96

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	

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
H	MEN'S ROOM	HALSEY TAYLOR WM 8A	SUSPECTED OF LEAD CONTAMINATION
H	WOMEN'S ROOM	SUNROC TYPE 1	
H	BREAK ROOM	SUNROC TYPE 1	

Source: _____

Environmental Appraisal Checklist

Building Name: H

Appraisers: Mary Stromme, Mary Louise Hoglund, John Puckett, Terry Glander

Date: 1/17/96

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 charactarization 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	 NA NA
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	

9.15-19

9.15-20

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	Y / N Y / N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y / N	
	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: H

Appraisers: MARY SIZEMORE, JOHN POCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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:		
	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 / N	
	If no go to next section.		
	If yes, note.		
	For Building 23, Building 72 & Burn Area use special checklist.		

9.15-21

Environmental Appraisal Checklist

Building Name: H Appraisers: Date: 1/17/96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	
	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	N/A
	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	

9.15-22

Environmental Appraisal Checklist

Building Name: H Appraisers: Date: 1/17/96

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	permitted TSDF - offsite
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:

9.15-23

9.15-24

Environmental Appraisal Checklist

Building Name: H

Appraisers: MATT SIZEMORE, JOHN PUCKETT, TERRY GLANDER, MARY-LOUISE HOAGLAND

Date: 1/17/96

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

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, MARY-LOUISE HOAGLAND, JOHN PUCKETT, TERRY GLANDER

Date: 1/17/96

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

Does this facility potentially contain any PCB's or PCB contaminated equipment?	Y / N (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 (N)	NA
	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	NA
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	NA
	If yes, are auditable records maintained.	Y / N	NA
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	NA
	Are they visually inspected quarterly? If yes, are auditable records maintained?	Y / N	NA

9.15-25

9.15-26

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOARLAND, TERRY GLANDER

Date: 1/17/96

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	N A
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	

Environmen[illegible] Appraisal Checklist

Building Name: H

Appraisers: MARY SIZENORE, MARY-LOUISE HONGLAND, JOHN PUCKETT, TERRY GLANDER

Date: 1/17/96

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators 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	N A
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:

9.15-27

9.15-28

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	
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	

Environment[illegible]ppraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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	
	Are records maintained at the facility enabling this waste to be traced from its origin?	Y / N	

9.15-29

9.15-30

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	N A
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN ~~SIZE~~ PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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	N/A
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	

9.15-31

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN POCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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:

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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)	SMALL AMOUNT USED TOLUENE EVAPORATES IN HOOD
	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	N A
	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	

9.15-34

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	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	N A
	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	
METAL WASTES			
	Are any technologies for the recovering of metals from waste rinsewater used?	Y / N	
	Evaporation of waste rinsewater?	Y / N	
	Reverse osmosis?	Y / N	N A
	Ion exchange?	Y / N	
	Electrolysis?	Y / N	
	Agglomeration?	Y / N	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN FOCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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	N A
	Is the process of evaporation of liquid wastes by heating used to leave behind a more concentrated solution?	Y / N	
CYANIDE AND REACTIVE WASTES			
	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	N A
	Evaporation?	Y / N	
	Ion exchange?	Y / N	
	Membrane separation which includes reverse osmosis or electrodialysis?	Y / N	
VEHICLE MAINTENANCE			
	How are auto parts cleaned?	Y / N	
	Solvent sink?	Y / N	
	Solvent dunk bucket?	Y / N	
	Solvent dip tank?	Y / N	N A
	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	

9.15-35

9.15-36

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GLANDER

Date: 1/17/96

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	N A
	Does a waste hauler collect solvent waste for recycling or treatment?	Y / N	
OILS			
	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	N A
	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	

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HONGLAND, TERRY GLANDETC

Date: 1/17/96

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	
SOLVENT WASTES			
	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	N A
	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	

9.15-37

9.15-38

Environmental Appraisal Checklist

Building Name: H

Appraisers: MARY SIZEMORE, JOHN PUCKETT, MARY-LOUISE HOAGLAND, TERRY GANDER

Date: 1/17/96

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?		NA
	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?	_____	

9.15.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

1. What are the access requirements (training, clearance, etc.)?
   No Clearance needed.
   Safety glasses required in LABS.
   Radiological Orientation required to enter LAB.

2. What protective equipment is required to enter the building? NONE.
   Safety Glasses required to enter LABS.

3. Are there any restricted areas? (Yes) No
   Where are they? Penthouse. ALSO H130 to H134 - RAD ~~ACT~~ CONTAMIN AREA

4. Provide a physical description of the building.

This one-story (with penthouse) structure contains 17,334 ft^2 constructed of concrete blocks with brick facing. It has a BUM roof (asphalt and coal tar). HVAC systems are central steam and chilled water. The building has radiological contamination.

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 houses a laundry, a bioassay lab, a credit union, men's and women's change rooms, a small maintenance shop, and some office space.

Source: Mound Buildings, 5-9-95

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

Source: Mound Buildings, 5-9-95

9.15-41

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow 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: Laundry, counting rooms

How Wastes Are Generated:

Water that might contain low levels of alpha contamination is generated in the laundry. The laundry has three washers for uncontaminated clothes and one for clothes that might be slightly contaminated. (Clothes with significant contamination are disposed of, not sent to the laundry.) One load of potentially contaminated clothes is washed every three months. Approximately 30 loads of uncontaminated clothes are washed each day. Two hundred gallons of water is required for each load. Water from all washers is discharged to a sump in the floor of Building H. From there it is pumped to Building WD for treatment.

There is one counting area in Building H. A germanium detector is used to prescreen samples to be sure that they do not contain unexpectedly high levels of contamination. Materials counted include soil samples taken prior to construction or D & D work and fecal samples. There are no hazardous wastes generated in this area.

In the analytical area, samples of ~~soil, vegetation,~~ feces, water, urine, tissue, etc. are prepared for counting. These samples generally contain pico-Curies of activity, a level so low that the samples are not classified as radioactive. The scintillation solution used in counting some of these samples ~~is DuPont's Atomlight.~~ ULTIMA GOLD After being counted, vials containing this solution are put in a waste drum for nonradioactive vials ~~in Building E~~. Some other types of samples are put on slides. These slides are rinsed with ethyl alcohol ~~or acetone~~ which is flushed down the drain with water. Toluene is used in some solvent extractions. About 5 mL is required for each operation, and the spent solution is allowed to evaporate under a hood. Only 300 to ~~400~~ 500 mL of toluene is used each year. ~~Benzene is required once a year for a distillation process that removes water (potentially contaminated with tritium) from plant tissues. One-half to three-quarters of a liter of benzene is required. The used benzene is put in a waste can for Waste Management to pick up.~~ Hydrochloric and nitric acids are used to ~~dissolve~~ digest samples for plutonium analyses. The acids are ~~diluted~~ neutralized and flushed down the drain. Quantities of acid required vary but generally exceed 6 lb per week.

Contact:
Phone #:

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

9.15-42

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow 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? Yes

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
Environmental	103	H103001	Y	hydrochloric acid nitric acid	0.072 0.078		149.76 162.24	
Environmental	103	H1030003	Y	hydrochloric acid nitric acid	0.007 0.03		14.56 62.4	
Environmental	103	H1030005	Y	hydrochloric acid nitric acid ammonium hydroxide phosphoric acid	0.0036 0.002 0.064 0.006		7.488 4.16 133.12 12.48	
Environmental	104	H1040001	Y	hydrochloric acid nitric acid toluene	0.001 0.033 0.0002		2.08 68.64 0.416	
Environmental	106	H1060001	Y	hydrochloric acid nitric acid acetone hydroflouric acid	0.0342 0.0702 0.001 0.001		71.136 146.016 2.08 2.08	
Environmental	106	H1060002	Y	hydrochloric acid nitric acid acetone hydroflouric acid	0.0342 0.0702 0.001 0.001		71.136 146.016 2.08 2.08	

Source: Mound Air Emissions Database 11/30/95

9.15-43

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow 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 → Credit Union has bottled wa

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: H Building Manager: W.H. Whitelow 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)
Potassium Sulfur Hydrogen (Bldg H04)	PS	
2 - Propanol (H2)	PL	
Ultima Gold	PL	5/GA
Urea	PS	1000/G
Benzene	PL	500/ML
Cerous Nitrate	PS	50/G
Insta-Gel	PL	950/ML
Iodic Acid	PS	50/G
Isopropyl alcohol	PL	0.5/PT
Octyl Alcohol	PL	500/G
Opti-Fluor	PL	3.5/L
P-Dioxane	PL	0.33/PT
Sodium Form Aldehydesulfoxylate 2	PS	1/Kg/PS
Soluene-350	PL	200/ML
Solvene 100	PL	75/ML
Toluene	PL	1/PT
Toluene	PL	0.25/PT
Tri-i-octylamine	PL	100/G
Tri-n-butyl Phosphate	PL	1.25/PT
Vitamin B12	PS	100/MG
Xylenes	PL	1/PT
Yttrium Acid	PS	50/G
Refrigeration Oil	PL	5/GA
Coil Cleaner	PL	5/GA
Ammonium Hydroxide	PL	10/L
Ammonium Iodide	PS	0.25/LB
Ethyl Alcohol	PL	1/PT
Hydriodic Acid 47%	PL	4/PT
Hydrochloric Acid	PL	10/L
Hydrogen Peroxide 30%	PL	3000 ML
Nitric Acid	PL	30/L
O-Phosphoric Acid 85%	PL	2/L
Phosphoric Acid 85%	PL	2/PT

9.15-45

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

Chemical Name	State	Amount (MAX)
Sodium Bisulfite	PS	1/LB
Sulfuric Acid	PL	0/L
Sulfuric Acid	PL	3/L
Acetone	PL	10000/ML
Aluminum Nitrate	PS	0.25/LB
Ammonium Chloride	PS	2500/G
Ammonium Chloride	PS	0.5/KG
Ammonium Sulfate	PS	5000/G
Ammonium Thiocyanate	PS	250/G
Boric Acid	PS	1100/G
Boric Acid	PS	1000/G
Bromocresol Purple	PS	5/G/
Calcium Carbonate	PS	1/LB
Calcium Chloride	PS	1/LB
Calcium Chloride	PS	2.5/LB
Calcium Chloride (Dihydrate)	PS	100/G
Calcium Nitrate	PS	800/G
Cholesterol	PS	100/MG
Citric Acid	PS	250/G
Citric Acid (Monohydrate)	PS	1/LB
Creatinine	PS	160/G
Dextrose (Anhydrous)	PS	500/G
DI-?-Butl-n-diethyclcarbamoyphosphon	PL	10/G/
Dibutyl-n-n-diethylcarbmoylphosphon	PL	75/G
Disodium Ethylemediaminete	PS	250/G
Ethyl Alcohol 95%	PL	0.5/GA
Ferric Chloride (Solution)	PL	1/L
Glycerin	PL	1/PT
Glycine	PS	75/G
Glycine	PS	50/G
Hionic Fluor	PL	500/ML
Hippuric Acid	PS	40/G
Hippuric Acid	PS	50/G
Hydrochloric Acid	PL	8/GA
Hydrofluroc Acid 49%	PL	4/OT
Hydroxylaminehydrochloride	PS	50/G
L(+)Glutamic Acid	PS	100/GS
L-Ascorbic Acid	PS	5/OZ
Lactic Acid	PL	500/G
Lanthanum Chloride	PS	150/G
Lead Nitrate	PS	0.25/LB
Magnesium Sulfate	PS	300/G
Manganese (OUS) Nitrate	PL	100/ML

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

Chemical Name	State	Amount (MAX)
Methanol	PL	3500/ML
Methyl Orange	PS	4/OZ
Methyl Red	PS	0.5/OZ
Oxalic Acid (Dihydrate)	PS	1/LB
Palladium Chloride II	PS	50/G
Pepsin	PS	50/G
Phenolphtalein	PS	4/OZ
Phosphoric Acid 85%	PL	1/PT
Potassium Carbonate	PS	300/G
Potassium Chloride	PS	500/G
Potassium Permanganate	PS	1/LB
Potassium Persulfate	PS	1/LB
Praseodymium Chloride	PS	50/G
Silver Nitrate	PS	0.5/LB
Sodium (Tetra) Ethylenediamine	PS	1/LB
Sodium Azide	PS	75/G
Sodium Bicarbonate	PS	2/LB
Sodium Bisulfate	PS	1500 G
Sodium Bisulfate	PS	750/G
Sodium Bisulfate	PS	400/G
Sodium Bisulfite	PS	300/G
Sodium Bisulfite (Meta)	PS	300/G
Sodium Boilate	PS	2/LB/
Sodium Carbonate	PS	0.5/LB
Sodium Chloride	PS	2/LB
Sodium Fluride	PS	2/LB
Sodium Hydroxide	PS	3/LB
Sodium Nitrate	PS	1000/G
Sodium Nitrate	PS	0.5/LB
Sodium Oxalate	PS	1/LB
Sodium Phosphate (DiBasic)	PS	1/LB
Sodium Phosphate (Monobasic)	PS	500/G
Sodium Silicate (Meta)	PS	0.75/LB
Sodium Sulfate (Anhydrous)	PS	1/LB
Sodium Sulfite (Anhydrous)	PS	1/LB
Strontium Nitrate	PS	0.75 LB
Sulfuric Acid	PL	1/GA
Thymol Blue	PS	5/G
Trioctylphosphide Oxide	PS	90/G

Source: Chemical Inventory 1994

9.15-47

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow 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?

Acids are neutralized and washed down the drain.

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

ATTACHED

23. Where do excess janitorial supplies go?

H 138

Source: _____

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

ATTACHED

Chemical	Amount	Chemical	Amount
Roundup	As needed		

Source: INDUSTRIAL HYG.

ecord#	COMMON	CHEMICAL
1	BLUE MAX SPRAY BUFF	BLUE MAX SPRAY BUFF
2	CLEAN-N-DRY	CLEAN-N-DRY
3	CLR WINDOW	CLR WINDOW
4	CONQUEST	CONQUEST
5	DD/85 SPRAY	DD/85 SPRAY
6	DMQ	DMQ
7	DUO-POWDER	DUO-POWDER
8	FLOOR FINISH/ABOVE	FLOOR FINISH/ABOVE
9	FOUNTAIN HEAD	FOUNTAIN HEAD
10	GLOSS-EXTENDERA	GLOSS-EXTENDERA
11	GREASE-BE-GONE	GREASE-BE-GONE
12	HEAD START	HEAD START
13	INSECT SPRAY/CHERRY	INSECT SPRAY/CHERRY
14	INSECTICIDE/WAS	INSECTICIDE/WAS
15	KINDEST CARE	KINDEST CARE
16	LAVA HAND SOAP	LAVA HAND SOAP
17	LIL BROTHER SAM	LIL BROTHER SAM
18	NABC	NABC
19	NEUT. FLOOR CORP.	NEUT. FLOOR CORP.
20	ODOR BANE	ODOR BANE
21	ON-BASE SEALER	ON-BASE SEALER
22	ONE-STEP/SURE BET	ONE-STEP/SURE BET
23	POLISH/LEMON	POLISH/LEMON
24	PUMMEL HAND SOAP	PUMMEL HAND SOAP
25	RINSE FREE/STRIP	RINSE FREE/STRIP
26	SBS-61 LOTION SOAP	SBS-61 LOTION SOAP
27	SCRUB-ENDER	SCRUB-ENDER
28	SEAL, CON-SEAL	SEAL, CON-SEAL
29	SEALER/IRONSTONE	SEALER/IRONSTONE
30	SHINELINE BASE	SHINELINE BASE
31	SNAPOUT	SNAPOUT
32	SPIN-OUT	SPIN-OUT
33	SPOT, PILE DRIVER	SPOT, PILE DRIVER
34	SPOTTER, PULL OUT	SPOTTER, PULL OUT
35	STAINLESS CLEANER	STAINLESS CLEANER
36	STATCIDE, GP	STATCIDE, GP
37	STRIPPER, ZIP	STRIPPER, ZIP
38	SURFACE GLEEM	SURFACE GLEEM
39	TREATMENT/DUST	TREATMENT/DUST
40	TRIPLE SSS	TRIPLE SSS
41	VESTA POWER	VESTA POWER
42	WINDOW SHINE	WINDOW SHINE

Cus Todial Chemical list

☐ INITIAL SERVICE
☑ REGULAR SERVICE
☐ EXTRA SERVICE

TERMINIX.

TERMITE and PEST CONTROL

COPY

COMMERCIAL SERVICE AND INSPECTION REPORT

BRANCH	ACCOUNT	RT	TELEPHONE	GRID	S DAY	F	T	PRODUCTION	TIME IN	TIME OUT
2419	006093-	07	000/000-0000 513/865-4585	E30 -	2FR	S	P	00005000 09	7:00AM	8:25

SERVICE PROPERTY AT	BRANCH
E G & G MOUND EARNIE HAYES 865-4310 MOUND AVENUE MIAMISBURG OH 45342-0000	TERMINIX INTERNATIONAL 4712 PAYNE AVENUE DAYTON OH 45414-0000 513/274-5800

OPERATOR NAME & CERTIFICATION NUMBER: [illegible] 1407

SUPERVISOR NAME & CERTIFICATION NUMBER: DANIEL J. STECK #1207

TARGET PEST(S): ☑ T2 Cockroaches ☑ T18 Rats ☐ Other: _____
☐ T3 Ants ☐ T19 Mice ☐ Other: _____

SERVICE AREAS:	INSPECTED	TREATED	PESTICIDE(S) TO BE APPLIED	EPA'S	T/C	AMOUNT	E
☐ C1 FOOD AREAS:	☐	☐	☐ P24 PT279 Engage (Chlorpyrifos) 0.5%	499-292			
			☑ P10 PT565 + XLO (Pyrethrin) 0.5%	499-310			
			☐ P04 Dursban L.O. (Chlorpyrifos) 0.5%	62719-55			
☐ C2 OFFICES:	☐	☐	☑ P11 Conquer (Esfenvalerate) 0.05%	1021-1565-57076	C		
			☐ P23 Tempo 20 WP (Cyfluthrin) 0.05%	3125-380			
			☐ P06 Ficam W (Bendiocarb) 0.5%	45639-1			
			☐ P21 Knox-Out 2FM (Diazinon) 1%	4581-335-AA-499			
☐ C3 STORAGE/UTILITY:	☐	☐	☐ P07 Gentrol (Hydroprene) 0.125%	2724-304-50809			
			☐ P12 Precor (Methoprene) 0.008%	2724-352-50809			
			☑ P02 Drione Dust (Silica/Pyrethrin) 1%	4816-353AA			
☐ C4 PUBLIC AREAS:	☐	☐	☐ P05 Ficam D (Bendiocarb) 1%	45639-3			
			☐ P03 Dursban G (Chlorpyrifos) 0.5%	10370-36-432			
			☐ P08 Maxforce Bait (Hydramethylnon) 1.65%	64248-1			
			☐ P27 Avert Roach Bait (Avermectin) 0.05%	499-294			
☐ C5 REST ROOMS:	☐	☐	☐ P09 PT270 Dursban (Chlorpyrifos) 0.5%	499-147			
			☐ P25 PT280 Orthene (Acephate) 1%	499-230			
			☐ P26 Maxforce Gel (Hydramethylnon) 2.15%	64248-5			
☐ C6 EXTERIOR AREAS:	☐	☐	☐ P14 Ditrac All Weather Cake (Diphacinone) 0.005%	12455-5			
			☐ P20 Talon G (Brodifacoum) 0.005%	10182-38			
			☐ P47 Contrac Blox (Bromadiolone) 0.005%	12455-79			
			☐ P34 Ditrac Bait Pack (Diphacinone) 0.005%	12455-19			
☐	☐	☐	☐ P16 Glue Boards				
			☐ P17 Kotch-All/Tin Cat				
			☐ P19 Snap Traps				
☐	☐	☐					

TREATMENT CODE:
C = Crack & Crevice
S = Spot
G = General
T = Space Treatment
B = 3' Band

Supervisor's Comments: ☐ Treat for Infestation/Prevention or Inspect areas indicated.

EQUIP. CODE
F = Fogger B = [illegible]
HD = Hand Dust A = [illegible]
B&G = Comp. Air T = [illegible]

SPECIAL SERVICE INSTRUCTIONS

GENERAL PC , C-BLDG. A-BLDG, MEDICAL, GH BLDG
SM CAFETERIA.(MONTHLY) -- OS-EAST CAFETERIA,
NEW CAFETERIA ONLY , PO #38224

BALANCE AS OF
NOVEMBER 29
DEC CHARGE
SALES TAX
TOTAL DUE

CUSTOMER'S SIGNATURE: [illegible]

SERVICE TECHNICIAN'S SIGNATURE: [illegible] DATE: 11/15/95

AMOUNT PAID: ☐ CASH ☐ CHECK

9.15-50

12-95

☐ INITIAL SERVICE
☑ REGULAR SERVICE
☐ EXTRA SERVICE

TERMINIX.

TERMITE and PEST CONTROL

COPY

COMMERCIAL SERVICE AND INSPECTION REPORT

BRANCH	ACCOUNT	RT	TELEPHONE	GRID	S DAY	F	T	PRODUCTION	TIME IN	TIME OUT
2418	006092-	07	000/000-0000 513/865-3921	E30 -	2FR	S	P	00004577 09	7:40 AM	8:25 A

SERVICE PROPERTY AT

E G & G MOUND
P. O. #38224
MOUND AVE
MIAMISBURG OH 45342-0000

BRANCH

TERMINIX INTERNATIONAL
4712 PAYNE AVENUE
DAYTON OH 45414-0000
513/274-5800

OPERATOR NAME & CERTIFICATION NUMBER [illegible] 1067

SUPERVISOR NAME & CERTIFICATION NUMBER DANIEL J. STECK #1207

TARGET PEST(S): ☐ T2 Cockroaches ☑ T18 Rats ☐ Other: _____
☐ T3 Ants ☐ T19 Mice ☐ Other: _____

SERVICE AREAS:	INSPECTED	TREATED
☑ C1 FOOD AREAS:	☐	☐
☐ C2 OFFICES:	☐	☐
☐ C3 STORAGE/UTILITY:	☐	☐
☐ C4 PUBLIC AREAS:	☐	☐
☐ C5 REST ROOMS:	☐	☐
☐ C6 EXTERIOR AREAS:	☐	☐
☐	☐	☐
☐	☐	☐

PESTICIDE(S) TO BE APPLIED	EPA'S	T/C	AMOUNT	EQUI
☐ P24 PT279 Engage (Chlorpyrifos) 0.5%	499-292			
☑ ~~P10~~ PT565 + XLO (Pyrethrin) 0.5%	499-310	C	3	
☐ P04 Dursban L.O. (Chlorpyrifos) 0.5%	62719-55			
☑ ~~P11~~ Conquer (Esfenvalerate) 0.05%	1021-1565-57076	C		
☐ P23 Tempo 20 WP (Cyfluthrin) 0.05%	3125-380			
☐ P06 Ficam W (Bendiocarb) 0.5%	45639-1			
☐ P21 Knox-Out 2FM (Diazinon) 1%	4581-335-AA-499			
☐ P07 Gentrol (Hydroprene) 0.125%	2724-304-50809			
☐ P12 Precor (Methoprene) 0.008%	2724-352-50809			
☑ ~~P02~~ Drione Dust (Silica/Pyrethrin) 1%	4816-353AA	X		
☐ P05 Ficam D (Bendiocarb) 1%	45639-3	X		
☐ P03 Dursban G (Chlorpyrifos) 0.5%	10370-36-432			
☐ P08 Maxforce Bait (Hydramethylnon) 1.65%	64248-1			
☐ P27 Avert Roach Bait (Avermectin) 0.05%	499-294			
☐ P09 PT270 Dursban (Chlorpyrifos) 0.5%	499-147			
☐ P25 PT280 Orthene (Acephate) 1%	499-230			
☐ P26 Maxforce Gel (Hydramethylnon) 2.15%	64248-5			
☐ P14 Ditrac All Weather Cake (Diphacinone) 0.005%	12455-5			
☐ P20 Talon G (Brodifacoum) 0.005%	10182-38			
☐ P47 Contrac Blox (Bromadiolone) 0.005%	12455-79			
☐ P34 Ditrac Bait Pack (Diphacinone) 0.005%	12455-19			
☐ P16 Glue Boards				
☐ P17 Ketch-All/Tin Cat				
☐ P19 Snap Traps				

TREATMENT CODE:
C = Crack & Crevice
S = Spot
G = General
T = Space Treatment
B = 3' Band

Supervisor's Comments: ☐ Treat for Infestation/Prevention or Inspect areas indicated.

EQUIP. CODE
F = Fogger
HD = Hand Dust
B&G = Comp. Air

SPECIAL SERVICE INSTRUCTIONS

SER. OLD CAFE, SMPP, GUARDS REST ROMS AND BASINS IN MEDICAL AREA
P. O. # 38224

BALANCE AS OF NOVEMBER 29
DEC CHARGE
SALES TAX
TOTAL DUE 9.15=51

CUSTOMER'S SIGNATURE [illegible]

SERVICE TECHNICIAN'S SIGNATURE [illegible] DATE [illegible]

AMOUNT PAID
CASH
CHECK

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow 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
7697-37-2	NITRIC ACID	01C		Y/N	
7664-93-9	SULFURIC ACID	01C		Y/N	103
7664-93-9	SULFURIC ACID	01C		Y/N	103
7664-93-9	SULFURIC ACID	01C		Y/N	104
				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 OK

Materials	Amount
ATTACHED	

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

9.15-52

H BLDG	ACETIC ACID	NONE	10.0
H BLDG	ACETIC ACID, GLACIAL	D002	23.0
H BLDG	ALUMINA	NONE	1.0
[illegible]G	AMMONIUM NITRATE	D001	1.0
H BLDG	AMMONIUM OXALATE	NONE	0.3
[illegible] BLDG	BARIUM CHLORIDE	D005	2.0
H BLDG	BARIUM NITRATE	D001 D005	2.0
H BLDG	BARIUM SELENATE	NONE	0.1
H BLDG	BARIUM SULFATE	D005	1.0
H BLDG	BENZENE	D001 D018 F005 U019	2.0
H BLDG	BISMUTH NITRATE	D001 D003	1.0
H BLDG	BROMO CHLORO METHANE	D001 D018	12.0
H BLDG	CALCIUM ACETATE	NONE	0.2
H BLDG	CALCIUM NITRATE	D001	1.1
H BLDG	CALCIUM NITRATE	D001	19.8
H BLDG	CALCIUM SELENATE	NONE	0.2
H BLDG	CARBON THALLIUM	NONE	1.0
H BLDG	CARBON TUNGSTUN	NONE	1.0
H BLDG	CERIC AMMONIUM NITRATE	D001	0.2
H BLDG	CHLORO BENZENE	D001 D021	0.5
H BLDG	CHLOROFORM	D022 U044	1.1
H BLDG	CHLOROFORM	D022 U044	8.0
H BLDG	CUPRIC NITRATE	D001	1.0
H BLDG	CUPROUS CHLORIDE	NONE	1.1
H BLDG	DIETHYLENE TRIAMINE	NONE	2.5
H BLDG	FERRIC NITRATE	D001	1.1
H BLDG	FERROUS AMMONIUM SULFATE	NONE	1.0
H BLDG	FERROUS AMMONIUM SULFATE	NONE	1.0
[illegible]DG	FERROUS SULFATE	NONE	1.0
[illegible]DG	FORMIC ACID	D002 U123	1.1
H BLDG	GLUCURONIDASE ARYL SULFATASE	D001	0.2
H BLDG	GLYCEROL, ANHYDROUS	NONE	4.0
H BLDG	GRAPHITE	D003	0.2
H BLDG	HYDROBROMIC ACID	D002	2.2
H BLDG	IODINE	NONE	0.2
H BLDG	LEAD	D008	1.0
H BLDG	LEAD ACETATE	D008 U144	1.1
H BLDG	LEAD CHLORIDE	D008	1.1
H BLDG	LEAD NITRATE	D001 D008	1.0
H BLDG	LITHIUM NITRATE	D001 D003	1.0
H BLDG	MAGNESIUM SULFATE	NONE	1.0
H BLDG	MANGANESE NITRATE	D001	1.0
H BLDG	MERCURY	D009	2.0
H BLDG	MERCURY	D009	15.0
H BLDG	MERCURY	D009 U151	1.0
H BLDG	METHYL BLUE	NONE	0.1
H BLDG	METHYL ISOBUTYL KETONE	D001 D035 U159	1.1
H BLDG	NICKEL METAL	D003	1.0
H BLDG	NICKEL WASTE	NONE	1.0
H BLDG	NONRAD SCINTILLATION VIALS	D001 F003	150.0
H BLDG	NONRAD SCINTILLATION VIALS	D001 F003	150.0
H BLDG	NONRAD SCINTILLATION VIALS, XYLENE	D001 F003	198.0
H BLDG	PETROLEUM ETHER	D001	1.0
H BLDG	POTASSIUM BROMIDE	NONE	2.0
[illegible]DG	POTASSIUM DICHROMATE	D001 D007	1.0

? 7a

bldg. H

H BLDG	POTASSIUM HYDROXIDE	NONE	3.0
H BLDG	POTASSIUM NITRATE	D001	1.0
H BLDG	POTASSIUM PERMANGANATE	D001	1.0
H BLDG	POTASSIUM PHOSPHATE	NONE	1.0
H BLDG	SILVER NITRATE	D001 D011	0.2
H BLDG	SILVER SULFATE	D011	1.0
H BLDG	SODIUM ACETATE	NONE	1.0
H BLDG	SODIUM CARBONATE	NONE	1.1
H BLDG	SODIUM CITRATE	NONE	1.0
H BLDG	SODIUM NITRITE	D001 D003	1.0
H BLDG	SODIUM PHOSPHATE	NONE	1.0
H BLDG	SULFAMIC ACID	NONE	1.1
H BLDG	THIOACETAMIDE	NONE	0.2
H BLDG	TITANOUS CHLORIDE	D002 D003	1.9
H BLDG	TRI FLUORO ACETIC ACID	D002	2.0
H BLDG	TRIOCTYLPHOSPHINE OXIDE	NONE	0.2
H BLDG	ZINC NITRATE	D001	2.0
H BLDG	ZINC POWDER	D001 D003	1.0
H BLDG	ZINC SULFATE	NONE	1.0
H BLDG	ZINC SULFIDE	NONE	1.0
H-103	NITRIC ACID	D002	21.4
H-104	NONHAZ SCINTILLATION VIALS	NONE	70.6
H-104	NONHAZ SCINTILLATION VIALS	NONE	165.0
H-104	NONHAZ SCINTILLATION VIALS	NONE	130.4
H-104	NONHAZ SCINTILLATION VIALS	NONE	180.9
H-104	NONHAZ SCINTILLATION VIALS	NONE	184.5
H-104	NONHAZ SCINTILLATION VIALS	NONE	75.8
H-104	NONHAZ SCINTILLATION VIALS	NONE	51.9
H-104	NONHAZ SCINTILLATION VIALS	NONE	169.0
H-104	NONHAZ SCINTILLATION VIALS	NONE	121.5
H-104	NONHAZ SCINTILLATION VIALS	NONE	205.8
H-104	NONHAZ SCINTILLATION VIALS	NONE	29.5
H-104	NONHAZ SCINTILLATION VIALS	NONE	162.0
H-104	NONHAZ SCINTILLATION VIALS	NONE	191.9
H-104	NONHAZ SCINTILLATION VIALS	NONE	194.9
H-104	NONHAZ SCINTILLATION VIALS	NONE	186.7
H-104	NONHAZ SCINTILLATION VIALS	NONE	183.4
H-104	NONHAZ SCINTILLATION VIALS	NONE	160.0
H-104	NONHAZ SCINTILLATION VIALS	NONE	140.9
H-104	NONHAZ SCINTILLATION VIALS	NONE	179.4
H-105	NONHAZ SCINTILLATION VIALS	NONE	185.2
H-105	NONHAZ SCINTILLATION VIALS	NONE	177.6
H-107	ATOM LIGHT	D001 F003	55.0
H-107	ISO-PROPYL ETHER	D001	3.0
H-120	NON PCB CAPACITORS (120 UNITS), < 2PPM PCB	NONE	251.5

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow 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: _____

9.15-55

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow 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: H Building Manager: W.H. Whitelow 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? NONE ARE KEPT. THE AMOUNT of Waste each day matches the total amount of Mcuie (micro/curies

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

Count (ea) da the d tritiu Run. C Print is Ke in t Safe H-10

Source: _____

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

NONE KNOWN OF

9.15-57

Building Manager's Questionnaire

Building Name: H Building Manager: W.H. Whitelow 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.

GLASS Recycled
White Styrofoam packing is Recycled
Cardboard Boxes are recycled.

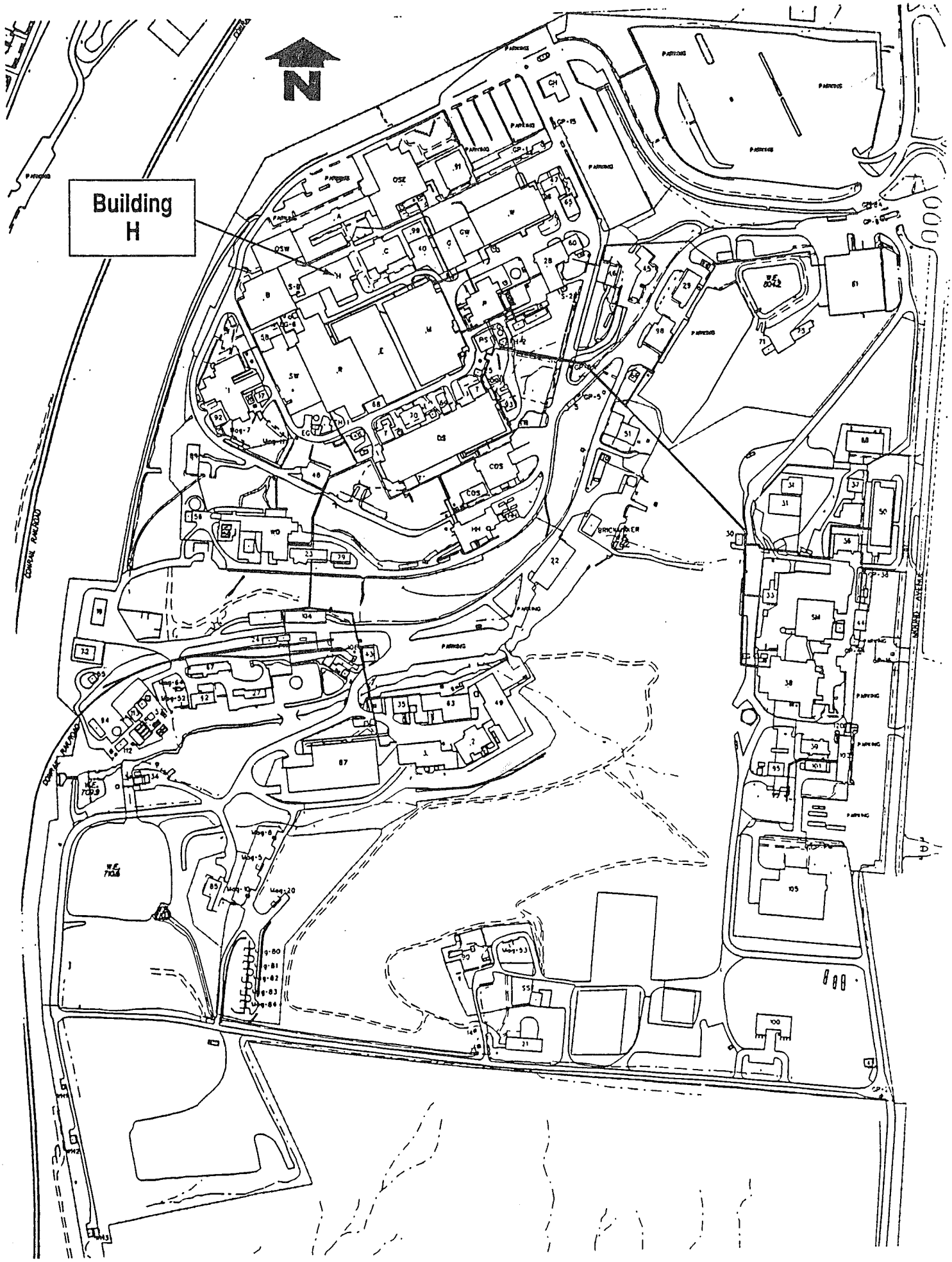
37. Has a pollution prevention program been developed for the building? (Yes) No

Source Reduction

Procedures incorporate a pollution prevention program along with waste minimization.

9.15-58

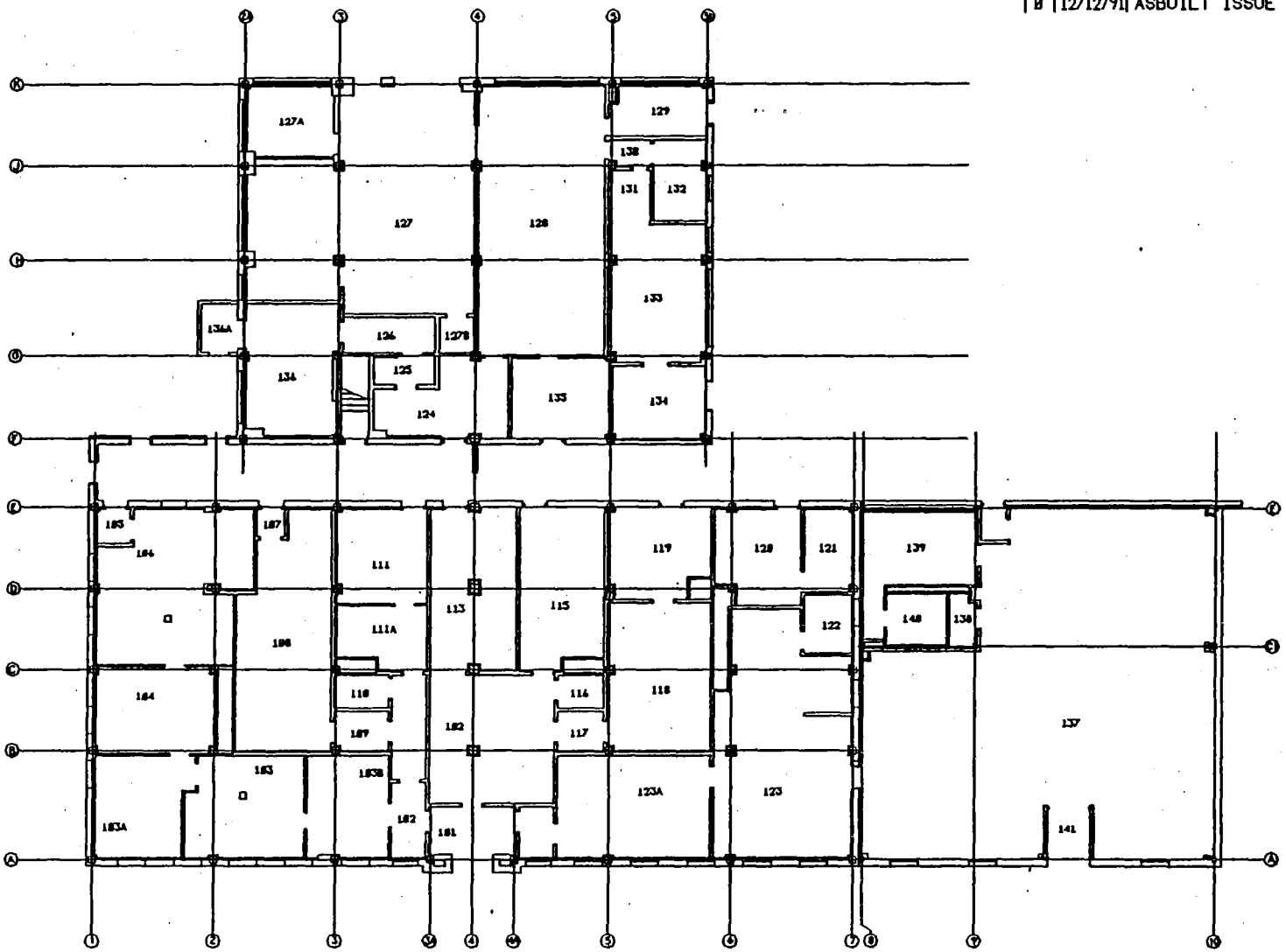
9.15.6.3 Location of Building H



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

9.15.6.4 Floor Plans for Building H

REV	DATE	REVISION	BY	CHKR	ENG	LP/SEC	APVD	N
0	12/12/91	ASBUILT ISSUE	DCW				DVD	



H BLDG
FIRST FLOOR
BLDG CODE:3505

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
___NONE ___TRUEDOC ___TEDOC ___EMDOC	
TECH. REWP.	
MR. MGR.	
TRUEDOC	
TEDOC	
EMDOC	

DESIGN ENG	PROJ MGR
SPEC'D	ENG MGR
LP & DC	PEER REV
ENG FOR	
APVD	DATE

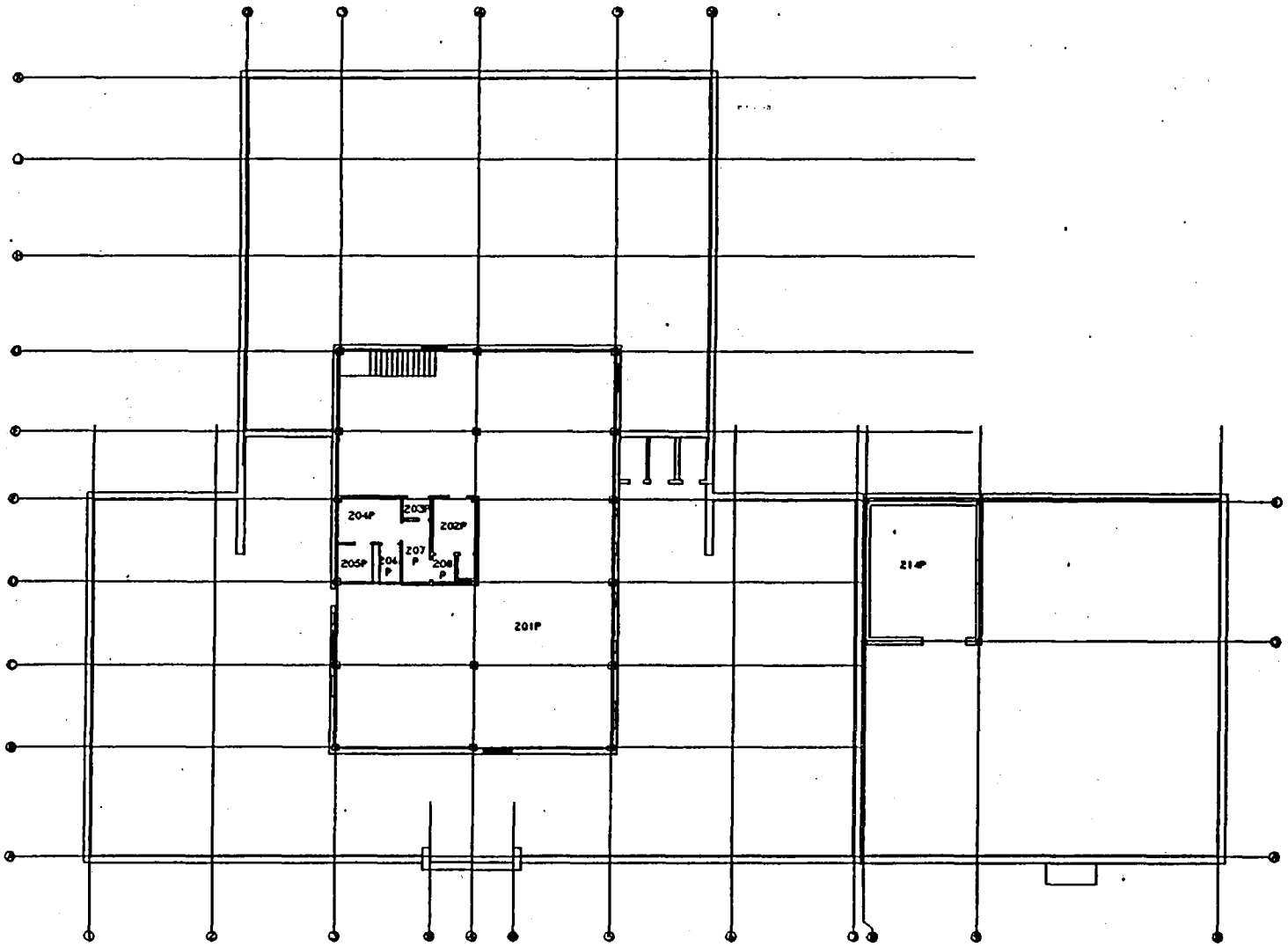
SHEET	1	2	3	4	5	6
ISSUE	0	0				

PART CLASSIFICATION

TITLE (U) TITLE CLASSIFICATION
H BLDG
FLOOR PLANS

DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE: C
DRAWING NUMBER: FSC911311
JOB NUMBER: 12335
DWG TYPE: SFP
FROM: H BLDG
CADRC: 14065
SCALE: AS NOTED
SHEET 1 OF 2
STATUS: MD-REL-12/12/91
ORIGIN: MD-BR3-V3.0

9 15-65

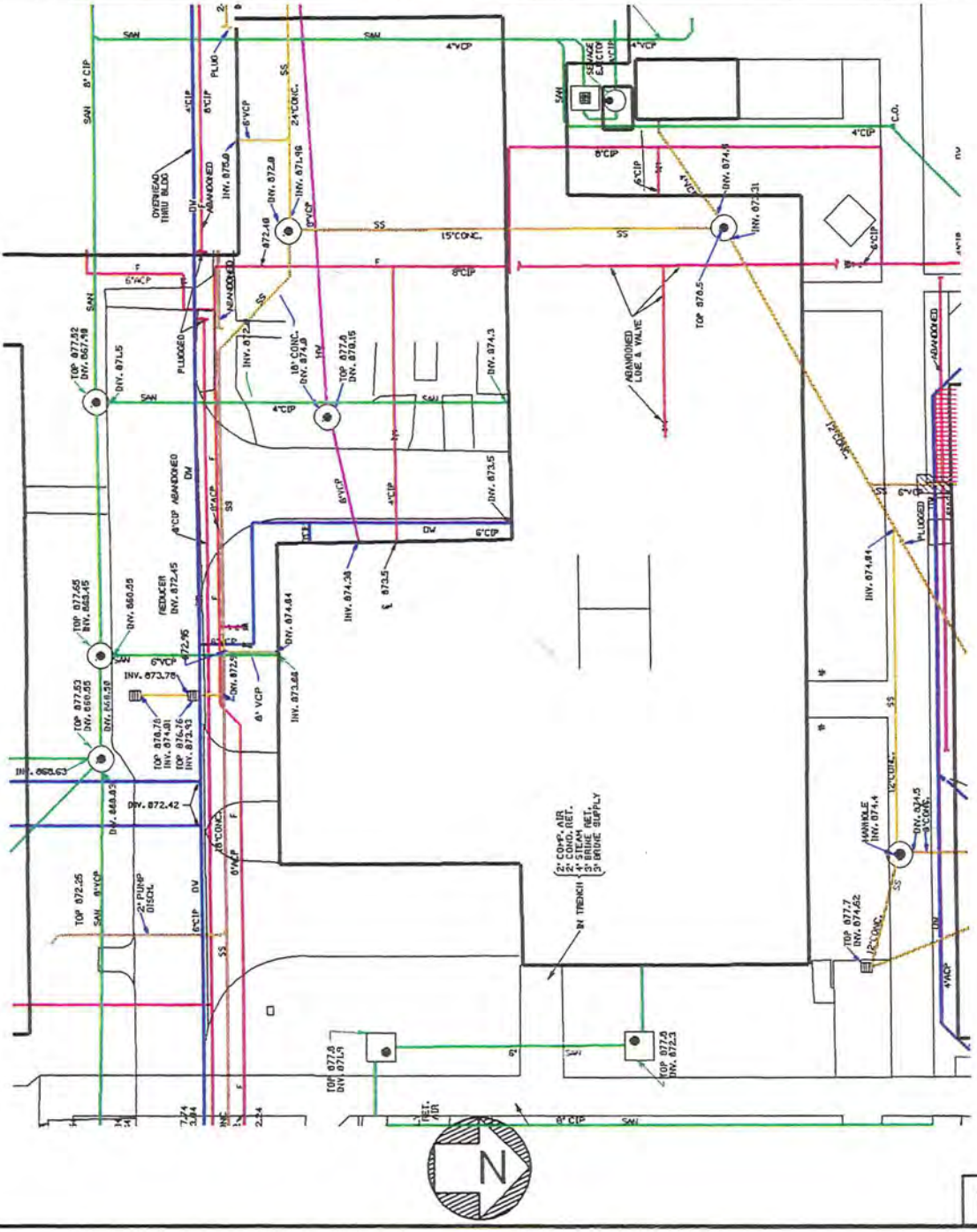


H BLDG
PENTHOUSE
BLDG CODE:3505

DRAWING NUMBER FSC911311	JOB NUMBER 12335
DRAWING CLASSIFICATION UNCLASSIFIED	
SIZE C / CHANGE 14865	SCALE AS NOTED
ISSUE B	SHEET 2
STATUS MD-REL-12/12/91	

9.15-67

9.15.6.5 Underground Utility Lines



UNCLASSIFIED

E.G.&G.-MOUND

UNDERGROUND WATER & WASTE LINES

BLDG. H

DATE: 03-12-96

9.15.6.6 Photographs

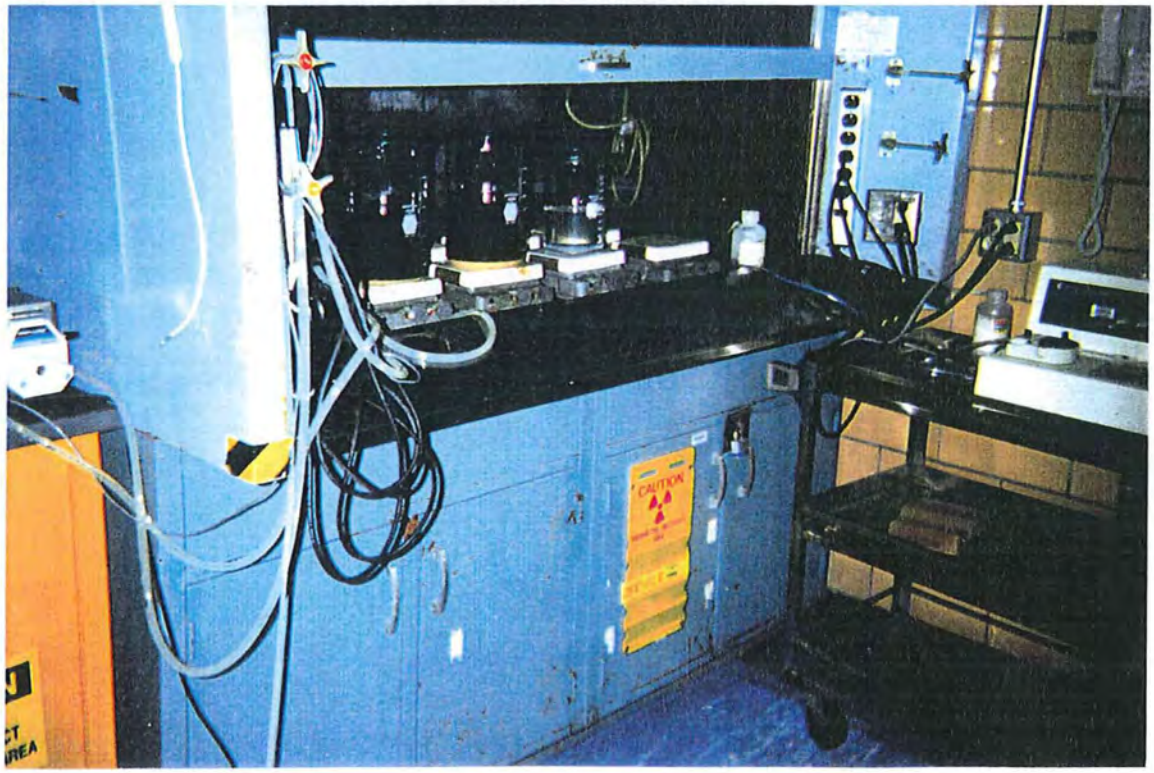
Mound Plant Building H

9.15-75

An abandoned concrete basin is located next to Building H. The size, content, and outfall are unknown.

(Left) Acids are used in the bioassay lab in Building H.

(Below) Hood duct may have radioactive contamination.



9.16 BUILDING HH

9.16.1 Scope of Building HH 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 HH on March 6, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.16.6.1). Escorting the appraisers were 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 9.16.6.2).

9.16.2 Description of Building HH

Building HH is a two-story, 15,276-square-foot, reinforced concrete block building with a built-up membrane roof. The building consists of two stories with a high bay, a cooling tower, and a basement. Location is shown in Attachment 3 (Section 9.16.5.3). The building is bordered by Building COS to the north, a hillside to the west, a roadway to the east, and a roadway to the south. Floor plans are presented as Attachment 4 (Section 9.16.6.4). The building is serviced by central steam for heat, chilled water, and electrical service (*Mound Facility Physical Characterization*, 12-1-93).

Building HH was constructed in 1948. The building was originally constructed as a "Hydrolysis House." The primary function was the hydrolysis of highly radioactive bismuth chloride and aluminum chloride solutions. The building is know to be contaminated with radioactive materials (*Mound Site Radionuclides by Location*, 6-22-95).

9.16.3 Summary of Findings

Building HH currently houses stable isotope separation and measurement of physical properties processes. The building is potentially scheduled to begin shutdown of processes in 90 days. The process owner is currently performing a room-by-room inventory to clearly identify all chemicals that are in the building. The building is well-maintained, but has several issues of environmental concern identified during the walk-through or during review of reference materials.

database is maintained in the Fire Station, Building 98. There are Emergency Evacuation Plans, and signs were posted in work areas.

Housekeeping in the Building HH was excellent. Although storage of gas cylinders was organized and orderly, there are many feed and product gas cylinders located throughout the building. These cylinders are maintained on a database for inventory purposes. The process owner is currently in the process of locating cylinders by room to assist in the shutdown process. Some of the cylinders will require analysis to determine radioactive content prior to any decision on disposition.

There are two aboveground storage tanks at the south end of the building. There is one aboveground tank at the southeast end of the building. This tank straddles a storm drain, however, it is empty, according to the process owner. There are three aboveground tanks located on the north side of the building. These tanks contain liquid nitrogen. Some of the aboveground tanks have containment. They are identified on the BMQ, provided in Attachment 2 (Section 9.16.6.2). There are three sumps in the building; one has been filled with cement. There are no separators, or catch basins, in or around the building. There are no underground storage tanks associated with this building.

The building was tested and does contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There was evidence of friable asbestos. Pipe lagging was not intact in some places. There was a one-time asbestos removal project in 1988 *(Characterization of Mound's Hazardous, Radioactive, and Mixed Wastes*, 8-15-90).

There are no capacitors or transformers containing polychlorinated biphenyls (PCB's) located in the building (1995 PCB Annual Document Log).

9.16.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes generated are primarily waste oil, discarded equipment, scrap metal, and office waste. Solid wastes are removed by janitorial personnel to a site collection point, then shipped offsite to a local landfill by a contractor. Aluminum cans, glass and cardboard are removed by janitorial personnel to specific collection points, then sent offsite to be recycled by a contractor. White paper is collected, compacted and sent offsite for recycling by a contractor. Scrap metal is collected at a specific site, then also sent offsite to be recycled by a contractor. These service contracts are maintained by Waste Management. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

Solid hazardous wastes generated by the process, maintenance and cleaning, are stored in a Satellite Accumulation Area (SAA) located inside the building proximate to and within eye contact of the work area. Liquid hazardous wastes generated by the process, maintenance, and cleaning are stored in a SAA located adjacent to the building in a 55-gallon drum that is kept locked except when adding wastes. Carbon disulfide is collected in waste solvent cans and removed from the area when volumes exceed one quart. Chemical Waste Disposal Request forms completed by the generator do not identify carbon disulfide as an F-listed waste, however

it appears this waste may have been manifested offsite as both P- and F-listed wastes. The SAA procedures and appearance conform to RCRA requirements. Wastes are collected and transported by a representative of the Waste Management Group, and are stored in Building 72 for ultimate disposal. There is no onsite treatment of waste. All are disposed of under a contract. Waste disposal manifests and Certificates of Disposal are maintained by the EG&G Waste Management Group. They conform to RCRA requirements.

9.16.4.6 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 include aluminum can, scrap metal, and paper recycling.

9.16.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.16.6.6). The environmental appraisal of Building HH 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.

HH-1 Review contents in storage cabinets for compatibility requirements.

HH-2 Determine if white flammable storage cabinets meet NFPA requirements.

HH-3 Correct glycol leak. This could be a potential point source discharge under the CWA. If heating and air conditioning equipment is set so that it must periodically or continually vent, drains should be diverted to the sanitary sewer system.

HH-4 Waste characterization information supplied by the generator to Waste Management is insufficient to properly profile the waste for offsite disposal. The current Waste Declaration Form is used by the generator. This form, unlike the formatted Waste Profile Form, does not routinely capture the additional required information for proper disposal.

HH-5 Provide secondary containment for carbon disulfide and xylene to reduce potential inadvertent spills from entering sanitary or storm water systems.

HH-6 If point sources are radioactive in nature the *de minimus* exclusion can not be applied.

HH-7 Notify RAPCA of change in status for sources that are no longer in use, and update air emissions inventory.

HH-8 Repair or remove asbestos pipe lagging if not intact.

This page intentionally left blank.

9.16.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name HH

Appraisers:

Name	Discipline

Building Manager: JEFFREY L. BOSTON

Process Manager: REGIS F. CMAR

Date: 3/6/96

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: HH

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

Date: 3/6/96

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. SINGLE PASS COOLING WATER. COOLING WATER WITH MAKE UP WATER OVER FLOW GOES TO STORM
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	ASBESTOS, CARBON DISULFIDE TRACE DEPOSITS OF URANIUM
	Is the building in operation? What are the processes and where do they discharge to?	(Y)/ N STORM	2 PROCESSES - INERT KRYPTON GAS FOR SALE 1 CARBON DISULFIDE AS ENRICHED Cs^2 COOLING WATER
	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	4 TO 5 GO TO SANITARY REST TO 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 N/A (Y)/ N Y/ (N)	EMPTY PIT IN RAD AREA OLD ONE OUTSIDE, COLLECTS WATER BEFORE GOES TO SD
	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	IN 113 PROPOLENE GLYCOL LEAK FROM SPRINKLER SYSTEM - GOES TO FLOOR DRAIN IF SPILLED

9.16-12

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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	008, 005, 121, 119, 011, 022, 024, 122
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	SEE PAGES 34, 61C
	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	
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)	NO ACCIDENTAL RELEASES

Building Name: HH

Appraisers: GLANDER PUCKETT HOAGLAND SIZEMORE

Date: 3-6-96

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
Inert Gas Analysis	121	121 0001	Y / N	Y / N	NA				
Inert Gas Analysis	119	1190002	Y / N	Y / N	NA				
Propane Generator	Outside - South of Bldg.	NA	Y / N	Y / N	NA				
Zinc Isotope Processing	005	0050001	Y / N	Y / N	NA				
Uranium Processing	008	008 0004	Y / N	Y / N	NA				

Source: F. Cmar

9.16-13

Environmental Appraisal Checklist

Building Name: HH

Appraisers: PUCKETT, HOAGLAND, SIZEMORE, GLANDER

Date: 3-6-96

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 #/h
Carbon Disulfide Processing	008	0080001	(Y)/N	(Y)/N	acetone CS_2			40	0.01 0
CS_2 Purification	008	008 0002	(Y)/N	(Y)/N	CS_2 mercury			40	0.0001 0
CS_2 Purification	008	0080003	(Y)/N	(Y)/N	CS_2			40	0.0001
Uranium Processing	008	0080005	(Y)/N	Y/(N)	NA →				
CS_2 Separation	011	0110001	(Y)/N	(Y)/N	CS_2			100	0.001

Source: F. Cmar

Environmental Appraisal Checklist

Building Name: Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date:

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					

EXTRA PAGE

EXTRA PAGE

Source:

9.16-15

9.16-16

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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 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: HH

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

Date: 3/6/96

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	
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	

9.16-17

9.16-18

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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
				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: HH

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

Date: 3/6/96

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	Room 2 - Janitor's Sink
	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	See Below

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
HH	023	WM8A-3	HALSEY-TAYLOR
HH	001	FD700-3-A	ELKAY
HH	111	PLF3CP(?)	OASIS

Source: _____

9.16-19

9.16-20

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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 charactarization 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	chemical waste disposal request form.
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: HH

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

Date: 3/6/96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area?	(Y) / N	
	Is it treated as such?	(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	

9.16-21

9.16-22

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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:		
	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 / 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: HH

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

Date: 3/6/96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	
	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	

9.16-23

9.16 -24

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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 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:

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos?	Y / N	PARTIAL CONTRACTOR ACBM REMOVAL REMOVED IN 1988-90. ANALYSIS & INSPECTION
	If no for this building or area note this conclusion in the comment section.		
	Is there any evidence of friable asbestos?	Y / N	
	Is the asbestos removal properly managed? (See questions listed below)	Y / N N/A	If there is no asbestos removal, do not complete the following section.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of 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	

9.16-25

9.16-26

Environmental Appraisal Checklist

Building Name: HH. Appraisers: Terry Glander, John Puckett, Mary-Louis Hoagland, Mary Sizemore Date: 3/6/96

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

Does this facility potentially contain any PCB's or PCB contaminated equipment?	Y / N	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	
	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	

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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	
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	

9.16-27

9.16-28

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators 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: HH

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

Date: 3/6/96

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	(Y) / N	Room 14-18 contain LLW (solid) e.g. shoe covers, solid waste etc (process knowledge)
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	Rooms 14-18 storing LLW
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 N/A	Room is contained & secure
	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	Health Physics Monitors
	Based on field data, does the monitoring conducted in this area conform to the performance standard?	(Y) / N	

9.16-29

9.16-30

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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	FRANK CMAR Keeps A LOG BOOK for this
	Do characterization data include the following:		SEE FAX FROM CMAR P1-P17
	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?		HEALTH PHYSICS MONITORS
	How were the concentrations of radionuclides determined? Indirect methods?		HEALTH PHYSICS MONITORS
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	STORAGE IS TEMPORARY LATER RELEASED TO WASTE MGT.
	Are records maintained at the facility enabling this waste to be traced from its origin?	(Y) / N	EXCEPT FOR WASTE PREVIOUSLY SHIPPED FOR BURIAL · WASTE MANAGEMENT SHOULD HAVE RECORDS

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

9.16-31

9.16-32

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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	

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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:

9.16-33

9.16-34

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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	NA
	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: HH

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

Date: 3/6/96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	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	
METAL WASTES			
	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	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

9.16-35

9.16-36

Environmental Appraisal Checklist

Building Name: HH Appraisers: Terry Glander, Mary-Louis Hoagland, John Puckett, Mary Sizemore Date: 3/6/96

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	
CYANIDE AND REACTIVE WASTES			
	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	
VEHICLE MAINTENANCE			
	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: HH

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

Date: 3/6/96

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	
OILS			
	What kind of oils are used?		
	Hydraulic oil?	Y / N	Vacuum pump oil
	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	on vacuum pumps
	Oil soaked rags laundered?	Y / N	NA
	Rags and absorbants used to their limit?	Y / N	NA

9.16-37

Environmental Appraisal Checklist

Building Name: HH

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

Date: 3/6/96

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	
SOLVENT WASTES			
	Has there been an attempt to reduce volume or toxicity by:		NA - process is shutting down.
	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: HH

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

Date: 3/6/96

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?	_____ _____	

9.16-39

This page intentionally left blank.

9.16.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: HH Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

Health physics orientation -- for certain rooms only

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

Safety glasses + shoes

3. Are there any restricted areas? Yes No
Where are they? Roof area; inside Room 14-18 - part of Room 5, + one shed outside.

4. Provide a physical description of the building.

Building is a 15,276-ft^2 structure of reinforced concrete. Roof is BUM of coal tar and metal. The building consists of two stories with a high bay and a basement. The isotope separation area is not contaminated with any radioactive or energetic materials. Another small portion of the building no longer in use is 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 as an isotope separation facility. Isotopes, mostly in the gas phase, are produced and packaged in the building. The radiologically contaminated portion of the building is scheduled for decommissioning and decontamination in 1997.

Source: Mound Buildings, 5-9-95

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

Polonium + Actinium processing -- late 40's/early 50's
Some work with natural and depleted uranium -- late 70's.
Molecular diffusion/atomic diameter experiments -- 1960's → 1992.

Source: Mound Buildings, 5-9-95

Building Manager's Questionnaire

Building Name: HH 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: Isotope separation, measurement of physical properties of gases, liquid-solid chromatography

How Wastes Are Generated:

A number of pumps are used in gaseous isotope separation. Oil in the vacuum pumps needs to be changed periodically. Waste oil is put in a 55-gal drum. When the drum is full, a sample is analyzed to be sure that it is not radioactive, and if it is not, Waste Management is asked to pick up the drum.

Equipment in the isotope separation systems is cleaned with ethyl alcohol. Waste alcohol is poured into red cans for Waste Management to collect. Volume of alcohol is small: approximately 1 gal per month.

1,1,1-trichloroethane is used to clean oxygen cylinders. Waste solvent is put in red cans for Waste Management pickup. Volume does not exceed 1 gal per month.

In the future a liquid-liquid calcium isotope separation system will be cleaned and dismantled. Chlorinated hydrocarbons (about 5 gal) will be used in the cleaning process.

Low-level beta waste is generated when He-3 is separated from decaying reactor gases. The small amounts of tritium remaining in the gas are caught in a carbon-filled trap. Supplies of He-3 are large enough that no isotope separations are expected this year. When separations are done, the amounts of tritium collected are small, and the trap does not to be emptied after each run.

Carbon disulfide is a feed material for isolating sulfur isotopes. Almost all of it is consumed.

Benzene was used in liquid thermal diffusion processes. It was disposed of in 1988 and is no longer needed.

Ethylene glycol was used in baths for liquid-liquid separations. Those separations are no longer done and no ethylene glycol is present.

Asbestos was removed from Building HH in 1988 during a one-time cleanup.

Physical measurements and chromatography operations produce no hazardous wastes.

Contact:
Phone #:

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

9.16-44

Building Manager's Questionnaire

Building Name: HH 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? Yes

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
Isotope Separation	119	HH1190001	Y	fluid oil 550 perfluorobutane	0.013 0.01		0.936 0.72	
Isotope Separation	008	HH0080005	Y	bromochloromethane calcium trifluroacetate dicyclohaxano 18-crown6	0.05 0.001 0.001		0.5 0.01 0.01	
Isotope Separation	122	Hh1220001	Y	acetone ethanol sulfuric acid hydrochloric acid phosphoric acid sodium hydroxide	0.09 0.09 0.01 0.01 0.01 0.01		180 180 20 20 20 20	
Isotope Separation	122	Hh1220002	Y	acetone ethanol sulfuric acid hydrochloric acid phosphoric acid sodium hydroxide	0.09 0.09 0.01 0.01 0.01 0.01		180 180 20 20 20 20	
Isotope Separation	008	HH0080001	Y	acetone	0.0005		0.416	
Isotope Separation	008	HH0080002	Y	carbon disulfide	0.0001		0.0832	
Isotope Separation	008	HH0080003	Y	carbon disulfide	0.0001		0.0832	
Isotope Separation	008	HH0080001	Y	acetone	0.01		0.2	
Isotope Separation	011	HH0110001	Y	carbon disulfide	0.001		8.736	
Isotope Separation	005	HH0050001	Y	dimethyl zinc	0.001		0.3	
Isotope Separation	024	HH0240001	Y	CO ammonia	0.0001 0.0001		0.0004 0.0004	
Isotope Separation	022	HH0220001	Y	carbon disulfide sulfur dioxide	0.001 0.001		0.096 0.096	
Isotope Separation	022	HH0220002,3	Y	ethanol tetra-methyl silane	0.1 0.001		4 0.04	

Source: _____

9.16-45

Building Manager's Questionnaire

Building Name: HH 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? Yes (No)

14. Does the building discharge to the storm sewer? (Yes) No
Where? Floor drains + some sinks (posted).

15. Does the building discharge to the sanitary sewer? (Yes) No
Where? Several laboratory sinks + restrooms.

16. Has an asbestos survey been conducted? Yes
What are the results? Yes, most, if not all, asbestos removed.

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

9.16-46

Building Manager's Questionnaire

Building Name: HH Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

17. Does building contain transformers or capcitors? NO

Source: PCB ANNUAL DOCUMENT REPORT

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

Source: PCB ANNUAL DOCUMENT REPORT

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)
Attached		

Source: Chemical Inventory 1994

9.16-47

CHEMICAL	MANUFACT	USE		MAX	Unit	AVG	Unit	BD	RM	STATE	STOR	PRES	TMP	SUPER
KRYPTON	MOUND	10	L	10	L	1	L	HH	112	G	L	2	4	EPPLEY
NEON	MOUND	10	L	10	L	0	L	HH	112	G	L	2	4	EPPLEY
XENON	MOUND	10	L	10	L	1	L	HH	112	G	L	2	4	EPPLEY
HELIUM	MOUND BULK GASES	10000	L	10000	L	0	L	HH	119	G	L	2	4	EPPLEY
ARGON	MOUND	10	L	10	L	0	L	HH	121	G	L	2	4	EPPLEY
NEON	MOUND	10	L	10	L	0	L	HH	121	G	L	2	4	EPPLEY
AMMONIUM HYDROXIDE	EM SCIENCE	250	ML	250	ML	0	ML	HH	122	L	N	1	4	EPPLEY
BUFFER SOLUTION	FISHER	970	ML	970	ML	0	ML	HH	122	L	N	1	4	EPPLEY
ELECTRODE SOLUTION	RICCA	470	ML	470	ML	0	ML	HH	122	L	N	1	4	EPPLEY
FL-70	FISHER	2.5	L	2.5	L	0	L	HH	122	S	M	1	4	EPPLEY
LITHIUM HYDROXIDE	FISHER	450	G	450	G	0	G	HH	122	S	M	1	4	EPPLEY
PHENOLPHTHATLEIN	FISHER	100	G	100	G	0	G	HH	122	S	M	1	4	EPPLEY
POTASSIUM BROMIDE	MCB	0.6	LB	0.6	LB	0	LB	HH	122	S	M	1	4	EPPLEY
POTASSIUM CHLORIDE	AMBER	470	ML	470	ML	0	ML	HH	122	L	N	1	4	EPPLEY
RESIN,AMINEX	BIO-RAD	40	G	40	G	0	G	HH	122	S	N	1	4	EPPLEY
RESIN,ANION EXCHANGE	BENSON	75	G	75	G	0	G	HH	122	S	N	1	4	EPPLEY
RESIN,CATION EXCHANGE	BENSON	125	G	125	G	0	G	HH	122	S	N	1	4	EPPLEY
SODIUM HYDROXIDE	FISHER	3	L	3	L	0	L	HH	122	L	N	1	4	EPPLEY
OXYGEN	AIR PRODUCTS	500	L	500	L	10	L	HH	126	G	L	2	4	EPPLEY
PROPANE	MOUND BULK GASES	500	L	5000	L	10	L	HH	126	G	L	2	4	EPPLEY
ARGON		100	L	100	L	0	L	HH	18	G	L	2	4	EPPLEY
CONVOIL	CVC	55	GA	55	GA	20	GA	HH	18	L	D	1	4	EPPLEY
KRYPTON		500	L	500	L	20	L	HH	18	G	L	2	4	EPPLEY
NEON		500	L	500	L	1	L	HH	18	G	L	2	4	EPPLEY
XENON	MOUND	500	L	500	L	20	L	HH	18	G	L	2	4	EPPLEY
NEON		1000	L	1000	L	0	L	HH	19	G	L	2	4	EPPLEY
XENON		1000	L	1000	L	0	L	HH	19	G	L	2	4	EPPLEY
ARGON	MOUND	200	L	200	L	1	L	HH	2	G	L	2	4	EPPLEY
AMMONIUM BROMIDE	MOUND	60	G	60	G	3	G	HH	24	S	N	1	4	EPPLEY
CS2	MOUND	20	G	50	G	40	G	HH	24	L	L	3	4	EPPLEY
HELIUM	MOUND ISOTOPES	5000	L	1000	L	8000	L	HH	24	G	L	2	4	EPPLEY
LIQUID N2	AIR PRODUCTS/AIRCO	200	L	200	L	4000	L	HH	24	L	C	2	6	EPPLEY
NEON	MOUND ISOTOPES	200	L	200	L	2	L	HH	24	G	L	2	4	EPPLEY
OXYGEN	MOUND ISOTOPES	2000	L	2000	L	20	L	HH	24	G	L	2	4	EPPLEY
SODIUM CHLORIDE	MOUND	60	G	60	G	3	G	HH	24	S	N	1	4	EPPLEY
SULFUR ELEM.	MOUND	20	G	40	G	40	G	HH	24	S	N	1	4	EPPLEY
CUTTING OIL	CHESTERTON	1	PT	1	PT	0	PT	HH	5	L	L	2	4	EPPLEY
DEUTERIUM	MATHESON	1000	L	1000	L	0	L	HH	5	G	L	2	4	EPPLEY
DIMETHYLZINC	ALPHA	1	KG	1	KG	0	KG	HH	5	L	L	2	4	EPPLEY
ETHYL ALCOHOL	MIDWEST GRAIN	1	GA	1	GA	0	GA	HH	5	L	M	1	4	EPPLEY
GOLD GALVANIZING COMPOUND	STATE	1	PT	1	PT	0	PT	HH	5	L	M	1	4	EPPLEY
KRYPTON		5000	L	5000	L	50	L	HH	5	G	L	2	4	EPPLEY
METHYL ALCOHOL	MALLINCRODT	1	GA	1	GA	0	GA	HH	5	L	M	1	4	EPPLEY
NEON		500	L	500	L	0	L	HH	5	G	L	2	4	EPPLEY
S[illegible] PAINT	KRYLON	10	PT	10	PT	1	PT	HH	5	L	L	[illegible]	4	EPPLEY
XE[illegible]		[illegible]000	L	2000	L	50	L	HH	5	G	L	[illegible]	[illegible]	EPPLEY
ACETONE	FISHER	2	GA	2	GA	1	GA	HH	7	L	M	1	4	EPPLEY

CHEMICAL	MANUFACT	USE	Unit	MAX	Unit	AVG	Unit	BD	RM	STATE	STOR	PRES	TMP	SUPER
CARBON DISULFIDE	FISHER	2	GA	2	GA	3	GA	HH	7	L	M	1	4	EPPLEY
ETHYL ALCOHOL	MIDWEST GRAIN PRODUCTS	7	GA	7	GA	1	GA	HH	7	L	M	1	4	EPPLEY
KRYPTON	MOUND	200	L	200	L	5	L	HH	7	G	L	2	4	EPPLEY
NEON	MOUND	200	L	200	L	2	L	HH	7	G	L	2	4	EPPLEY
XENON	MOUND	200	L	200	L	5	L	HH	7	G	L	2	4	EPPLEY
ARGON	MOUND ISOTOPES	2000	L	2000	L	20	L	HH	8	G	L	2	4	EPPLEY
CARBON DISULFIDE	FISHER	5000	L	5000	L	0	L	HH	8	L	M	1	4	EPPLEY
MERCURY	BAKER	50	LB	50	LB	0	LB	HH	8	L	M	1	4	EPPLEY
ARGON	AIRCO	5000	L	5000	L	5000	L	HH	DOCK	G	L	2	4	EPPLEY
CARBON MONOXIDE	CIL/LANL	15000	L	15000	L	0	L	HH	DOCK	G	L	2	4	EPPLEY
HELIUM	MOUND HOUSE GAS	10000	L	20000	L	10000	L	HH	DOCK	G	L	2	4	EPPLEY
KRYPTON	SPECTRA GASES	5000	L	5000	L	0	L	HH	DOCK	G	L	2	4	EPPLEY
NITROGEN	AIR PRODUCTS	15000	L	15000	L	5000	L	HH	DOCK	G	L	2	4	EPPLEY
OXYGEN	AIR PRODUCTS	5000	L	5000	L	1000	L	HH	DOCK	G	L	2	4	EPPLEY
ARGON GAS	AIR PRODUCT	2300	CF	2300	CF	0	CF	HH	DOCK	G	L	2	4	EPPLEY
DEUTERIUM	MARTIN MAREITTA (OAK RIDGE)	2000	L	2000	L	0	L	HH	SHED	G	L	2	4	EPPLEY
HELIUM	WESTINGHOUSE SAVANNAH RIVER	1000	L	1000	L	0	L	HH	SHED	G	L	2	4	EPPLEY
NEON	MOUND	5000	L	5000	L	0	L	HH	SHED	G	L	2	4	EPPLEY
SULFUR HEXAFLUORIDE	MARTIN MARIETTA (OAK RIDGE)	410	KG	410	KG	0	KG	HH	SHED	G	L	2	4	EPPLEY
XENON	MOUND	500	L	500	L	0	L	HH	SHED	G	L	2	4	EPPLEY
POTASSIUM SUL HYDROGEN	FISHER	0.25	LB	0.25	LB	0		H04	104	PS	M	1	4	BARTON
STAY SILV SILVER SOLDER FLUX	HARRIS	4	PT	4	PT	1	PT	HH	1	S	N	1	4	EPPLEY
ARGON	MOUND ISOTOPES	10	L	10	L	0	L	HH	102	G	L	2	4	EPPLEY
CARBON DIOXIDE	AIR PRODUCTS	500	L	500	L	0	L	HH	102	G	L	2	4	EPPLEY
HELIUM	MOUND ISOTOPES	20	L	20	L	0	L	HH	102	G	L	2	4	EPPLEY
KRYPTON	SPECTRA GASES	20	L	20	L	0	L	HH	102	G	L	2	4	EPPLEY
NEON		1000	L	1000	L	0	L	HH	102	G	L	2	4	EPPLEY
NITROGEN	AIR PRODUCTS	1000	L	1000	L	0	L	HH	102	G	L	2	4	EPPLEY
XENON	SPECTRA GASES	20	L	20	L	0	L	HH	102	G	L	2	4	EPPLEY
AMMONIUM HYDROXIDE	FISHER	2	L	2	L	0	L	HH	11	L	M	1	4	EPPLEY
CARBON DISULFIDE	FISHER	1	GA	1	GA	3	GA	HH	11	L	M	1	4	EPPLEY
HYDROCHLORIC ACID	FISHER	5	L	5	L	0	L	HH	11	L	G	1	4	EPPLEY
SODIUM HYDROXIDE	FISHER	4	L	4	L	0	L	HH	11	L	G	1	4	EPPLEY
ACETONE	FISHER	1.5	L	1.53	L	0.03	L	HH	111	L	M	1	4	EPPLEY
CHLOROFORM	FISHER	1.4	L	1.4	L	0	L	HH	111	L	M	1	4	EPPLEY
DUO SEAL OIL	SARGENT-WELCH	0.7	GA	0.7	GA	0	GA	HH	111	L	N	1	4	EPPLEY
ETHYL ALCOHOL	MIDWEST GRAIN PRODUCTS	1.2	GA	1.21	GA	0.01	GA	HH	111	L	N	1	4	EPPLEY
HYDROCHLORIC ACID	EM SCIENCE	1.5	L	1.5	L	0	L	HH	111	L	M	1	4	EPPLEY
METHANOL-CHLOROFORM MIX		0.8	L	0.8	L	0	L	HH	111	L	M	1	4	EPPLEY
METHANOL-WATER MIX		0.5	L	0.5	L	0	L	HH	111	L	M	1	4	EPPLEY
METHYL ALCOHOL	FISHER	4.5	L	4.5	L	0	L	HH	111	L	M	1	4	EPPLEY
TOLUENE	FISHER	1.07	L	1.07	L	0	L	HH	111	L	M	1	4	EPPLEY
ARGON	MOUND	10	L	10	L	0	L	HH	112	G	L	2	4	EPPLEY
CARBON DIOXIDE	MOUND	10	L	10	L	0	L	HH	112	G	L	2	4	EPPLEY
HELIUM	MOUND	10	L	10	L	1	L	HH	112	G	L	2	4	EPPLEY

9.16-49

P59 47

Building Name: HH Building Manager: J.L. Boston 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? From an outside tank.

Chemical	Amount	Clean-up Measures
Sulfuric Acid filter	~50 gal (1994)	Absorption, Neutralization, flushing

Source: _____

21. Where do waste chemicals go? To waste management. Spent solvents + CS_2.

22. What janitorial supplies are stored inside or outside of the building?
Restroom cleaning + floor cleaning/waxing supplies.

23. Where do excess janitorial supplies go? There is very little use of janitorial supplies. Not much is on hand, & there would be very little excess. The janitor has 2 sinks to wash materials in.

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

9.16-50

Building Manager's Questionnaire

Building Name: HH 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.
Inactive tanks include 3 empty storage tanks to be removed.

These are all active vendor storage vessels

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
	NITROGEN	6000 GAL		Y/N	
	NITROGEN	6000 GAL		Y/N	
7440-37-1	ARGON	02C		Y/N	DK1
7440-37-1	ARGON	01C		Y/N	018
7440-37-1	ARGON	01C			02
7440-37-1	ARGON	01C			121
7440-37-1	ARGON	01C			112
7440-37-1	ARGON	01C			102
7440-37-1	ARGON	02C			08
7440-59-7	HELIUM	01C			024
7440-59-7	HELIUM	01C			SHED
7440-59-7	HELIUM	01C			119
7782-37-9	NITROGEN	01C		Y/N	102

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? 2 sumps, one is empty in the rad area.
Yes No Unknown
Unknown for both → 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 for both Never

The col one contains was tewat that go to S

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
ATTACHED (Chem Inventory)	

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

HH BLDG	AMBERLITE XAD-2	NONE	1.0
HH BLDG	AMBERLITE XAD-7	NONE	1.3
HH BLDG	AMMONIA	D002	1.2
[illegible] LDG	AMMONIUM BICARBONATE	NONE	1.2
HH BLDG	AMMONIUM BISULFATE	NONE	0.2
HH BLDG	AMMONIUM HYDROXIDE	D002	10.3
HH BLDG	AMMONIUM HYDROXIDE	D002	2.7
HH BLDG	AMMONIUM SULFATE	NONE	1.2
HH BLDG	AMMONIUM TETROXIDE	D002	12.0
HH BLDG	ANTIMONY	NONE	0.5
HH BLDG	BARIUM ALLOY FLAKES	D003 D005	1.8
HH BLDG	BARIUM HYDROXIDE	D005	1.0
HH BLDG	BARIUM IODIDE	NONE	0.4
HH BLDG	BARIUM NITRATE	D001 D005	5.0
HH BLDG	BARIUM NITRATE	D001	9.4
HH BLDG	BARIUM SELENATE	NONE	0.2
HH BLDG	BENZENE	D001 D018 F005 U019	0.2
HH BLDG	BORON POWDER	NONE	0.1
HH BLDG	BROMINE	D002 D003	1.2
HH BLDG	CALCIUM CARBONATE	NONE	1.0
HH BLDG	CALCIUM CARBONATE	NONE	6.0
HH BLDG	CALCIUM CARBONATE	NONE	2.2
HH BLDG	CALCIUM IODIDE	NONE	2.0
HH BLDG	CALCIUM OXIDE	NONE	1.0
HH BLDG	CALCIUM SALICYLATE	NONE	0.2
HH BLDG	CALCIUM SULFATE	NONE	2.5
HH BLDG	CALCIUM SULFATE	NONE	14.2
HH BLDG	CARBON DISULFIDE	D001 F005	15.3
[illegible] LDG	CARBON DISULFIDE	D001 F005 P022	12.9
[illegible] LDG	CARBON DISULFIDE BOTTLES, EMPTY	F005 P022	5.1
HH BLDG	CHROMERAGE	NONE	42.0
HH BLDG	CITRIC ACID	NONE	0.7
HH BLDG	COPPER METAL	NONE	4.1
HH BLDG	COPPER POWDER	NONE	0.8
HH BLDG	DIPHENYL SILANEDIOL	NONE	1.0
HH BLDG	EPON RESIN 828	NONE	5.0
HH BLDG	ETHYLENE DICHLORIDE	D001 U077	0.8
HH BLDG	FERRIC CHLORIDE	NONE	1.0
HH BLDG	FERRIC CHLORIDE	NONE	1.9
HH BLDG	FERRIC OXIDE	NONE	1.7
HH BLDG	GLYCERIN	NONE	2.1
HH BLDG	HEPTANE	D001	3.8
HH BLDG	HEXANE	D001	8.0
HH BLDG	HYDROBROMIC ACID	NONE	10.3
HH BLDG	HYDROCHLORIC ACID	D002	18.0
HH BLDG	HYDROCHLORIC ACID	D002	10.9
HH BLDG	HYDROCHLORIC ACID	D002	18.0
HH BLDG	HYVAC OIL	NONE	2.1
HH BLDG	INDIUM METAL	NONE	1.8
HH BLDG	ION EXCHANGE RESIN	NONE	18.7
HH BLDG	IRON FOIL	NONE	0.1
HH BLDG	IRON POWDER	NONE	0.1
HH BLDG	IRON POWDER	NONE	2.0
HH BLDG	KROMA RED OXIDE, IRON OXIDE	NONE	0.6
[illegible] LDG	LANTHANUM COBALT INGOT	NONE	1.0

Bldg. H

9.16-52

HH BLDG	LAQUER THINNER	D001	3.7
HH BLDG	LEAD CHLORIDE	D008	2.0
HH BLDG	MAGNESIUM METAL	D003	2.5
[illegible]DG	MERCURIC CHLORIDE	D009	2.2
[illegible]DG	MERCURIC IODIDE	D009	1.0
HH BLDG	MERCURY	D009	195.7
HH BLDG	METHANOL	D001 F003 U154	5.0
HH BLDG	METHANOL, CARBON TRICHLORIDE	NONE	12.1
HH BLDG	MIMAX THINNER TL3800	D001	2.4
HH BLDG	MOLECULAR SEIVES	NONE	10.0
HH BLDG	MOLECULAR SEIVES	NONE	40.0
HH BLDG	MOLECULAR SEIVES	NONE	3.0
HH BLDG	MOLECULAR SEIVES	NONE	2.3
HH BLDG	MOLECULAR SEIVES	NONE	3.0
HH BLDG	NITRIC ACID	D002	11.6
HH BLDG	NOXON POLISH	D001	16.5
HH BLDG	OIL WASTE, VACUUM PUMP OIL	NONE	423.9
HH BLDG	OIL WASTE, VACUUM PUMP OIL	D009 F002 F003	402.0
HH BLDG	PAINT THINNER	NONE	1.4
HH BLDG	PAINT THINNER	D001	1.7
HH BLDG	PHOSPHORIC ACID	D002	4.3
HH BLDG	PLATINUM, ALUMINA PELLETS	NONE	1.0
HH BLDG	POLYFLUORO DIFFUSION OIL	NONE	4.0
HH BLDG	POTASSIUM BISULFATE	NONE	1.3
HH BLDG	POTASSIUM CHLORIDE	NONE	1.5
HH BLDG	POTASSIUM DICHROMATE	D001 D007	1.0
HH BLDG	POTASSIUM NITRATE	D001	3.0
HH BLDG	POTASSIUM SULFATE	NONE	0.9
[illegible]LDG	PRAESIDIUM INGOT	NONE	1.0
[illegible]LDG	PROPANOL (2-)	D001	6.7
HH BLDG	RADIO TV CEMENT SOLVENT	D001 F005	1.7
HH BLDG	RESIN 50W-X12	NONE	0.4
HH BLDG	RESIN 50W-X12	NONE	0.4
HH BLDG	RUTHENIUM ON ALUMINA	NONE	2.0
HH BLDG	RUTHENIUM POWDER	NONE	0.1
HH BLDG	SHELLAC THINNER	NONE	0.3
HH BLDG	SILICA GEL	NONE	2.0
HH BLDG	SILICA GEL	NONE	2.3
HH BLDG	SILICA GEL	NONE	2.0
HH BLDG	SILICON MONOOXIDE	NONE	0.2
HH BLDG	SILVER NITRATE	D001 D011	4.5
HH BLDG	SODIUM BICARBONATE	NONE	1.8
HH BLDG	SODIUM BISULFATE	NONE	1.5
HH BLDG	SODIUM BISULFITE	NONE	1.3
HH BLDG	SODIUM CHLORIDE	NONE	1.3
HH BLDG	SODIUM CHLORIDE	NONE	2.8
HH BLDG	SODIUM HYDROXIDE	D002	2.7
HH BLDG	SODIUM HYDROXIDE PELLETS	NONE	1.7
HH BLDG	SODIUM HYDROXIDE SOLUTION	D002	1.0
HH BLDG	SODIUM HYDROXIDE SOLUTION	D002	8.0
HH BLDG	SODIUM HYPERBROMITE	D002	1.3
HH BLDG	SODIUM NITRATE	D001	9.8
[illegible] BLDG	SOLDER FLUX 2, INDIUM ALLOY	NONE	2.0
[illegible] BLDG	SOLVENT CEMENT	D001	1.1
[illegible]LDG	STRONTIUM ACETATE	NONE	0.5

9.1 [illegible] H H

HH BLDG	STRONTIUM SALICYLATE	NONE	0.5
HH BLDG	SULFURIC ACID	D002	10.0
HH BLDG	SULFURIC ACID	D002	10.0
[illegible] LDG	SULFURIC ACID	D002	12.4
HH BLDG	SULFURIC ACID	D002	10.0
HH BLDG	TETRAMETHYL AMMONIUM HYDROXIDE	D002	1.1
HH BLDG	TOLUENE	D001 F005 U220	1.2
HH BLDG	TRANSMISSION LUBRICANT	NONE	7.3
HH BLDG	TRICHLOROETHANE (1,1,1-)	F002	34.3
HH BLDG	TRICHLOROTRIFLUOROETHANE	F002	5.7
HH BLDG	TUNGSTEN CATALYST	D001 D003	1.0
HH BLDG	TUNGSTEN SHOT	NONE	0.2
HH BLDG	VARIAN OIL	NONE	1.8
HH BLDG	VASOLINE	NONE	0.5
HH BLDG	ZERO MAX OIL	NONE	1.3
HH BLDG	ZINC SHOT	NONE	0.2
HH TANK	SULFURIC ACID SPILL CLEANUP, ABSORBED, FLUORCO, BOOMS	NONE	201.3
HH TANK	SULFURIC ACID SPILL CLEANUP, ABSORBED, SODIUM BICARBONATE, FLUORCO	NONE	325.2
HH TANK	SULFURIC ACID SPILL CLEANUP, ABSORBED, SODIUM BICARBONATE, FLUORCO	NONE	371.7
HH TANK	SULFURIC ACID SPILL CLEANUP, ABSORBED, SODIUM BICARBONATE, FLUORCO, BOOMS	NONE	132.0
HH-122	CESIUM HYDROXIDE SOLUTION	D002	0.1
[illegible] 122	CITRATE SOLUTION	NONE	0.2
[illegible] 122	ETHYL AMINE	D001	0.6
HH-122	HYDROQUINONE	NONE	0.3
HH-122	METHYL AMINE	D001 D002	0.5
HH-122	RUBIDIUM HYDROXIDE SOLUTION	D002	0.1
HH-122	SULFURIC ACID	D002	5.4
HH-122	SULFUROUS ACID	D002	2.0
HH-122	TETRA BUTYL AMMONIUM HYDROXIDE	D002	0.1

HH BLDG	7031 ADHESIVE	D001	5.3
HH BLDG	ACETIC ACID	D002	1.0
HH BLDG	ACETONE, ETHANOL WASTE	D001 F003 U002	8.2
HH BLDG	ACETONE, METHYLENE CHLORIDE	D001 F002	23.0
HH BLDG	ACTIVATED CHARCOAL	NONE	5.3
HH BLDG	ALUMINA	NONE	10.1
HH BLDG	ALUMINA	NONE	11.0
HH BLDG	ALUMINUM OXIDE	NONE	0.9
[illegible] LDG	ALUMINUM PAINT	D001	2.5

P7c

Bldg. HH

9.16-54

Building Manager's Questionnaire

Building Name: HH 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 3 tanks have had a project submitted for removal.

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? When we get up to 1gt. of CS_2 waste may take it away
Yes [redacted]

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: _____

9.16-55

Building Manager's Questionnaire

Building Name: HH Building Manager: J.L. Boston 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: _____

9.16-56

Building Manager's Questionnaire

Building Name: HH 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) [redacted] None waste will be generated during D&D.
Where are logs found?
Room 14-18 -- Solid Waste, shoecovers, etc, possible tritium contaminat.

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

9.16-57

Building Manager's Questionnaire

Building Name: HH Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

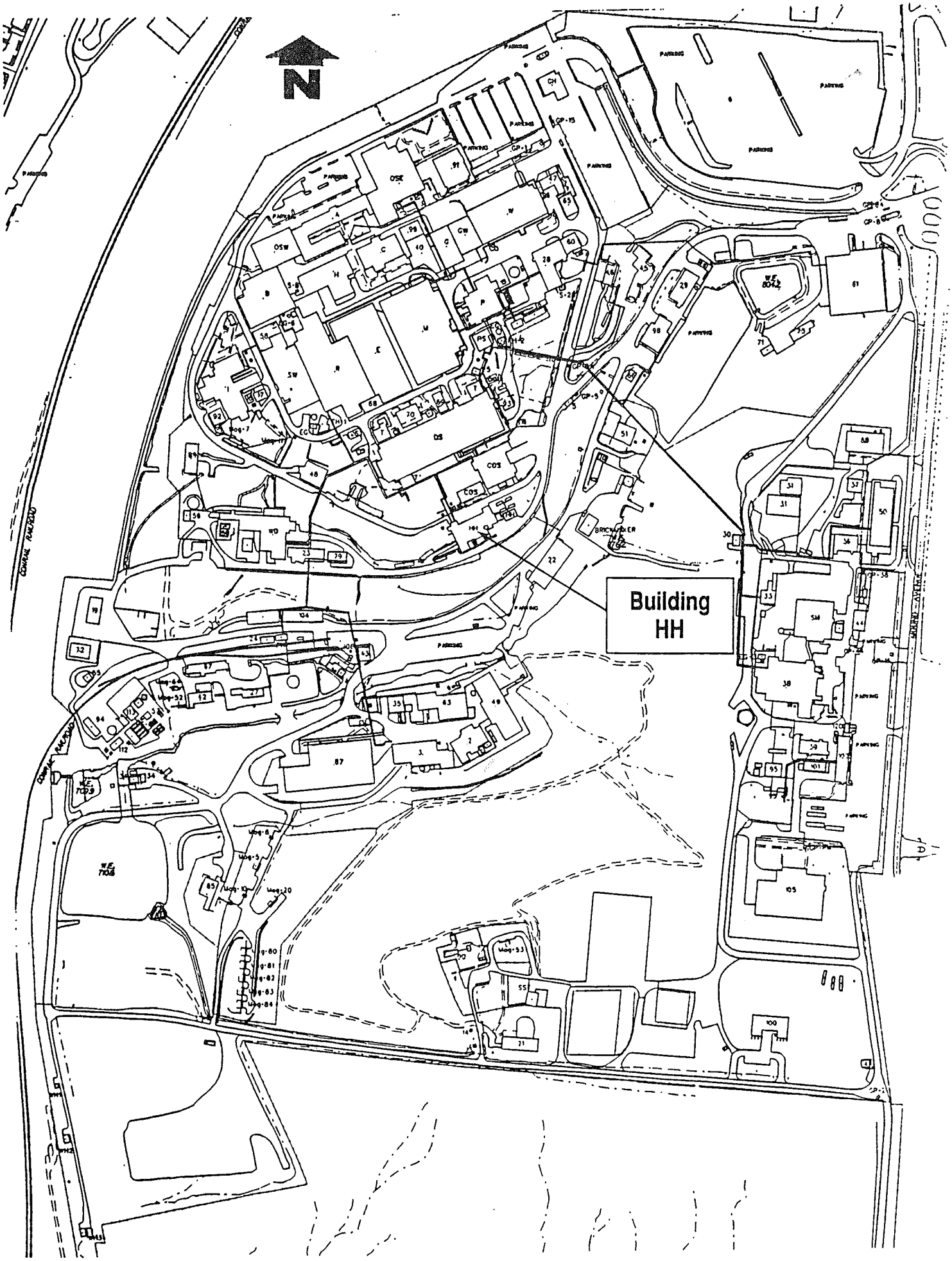
36. Is there a waste minimization program in the building? Yes No
Discuss your ideas about how to minimize waste.

We have been minimizing our use of CS_2 + solvents for process work.

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

9.16-58

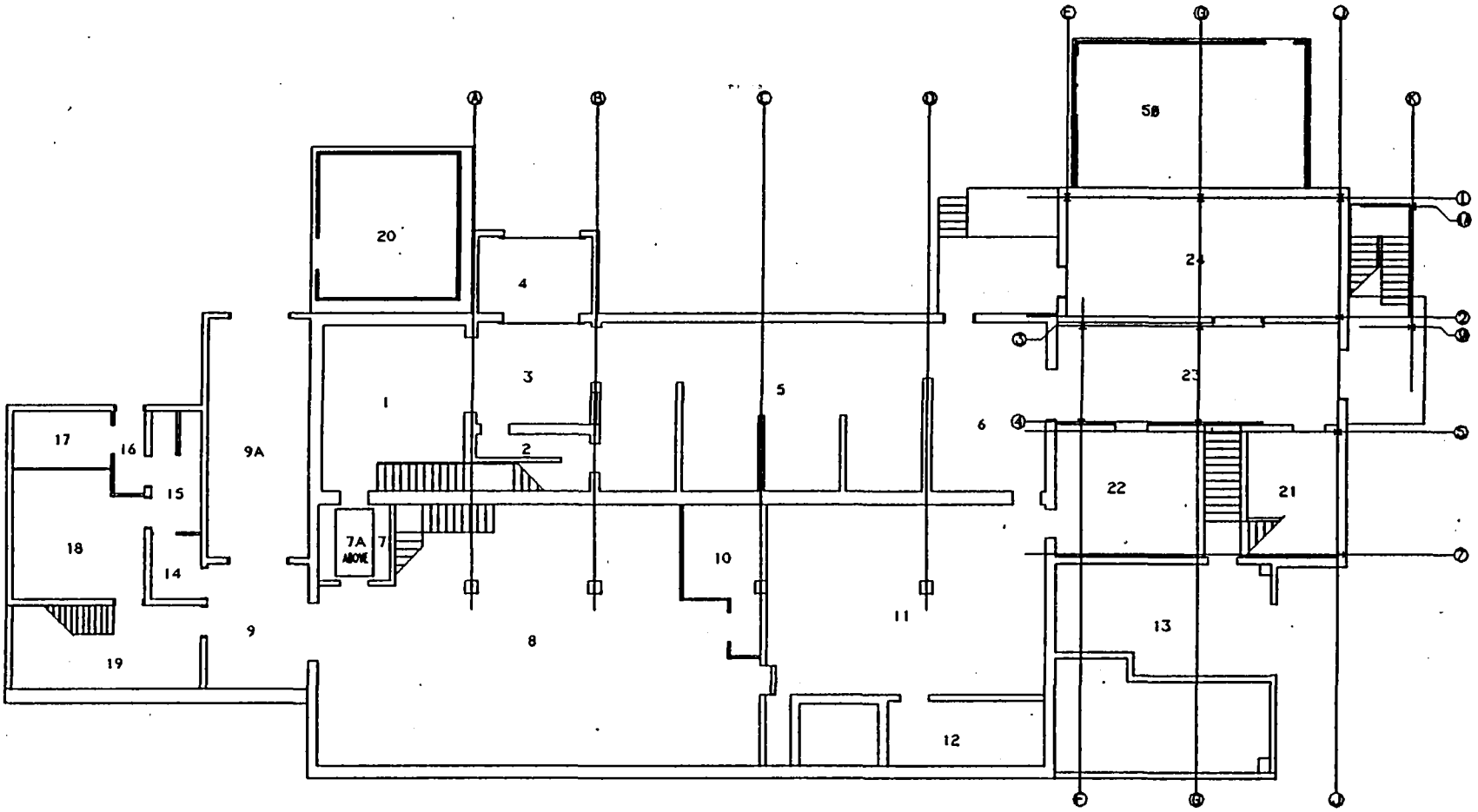
9.16.6.3 Location of Building HH



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

9.16.6.4 Floor Plans for Building HH

ISS	DATE	REVISION	BY	CHKR	ENG	LPMGR	APVD	R
0	12/12/91	ASBUILT ISSUE	DCW				DVD	



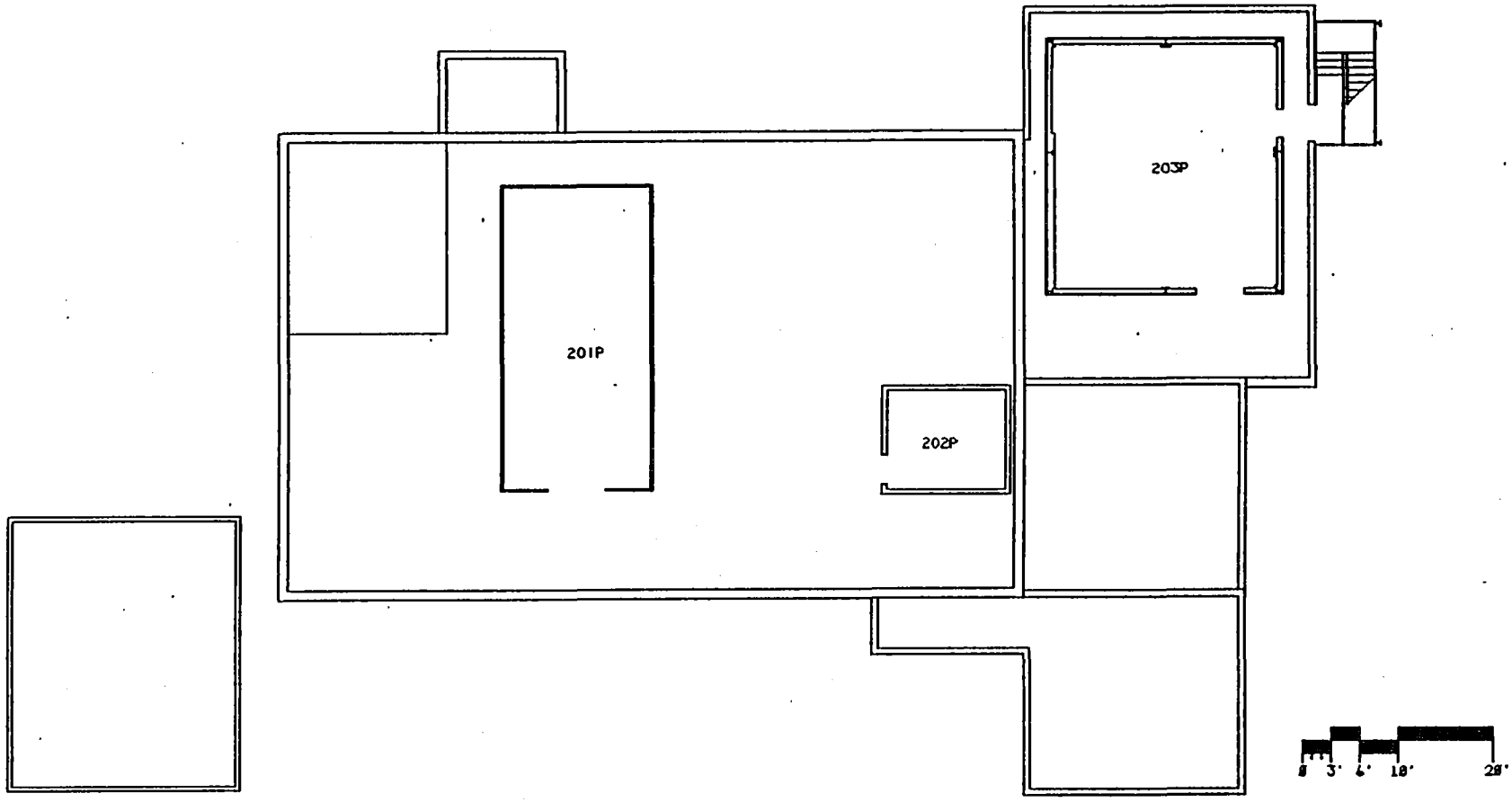
H-H BLDG BASEMENT BLDG CODE:3506

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED: ___NONE ___TRUEROC ___TEROC ___EMROC	
TECH. REP.	
BR. MGR.	
TRUEROC	
TEROC	
EMROC	

DESIGN ENG	PROJ MGR
BPCMS	ENG SUPV
LP & CC	PECS REV
ENG MGR	
APVD	DATE

SHEET	1	2	3	4	5	6	TITLE (U) TITLE CLASSIFICATION
TOTAL	0	0	0				H-H BLDG FLOOR PLANS
PART CLASSIFICATION							
DRAWING CLASSIFICATION: UNCLASSIFIED				SIZE: C	DRAWING NUMBER: FSC911312		JOB NUMBER: 12335
DWG TYPE: SFP	PROJ: H-H BLDG	CAGE: 14065	SCALE: AS NOTED	SHEET 1 OF 3			
STATUS: MD-REL-12/12/91	ORIGIN: MD-BR3-V3.3						

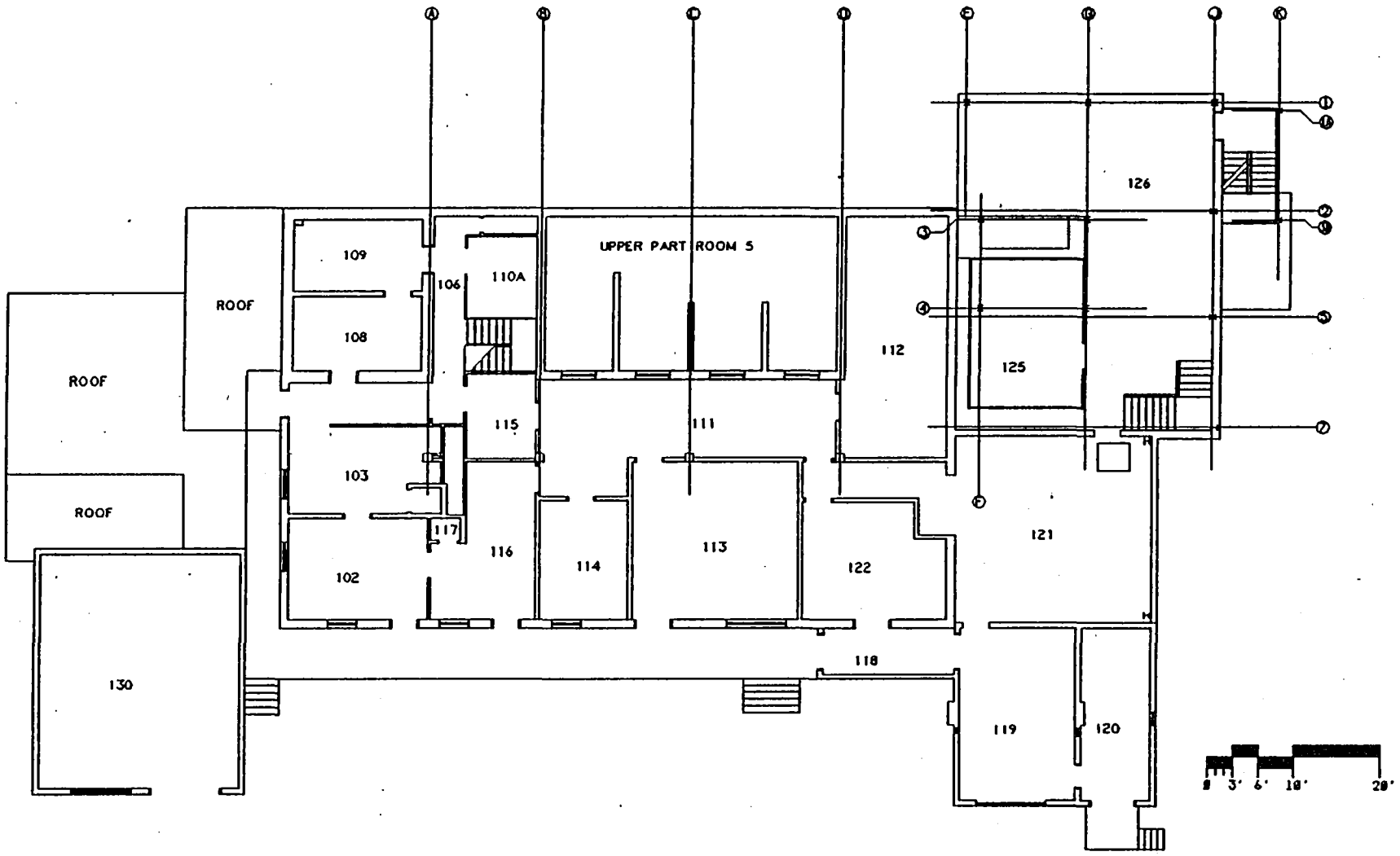
9-16-65



H-H BLDG
PENTHOUSE
BLDG CODE:3508

DRAWING NUMBER FSC911312	JOB NUMBER 12335
DRAWING CLASSIFICATION UNCLASSIFIED	
SIZE C	CHECK 14865 / SCALE AS NOTED
	ISSUE 0 / SHEET 3
STATUS MD-REL-12/12/91	

9.16-67



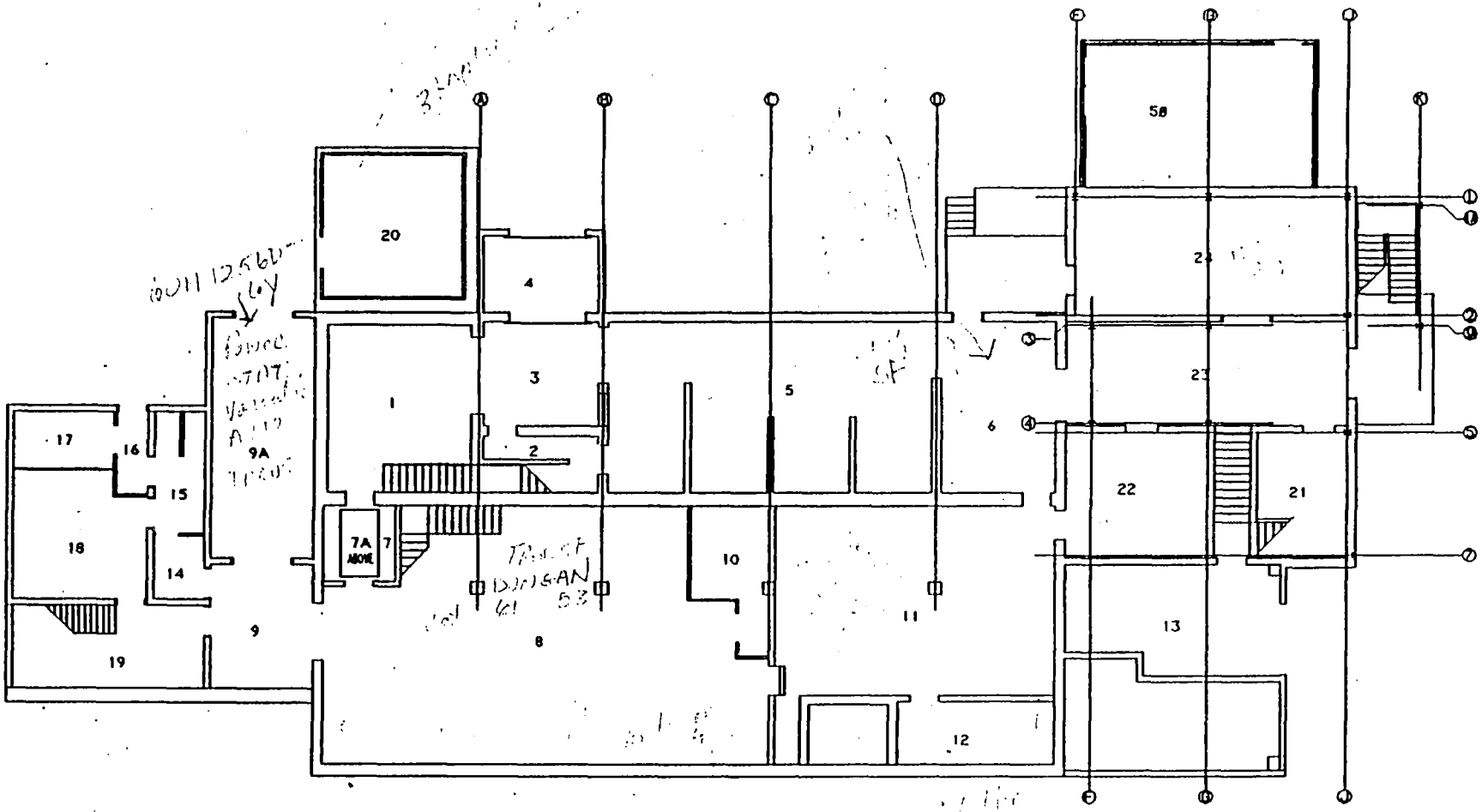
H-H BLDG
FIRST FLOOR
BLDG CODE:3506

DRAWING NUMBER FSC911312		JOB NUMBER 12335
DRAWING CLASSIFICATION UNCLASSIFIED		
SIZE C	CODE 14865	SCALE AS NOTED
	ISSUE 0	SHEET 2
STATUS MD-REL-12/12/91		

9.16-69

ISS	DATE	REVISION	BY	CHKD	DWG	UPKD	APVD	N
0	12/12/91	ASBUILT ISSUE	DCH				DVD	

9.16-71



0 3' 6' 10' 20'

H-H BLDG
BASEMENT
BLDG CODE:3506

APPROVALS: DATE:
SAFETY COMMITTEE REQUIRED:
___NONE ___TRUEDOC ___TEDOC ___CHDOC
TECH. REP. ___
GR. MGR. ___
TRUEDOC ___
TEDOC ___
CHDOC ___

DESIGN CHK	PROJ MGR
APVD	CHK SUPV
LP & EC	PEER REV
CHK MGR	
APVD	DATE

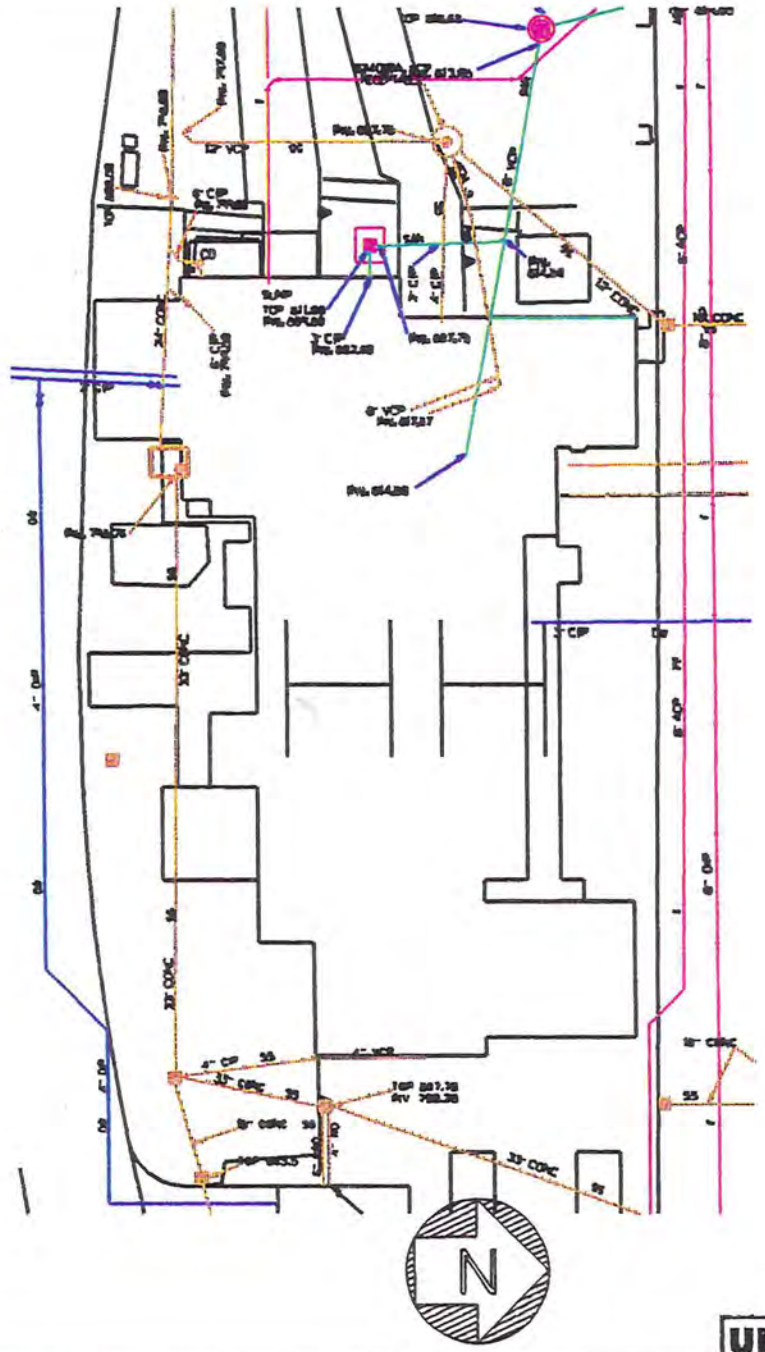
SHEET	1	2	3	4	5	6
ISSUE	0	0	0			

PART CLASSIFICATION

TITLE (U) TITLE CLASSIFICATION
H-H BLDG
FLOOR PLANS

GRAPHIC CLASSIFICATION: UNCLASSIFIED
DWG TYPE: SFP
STATUS: MD-REL-12/12/91
DWG NO: C FSC911312
JOB NUMBER: 12335
PROJ: H-H BLDG
CODE: 14065
SCALE: AS NOTED
SHEET 1 OF 3
ORIGIN: MD-BR3-V3.3

9.16.6.5 Underground Utility Lines



FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL

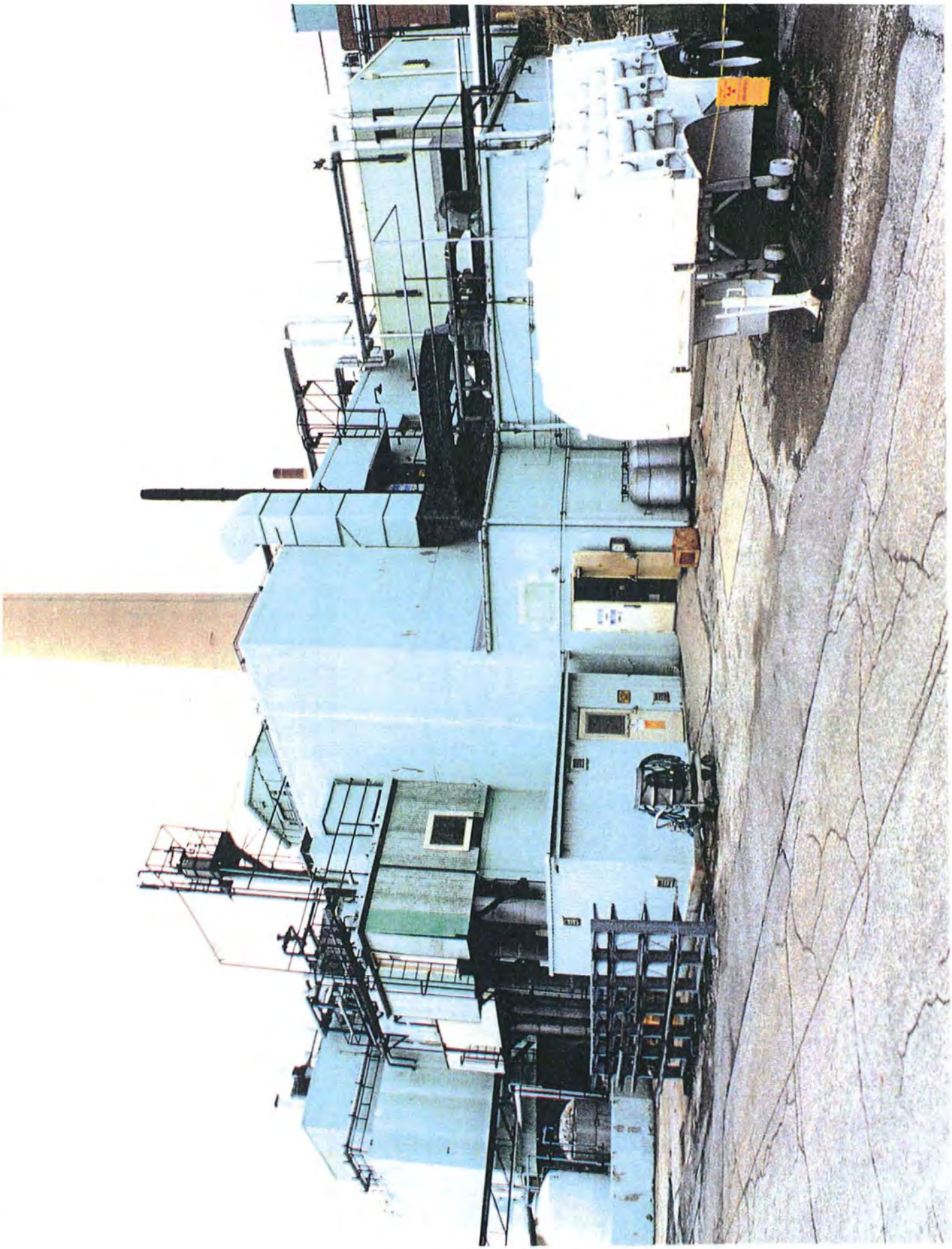
E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
HH BLDG.

DATE: 3-4-96

UNCLASSIFIED

9.16.6.6 Photographs



Mound Plant Building HH

9.16-79

9.17 BUILDING I

9.17.1 Scope of Building I 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 I on January 25, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.17.6.1). The appraisers were accompanied by the former building manager, who is now responsible for the Safe Shutdown operation of Building I. The building manager was not in attendance. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.17.6.2).

9.17.2 Description of Building I

Building I is a one-story structure, with a basement, constructed of concrete block with brick facing. The roof is a metal built-up membrane of coal tar. The original building was constructed in 1948 with additions in 1956, 1962, and 1985. Building I is located on the western perimeter of the main hill as shown in Attachment 3 (Section 9.17.6.3). The building is bordered on three sides by a roadway to the north, east, and west. Adjacent buildings are Building SW to the east, and Magazines 7 and 11 to the south. Buildings 16 and 17 were immediately east of Building I and Building 92 was west. However, only the foundations remain of Buildings 16, 17, and 92. The building is serviced by central steam for heat and chilled water, and electrical service of 480V (*Mound Facility Physical Characterization*, 12-1-93).

The total area of Building I is 25,736 square feet. Floor plans are presented as Attachment 4 (Section 9.17.6.4). Building I was used for loading and testing of explosive actuators in support of defense programs. There are two Class 100,000 clean rooms in the building. One of the clean rooms, which has never been used, is on the newly remodeled second floor of the northwest addition. This clean room has high efficiency particulate air absorber (HEPA) filter modules in the ceiling to filter incoming room air and new HEPA lab benches throughout. The building had been used for the same purpose since construction. Other than record storage in Room 101C, the building is unoccupied and is under administrative Safe Shutdown control (lock and key). Utility services are maintained at a minimum in order to prevent the fire suppression system and water lines from freezing. Development and production activities using energetic materials have occurred in the building (*Mound Facility Physical Characterization.* 12-1-93).

9.17.3 Summary of Findings

The building has only a few chemicals and janitorial supplies remaining in it and they are expected to be removed soon. Documentation related to disposal was provided for the chemicals and hazardous waste that were removed from Building I. Current plans are to decontaminate Room 101, including the ductwork from the lab hood. Dust from past operations using MOCA (4,4 methylene bis-2-chloro benzenamine), a cancer causing agent, is evident throughout the room. Other issues to be addressed are the disposition of process equipment and friable asbestos. Waste minimization opportunities exist by recycling metal fixtures associated with the presses and shutting down the blower to Room 104.

9.17.4 Observations

9.17.4.2 Air Emissions

Two Permit-to-Operate (PTO) applications (EF-4 and EF-7) were filed on March 5, 1992. No PTO was received from the Regional Air Pollution Control Agency (RAPCA). Associated documentation resides with the EG&G Technology and Monitoring Group. EF-4 (Room 102B hood) is shut down. EF-7 is currently operating in Room 101, the MOCA room. No documentation was found to determine whether the HEPA filters used on the glovebox in the MOCA room were ever changed. There are no fuel-burning units in the building. There was no visual evidence of fugitive dust. However, the possibility of fugitive dust could be a concern in the MOCA room (101). Mound's air emission inventory database needs to be updated.

9.17.4.2 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.

9.17.4.2.1 Sanitary Wastewater

The building has sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.17.6.5), the building is serviced by two sanitary lines. Expected discharges to the sanitary system are by sinks, toilets, and floor drains. Chemicals

would not be expected to enter the sanitary system as no processes are in operation. 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. There is no monitoring of building effluent. Based on current operations identified by the process owner, effluent from Building I should not deviate from that expected by the sanitary treatment plant manager.

9.17.4.2.2 Storm Wastewater

The building is also serviced by storm drains according to Attachment 5 (Section 9.17.6.5). Roof drains discharge to the storm sewer. 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 have entered the storm drainage system.

9.17.4.2.3 Chemicals

The remaining chemicals in Building I 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. There have been no reported spills from Building I. No floor drains were seen in areas of past operations. There is no evidence that chemicals have entered the storm or sanitary drains. Chemicals would not be expected to enter the wastewater collection system, as no processes are in operation and safe shut down is underway.

9.17.4.3 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 four water fountains that supply drinking water in the building are not EPA-listed models suspected of lead contamination.

9.17.4.4 Chemical Storage and Hazardous Materials

The building is going through Safe Shutdown. All chemicals and hazardous materials are being removed from the building since it is in Safe Shutdown The list of chemicals still in Building I are listed in Attachment 2 (Section 9.17.6.2), the BMQ. There was no visual evidence of chemical storage incompatibility among remaining materials and janitorial supplies. The disposition of chemicals, whether reused or disposed, are handled according to Safe Shutdown SOP's in MD-10431. Documentation, located in E-223, was provided for the chemicals that were removed from Building I.

A review of the procedures and requirements contained in MD-10431, *Safe Shutdown Standards Operating Procedures*, and the Safe Shutdown process manager's 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, either 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 placed in containers, 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 is no evidence that chemicals entered the storm or sanitary drains.

The building is equipped with appropriate emergency response equipment such as eyewashes, safety showers, and fire extinguishers. Halon 1211 is the prevalent type of fire extinguisher. Inspection tags for eyewashes and safety showers were not current as the building is unoccupied. There is an Emergency Evacuation Plan, and signs remain posted throughout the building.

Although not associated with Building I, there are two 6,000-gallon aboveground chemical storage tanks that contain liquid nitrogen to supply nitrogen to adjacent buildings. No secondary containment is provided or required. These two tanks are located on the northeast side of the building. They are owned and maintained by outside contractors. 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 was tested and does contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There was visual evidence of friable asbestos in Rooms 136 and 137. The areas containing asbestos material were identified and properly marked indicating the presence of asbestos.

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

9.17.4.5 Solid, Hazardous, and Wastes

Solid waste generated in the building results from cleaning out the offices and laboratory areas for Safe Shutdown. 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.

Many pieces of equipment contaminated with energetic material have been tagged and designated as "XXX." This tag documents that the surface of an item has been cleaned, inspected, and administered by the Safety Department. A "XXXXX" designation is required on

equipment/facilities before it can be released for general use or to the general public (DOE *Explosives Safety Manual*, Revision 7, DOE/EV/06194). Hazardous wastes are generated by the process of cleaning items and process equipment contaminated with energetic materials. The area is under administrative control of the generator. The amount of material generated is small. The waste is bagged after it is characterized. There was no labeling on the bag to identify it as hazardous waste. When noted, measures were taken to correct the oversight. All hazardous wastes are collected and transported by a representative of the EG&G Waste Management Group, 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. They conform to Resource Conservation and Recovery Act (RCRA) requirements.

MOCA is considered a hazardous waste and all associated equipment still remains in Room 101. The room is locked and is posted as containing a cancer-causing agent. Filters for the clean room (Room 104) may also be contaminated with MOCA residue.

Several pieces of equipment still contain oil although the building is shut down and there is no intention of using the equipment within 90 days. Oil has been collecting in bags tied to lines going to the presses. The oil lines are held upright by wood supports. A mixer in room 102B still has resins in its lines.

There are no drums of waste, identified or unidentified, in or around the building.

9.17.4.6 Waste Minimization and Pollution Prevention

Although at Mound there is an active program to minimize waste streams in accordance with state and federal requirements and Executive Order 12856, waste minimization and pollution prevention activities are not applicable to an empty building. The potential exists to recycle metal fixtures used during production. Filtered air for Room 104 is not required any more, consequently, a cost savings may be incurred by shutting down the blowers.

9.17.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.17.6.6). The environmental appraisal of Building I 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. Photographs were taken to document the environmental appraisal.

I-1 MOCA is classified as a RCRA "u" listed hazardous material and a cancer causing agent. Room 101 needs to be decontaminated. A chemical waste cannot be stored in a process in excess of 90 days (OAC 3745-52-32 B).

I-2 A mixer in Room 102B still has resins in its lines. Certain resins listed in the BMQ are identified as hazardous waste. The resins in the mixer should be characterized, either by process knowledge or by analysis, to determine if the resins are hazardous materials.

Characterization will determine the appropriate method of disposal. A chemical waste cannot be stored in ancillary equipment in excess of 90 days (OAC 3745-52-32 B).

I-3 Inactive equipment and lines should be drained of oil and capped. Plastic bags hung from draining lines to collect oil are vulnerable to punctures, rips, or deteriorating. This pollution prevention measure would ensure that oil is not released to the sanitary or storm water systems. OAC 3745-52-32(B) requires waste to be removed from inactive or idle equipment within 90 days.

I-4 As part of the process of Safe Shutdown, equipment contaminated with energetic materials is being cleaned. The waste being accumulated should be appropriately identified. There should be documentation concerning the type of energetic materials used, their RCRA classification, and the quantities that can be accumulated. Since the cleaning process is now sporadic, it is advisable to have hazardous wastes picked up more frequently as a housekeeping measure, regardless of the amount accumulated.

I-5 Waste minimization opportunities exist by recycling metals from the Safe Shutdown process and by shutting down the blowers to Room 104 clean room.

I-6 Conditions of friable asbestos should be addressed in Rooms 136 and 137.

I-7 The air emission source in Room 102B is no longer active. An application is on file for this source with RAPCA. RAPCA should be notified of this change in status.

9.17.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name I

Appraisers:

Name Discipline

Name Discipline

Name Discipline

Name Discipline

Building Manager:

Process Manager:

Date: 1-25-96

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: I

Appraisers: Paulick / Adkins / Vannet Date: 1-25-96

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) Safe Shutdown	
	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	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)	

9.17-11

9.17-12

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Hammel Date: 1-25-96

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	BMQ air emissions listed none but 2 PTO's exist.
	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	Applications (PTO's)
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	BMQ air emissions listed none but 2 PTO's exist.
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: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

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
	102B	EF-4	Y / N	Y / N				Shut-down	
MOCA Room	101	EF-7	Y / N	Y / N	MOCA resins	neg.		neg.	
			Y / N	Y / N					
			Y / N	Y / N					
			Y / N	Y / N					

Source: _____

9.17-13

9.17-14

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Vannet/Adkins Date: 1-25-96

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	NONE IN AREA HAVE BEEN REMOVED
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: I Appraisers: Paulick / Atkins / Vannet Date: 1-25-96

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 1211 FIRE EXTINGUISHERS IN AREA.
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	NO STORAGE AREAS REMAIN IN I BLDG.
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	N/A - NO BULK STORAGE
	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	

9.17-15

9.17-16

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	Y / N	N/A
	Does it have proper containment?	Y / N	N/A
	Is there a liquid bulk transfer area?	Y / N	N/A
	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
* I outside	6,000	Nitrogen		(Y) / N	Y / N	Y / (N)	Y / N
* I outside	6,000	Nitrogen		(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

* These Aboveground Storage Tanks ARE Not Associated With I Bldg.

Source: _____

Environmental Appraisal Checklist

Building Name: I Appraisers: Paulick/Adkins/Vennet Date: 1-25-96

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	

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
I	Corr 103	ELKAY EFA-83	By room 101B ok.
I	119A	ELKAY EFA-83	ok.
I	Corr 124	ELKAY F700-3	By room 131 ok
I	03	OASIS EPB-WM-E	ok.

Source: _____

9.17-17

9.17-18

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

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 charactarization 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	~~Paper~~ Energetic materials MOCA resins in mixer
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	energetic materials

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area?	(Y) / N	156 room
	Is it treated as such?	(Y) (N)	No labeling on bag
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 labels
	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	room is locked building under administrative control
	Are containers moved within 3 days of being filled?	(Y) (N)	waste is picked up before the 55 gallon limit

9.17-19

9.17-20

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

RCRA Checklist

page intentionally left blank

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 / 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: I

Appraisers: Paulick/Adkins/Hannet Date: 1-25-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	(Y) N	mixer, presses
	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	N/A
	Does the tank or equipment have secondary containment?	Y / N	N/A
	Does the tank or equipment have leak detection device(s)?	Y / N	N/A
	Has spill control prevention been enacted?	Y / (N)	* oil in presses
	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)	

9.17-21

9.17-22

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

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 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:

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos? If no for this building or area note this conclusion in the comment section.	(Y) / N	
	Is there any evidence of friable asbestos?	(Y) / N	Room 136 & 137
	Is the asbestos removal properly managed? (See questions listed below)	Y / (N)	If there is no asbestos removal, do not complete the following section.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of 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	

9.17-23

9.17-24

Environmental Appraisal Checklist

Building Name: I. Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

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

Does this facility potentially contain any PCB's or PCB contaminated equipment?	Y / N	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	
	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	

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

TSCA Checklist page intentionally left blank

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	

9.17-25

9.17-26

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

TSCA Checklist page intentionally left blank

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators 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: I Appraisers: Paulick/Adkins/Vennet Date: 1-25-96

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	
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	

9.17-27

9.17-28

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

Low-Level Waste and Transuranic Waste Checklist

page intentionally left blank

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	N/A
	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: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

Low-Level Waste and Transuranic Waste Checklist

Page intentionally left blank.

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

9.17-29

9.17-30

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vonnet Date: 1-25-96

Low-Level Waste and Transuranic Waste Checklist Page intentionally left Blank

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 Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet

Date: 1-25-96

Low-Level Waste and Transuranic Waste Checklist

Page intentionally left blank.

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:

9.17-31

9.17-32

Environmental Appraisal Checklist

Building Name: I Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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	Turn blower off to clean room 104 recycle metal fixtures
	Are there solvent wastes?	Y / (N)	
	Is vehicle maintenance performed?	Y / (N)	
	Are oils used ?	(Y)/ N	in presses
	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	N/A
	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: I

Appraisers: Paulick/Adkins/Vanner Date: 1-25-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	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	
METAL WASTES			
	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	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	N/A

9.17-33

9.17-34

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick / Adkins / Vannet

Date: 1-25-96

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	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	↓
CYANIDE AND REACTIVE WASTES			
	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	↓
VEHICLE MAINTENANCE			
	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: I Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

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	↓
OILS			
	What kind of oils are used?		
	Hydraulic oil?	(Y) / N	presses
	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	N/A
	Oil soaked rags laundered?	Y / N	N/A
	Rags and absorbants used to their limit?	Y / N	N/A

9.17-35

9.17-36

Environmental Appraisal Checklist

Building Name: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

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	N/A
	Gravity setting?	Y / N	
	Screening?	Y / N	
	Centrifugation?	Y / N	
	Filtration?	Y / N	
SOLVENT WASTES			
	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: I

Appraisers: Paulick/Adkins/Vannet Date: 1-25-96

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?	_____ _____	

9.17-37

This page intentionally left blank.

9.17.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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.

This one-story (plus basement) structure is constructed of concrete blocks with brick facing, with some reinforced concrete. Roof is BUM of coal tar and asphalt. Total area is 25,736 ft^2. HVAC systems are central steam and chilled water. The building is contaminated with energetic materials, and it also 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 SHUTDOWN

The building is used for loading and testing of explosive actuators in support of defense programs.

Storage of records in 101C

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

9.17-41

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow 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?

PAST OPERATIONS - BLDG IS SHUT DOWN

Process(es) Housed: Incorporation of explosives into detonators

How Wastes Are Generated:

"I" Waste Solvent: Isopropyl alcohol is used in a cleaning bath for small parts. After use, the alcohol is poured into a solvent drain which is connected to waste drums in a shed. Ethyl alcohol can be used but currently is not.

Trichloroethane is also used in a cleaning bath and is poured into solvent drains.

Occasionally solder flux and rosin flux remover are used. Both are put into the solvent drain.

Water is not supposed to be discarded in solvent drains.

Freon TF is used in Building I as a cleaner also. It is used only to wipe parts clean. In such small amounts, the Freon evaporates, and there is no waste to discard.

Halathane 88 is used in Building I processes. Halathane is a carcinogen. It is distributed as two components. When the components are mixed, they harden. The resulting material is not hazardous and is put in a trash can.

MOCA Wastes: MOCA is melted in a crucible in a glovebox, degassed, and poured into a mold. Material left in the crucible, papers used to wipe out the crucible, papers used to clean any spills, and papers used to clean MOCA that occasionally crystallizes on the inside of the glovebox are wastes. These wastes are put in a trash container inside the glovebox. These small containers are later put into another bag to provide double containment. The bag is labeled and picked up by Waste Management.

Contact:
Phone #:

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

Only operation going on in I Building is the cleaning/decontamination of process equipment for safe shutdown. Energetic materials are the source of decontamination

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow 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? (Yes) ~~No~~

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
	102B	EF-4	Y / (N)					shut-down
MOCA Room	101	EF-7	(Y) / N	MOCA	neg.		neg.	
			Y / N					
			Y / N					
			Y / N					

Source: Mound Air Emissions Database 11/30/95

9.17-43

Building Manager's Questionnaire

Building Name: 1 Building Manager: W.H. Whitelow 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? ROOF DRAINS

15. Does the building discharge to the sanitary sewer? Yes No
Where? SINKS, TOILETS, FLOOR DRAINS

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

9.17-44

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow 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~~ acrylic seal		can
plastic cement		can
Duoseal pump oil	L	1 gal

Source: Chemical Inventory 1994

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

~~NONE~~

soap
surface cleaner
glass cleaner

NABC - ~~det~~ disinfectant
Simply Green
Bravo
Complete } floor waxes

Source: _____

Based on inspection.

9.17-45

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow 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?

N/A

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

~~NONE~~
See Question 20 page 5

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
ATTACHED			
ROUNDUP	AS NEEDED		

Source: _____

9.17-46

12-95

☐ INITIAL SERVICE
☑ REGULAR SERVICE
☐ EXTRA SERVICE

TERMINIX.

TERMITE and PEST CONTROL

COPY

COMMERCIAL SERVICE AND INSPECTION REPORT

BRANCH	ACCOUNT	RT	TELEPHONE	GRID	S DAY	F	T	PRODUCTION	TIME IN	TIME OUT
2418	006092-7	07	000/000-0000 513/865-3921	E30 -	2FR	S	P	00004570 09	7:45 AM	8:25 A

SERVICE PROPERTY AT

E G & G MOUND
P. O. #38224
MOUND AVE
MIAMISBURG OH 45342-0000

BRANCH

TERMINIX INTERNATIONAL
4712 PAYNE AVENUE
DAYTON OH 45414-0000
513/274-5800

OPERATOR NAME & CERTIFICATION NUMBER: [illegible] 1067

SUPERVISOR NAME & CERTIFICATION NUMBER: DANIEL J. STECK #1207

TARGET PEST(S): ☐ T2 Cockroaches ☑ T18 Rats ☐ Other: ____
☐ T3 Ants ☑ T19 Mice ☐ Other: ____

SERVICE AREAS:	INSPECTED	TREATED	PESTICIDE(S) TO BE APPLIED	EPA'S	T/C	AMOUNT	EQU
☑ C1 FOOD AREAS:	☐	☑	☐ P24 PT279 Engage (Chlorpyrifos) 0.5%	499-292			
			☑ ~~P10~~ PT565 + XLO (Pyrethrin) 0.5%	499-310	C	3	A
			☐ P04 Dursban L.O. (Chlorpyrifos) 0.5%	62719-55			
☐ C2 OFFICES:	☑	☑	☑ ~~P11~~ Conquer (Esfenvalerate) 0.05%	1021-1565-57076	C	[illegible]	A
			☐ P23 Tempo 20 WP (Cyfluthrin) 0.05%	3125-380			
			☐ P06 Ficam W (Bendiocarb) 0.5%	45639-1			
			☐ P21 Knox-Out 2FM (Diazinon) 1%	4581-335-AA-499			
☐ C3 STORAGE/UTILITY:	☐	☑	☐ P07 Gentrol (Hydroprene) 0.125%	2724-304-50809			
			☐ P12 Precor (Methoprene) 0.008%	2724-352-50809			
			☑ ~~P02~~ Drione Dust (Silica/Pyrethrin) 1%	4816-353AA	[illegible]	[illegible]	[illegible]
☑ C4 PUBLIC AREAS:	☐	☑	☐ P05 Ficam D (Bendiocarb) 1%	45639-3	[illegible]		
			☐ P03 Dursban G (Chlorpyrifos) 0.5%	10370-36-432			
			☐ P08 Maxforce Bait (Hydramethylnon) 1.65%	64248-1			
			☐ P27 Avert Roach Bait (Avermectin) 0.05%	499-294			
☑ C5 REST ROOMS:	☐	☑	☐ P09 PT270 Dursban (Chlorpyrifos) 0.5%	499-147			
			☐ P25 PT280 Orthene (Acephate) 1%	499-230			
			☐ P26 Maxforce Gel (Hydramethylnon) 2.15%	64248-5			
☐ C6 EXTERIOR AREAS:	☐	☐	☐ P14 Ditrac All Weather Cake (Diphacinone) 0.005%	12455-5			
			☐ P20 Talon G (Brodifacoum) 0.005%	10182-38			
			☐ P47 Contrac Blox (Bromadiolone) 0.005%	12455-79			
			☐ P34 Ditrac Bait Pack (Diphacinone) 0.005%	12455-19			
☐	☐	☐	☐ P16 Glue Boards				
			☐ P17 Ketch-All/Tin Cat				
			☐ P19 Snap Traps				
☐	☐	☐					

TREATMENT CODE:
C = Crack & Crevice
S = Spot
G = General
T = Space Treatment
B = 3' Band

Supervisor's Comments: ☐ Treat for Infestation/Prevention or Inspect areas indicated.

EQUIP. CODE
F = Fogger
HD = Hand Dust
B&G = Comp. Air
B
____ = ____

SPECIAL SERVICE INSTRUCTIONS

SER. OLD CAFE, SMPP, GUARDS REST ROMS AND BASINS IN MEDICAL AREA
P. O. # 38224

BALANCE AS OF NOVEMBER 29
DEC CHARGE
SALES TAX
TOTAL DUE 9.17-47

CUSTOMER'S SIGNATURE: [illegible]

SERVICE TECHNICIAN'S SIGNATURE: [illegible] DATE 12-15-95

AMOUNT PAID: ☐ CASH ☐ CHECK

☐ INITIAL SERVICE
☑ REGULAR SERVICE
☐ EXTRA SERVICE

TERMINIX.

TERMITE and PEST CONTROL

COPY

COMMERCIAL SERVICE AND INSPECTION REPORT

BRANCH	ACCOUNT	RT	TELEPHONE	GRID	'S DAY	F	T	PRODUCTION	TIME IN	TIME
2410	006093-	07	000/000-0000 513/865-4585	E30 -	2FR	S	P	00005000 09	7:00 AM	7:25 AM

SERVICE PROPERTY AT	BRANCH
E G & G MOUND EARNIE HAYES 865-4310 MOUND AVENUE MIAMISBURG OH 45342-0000	TERMINIX INTERNATIONAL 4712 PAYNE AVENUE DAYTON OH 45414-0000 513/274-5800

OPERATOR NAME & CERTIFICATION NUMBER	SUPERVISOR NAME & CERTIFICATION NUMBER
[illegible] 1407	DANIEL J. STECK #1207

TARGET PEST(S): ☑ T2 Cockroaches ☑ T18 Rats ☐ Other: _____
☑ T3 Ants ☑ T19 Mice ☐ Other: _____

SERVICE AREAS:	INSPECTED	TREATED	PESTICIDE(S) TO BE APPLIED	EPA'S	T/C	AMOUNT	EQ
☐ C1 FOOD AREAS:	☐	☐	☐ P24 PT279 Engage (Chlorpyrifos) 0.5%	499-292			
			☑ P10 PT565 + XLO (Pyrethrin) 0.5%	499-310			
			☐ P04 Dursban L.O. (Chlorpyrifos) 0.5%	62719-55			
☑ C2 OFFICES:	☐	☐	☑ P11 Conquer (Esfenvalerate) 0.05%	1021-1565-57076	C		
			☐ P23 Tempo 20 WP (Cyfluthrin) 0.05%	3125-380			
			☐ P06 Ficam W (Bendiocarb) 0.5%	45639-1			
			☐ P21 Knox-Out 2FM (Diazinon) 1%	4581-335-AA-499			
☑ C3 STORAGE/UTILITY:	☐	☑	☐ P07 Gentrol (Hydroprene) 0.125%	2724-304-50809			
			☐ P12 Precor (Methoprene) 0.008%	2724-352-50809			
			☑ P02 Drione Dust (Silica/Pyrethrin) 1%	4816-353AA	C		
☐ C4 PUBLIC AREAS:	☐	☐	☐ P05 Ficam D (Bendiocarb) 1%	45639-3			
			☐ P03 Dursban G (Chlorpyrifos) 0.5%	10370-36-432			
			☐ P08 Maxforce Bait (Hydramethylnon) 1.65%	64248-1			
			☐ P27 Avert Roach Bait (Avermectin) 0.05%	499-294			
☐ C5 REST ROOMS:	☐	☐	☐ P09 PT270 Dursban (Chlorpyrifos) 0.5%	499-147			
			☐ P25 PT280 Orthene (Acephate) 1%	499-230			
			☐ P26 Maxforce Gel (Hydramethylnon) 2.15%	64248-5			
☐ C6 EXTERIOR AREAS:	☐	☐	☐ P14 Ditrac All Weather Cake (Diphacinone) 0.005%	12455-5			
			☐ P20 Talon G (Brodifacoum) 0.005%	10182-38			
			☐ P47 Contrac Blox (Bromadiolone) 0.005%	12455-79			
			☐ P34 Ditrac Bait Pack (Diphacinone) 0.005%	12455-19			
☐	☐	☐	☐ P16 Glue Boards				
			☐ P17 Ketch-All/Tin Cat				
			☐ P19 Snap Traps				
☐	☐	☐					

TREATMENT CODE:
C = Crack & Crevice
S = Spot
G = General
T = Space Treatment
B = 3' Band

Supervisor's Comments: ☐ Treat for Infestation/Prevention or Inspect areas indicated.

EQUIP. CODE
F = Fogger B = [illegible]
HD = Hand Dust A = [illegible]
B&G = Comp. Air T = [illegible]
_____ = _____

SPECIAL SERVICE INSTRUCTIONS

GENERAL PC , C-BLDG, A-BLDG, MEDICAL, GH BLDG SM CAFETERIA.(MONTHLY) -- OS-EAST CAFETERIA, NEW CAFETERIA ONLY , P.O. #38224

BALANCE AS OF NOVEMBER 29
DEC CHARGE
SALES TAX
TOTAL DUE

CUSTOMER'S SIGNATURE [illegible]

SERVICE TECHNICIAN'S SIGNATURE [illegible] DATE 11-15-45

AMOUNT PAID 0 — CASH ☐ CHECK ☐

9.17-48

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow 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 Performence	Inside Or Outside
	NITROGEN	6000 GAL		Y/N	
	NITROGEN	6000 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
ATTACHED	

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

9.17-49

I BLDG	SCOTCH CAST ELECTRICAL RESIN PART B	NONE	0.6
I BLDG	SODIUM HYDROXIDE	NONE	0.7
I-101	MOCA	U158	20.6
[illegible]	MOCA	U158	20.0
I-101	MOCA	U158	15.0
I-101	MOCA	U158	20.0
I-101	ZINC STEARATE	D003 D009	6.8
I-104	DIALLYL PHTHALATE	NONE	9.0
I-156	AMMONIUM HYDROXIDE, SOAP, PETROLEUM DISTILLATES	D002	3.2
I-156	CALCIUM STEARATE	NONE	14.5
I-156	CONCRETE SEALER	NONE	1.6
I-156	DEXTROSE	NONE	0.9
I-156	ELECTRICAL RESIN PART A	NONE	2.3
I-156	ELECTRICAL RESIN PART B	D002	2.3
I-156	ETHANOL, TRACE PETN (<1g)	D001	8.6
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
[illegible]-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	8.2
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	10.0
I-156	EXPLOSIVE DEBRIS (WETTED) CONTAMINATED WITH TRACE PETN, TATB, RDX	NONE	5.0
I-156	LEAD THERMOMETER	D008	0.1
I-156	SILICA GEL	NONE	21.6
[illegible]-6	SODIUM HYDROXIDE, ETHYLENE GLYCOL	NONE	1.0

I BLDG	CALCIUM STEARATE	NONE	12.0
I BLDG	ETHYL ALCOHOL, TITANIUM HYDRIDE, POTASSIUM PERCHLORATE	D001	2.3
I BLDG	I WASTE SOLVENT	D001 F001	240.0
I BLDG	MOCA RESIN CLEAN UP MATERIALS	NONE	74.4
I BLDG	OIL WASTE	NONE	505.0
I BLDG	OIL WASTE	NONE	272.0
I BLDG	OIL WASTE	NONE	322.0
I BLDG	OIL, WATER WASTE	NONE	382.5
I BLDG	PEMCO P-1701	D008	122.6
I BLDG	RESIN	NONE	110.0
I BLDG	RINSE WATER	NONE	512.2
I BLDG	RINSE WATER	NONE	513.7
DG	SCOTCH CAST ELECTRICAL RESIN PART A	NONE	0.6

-156	TITANIUM HYDRIDE	NONE	3.2
-156	XYLENE, ETHYLENE GLYCL, TRACE THERMITE, TRACE PETN	F003	0.9
	KESTER FLUX 115	D001	1.1
-164	KESTER FLUX 135	D001	1.0
-164	KESTER FLUX 194	D001	0.6
-164	SODIUM NITRITE	D001	7.6
-164	SULMAIC ACID 5%	D002	6.6

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

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: _____

9.17-52

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow 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: _____

9.17-53

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow 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 KNOWN OF

Building Manager's Questionnaire

Building Name: I Building Manager: W.H. Whitelow 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.

recycle metal fixtures

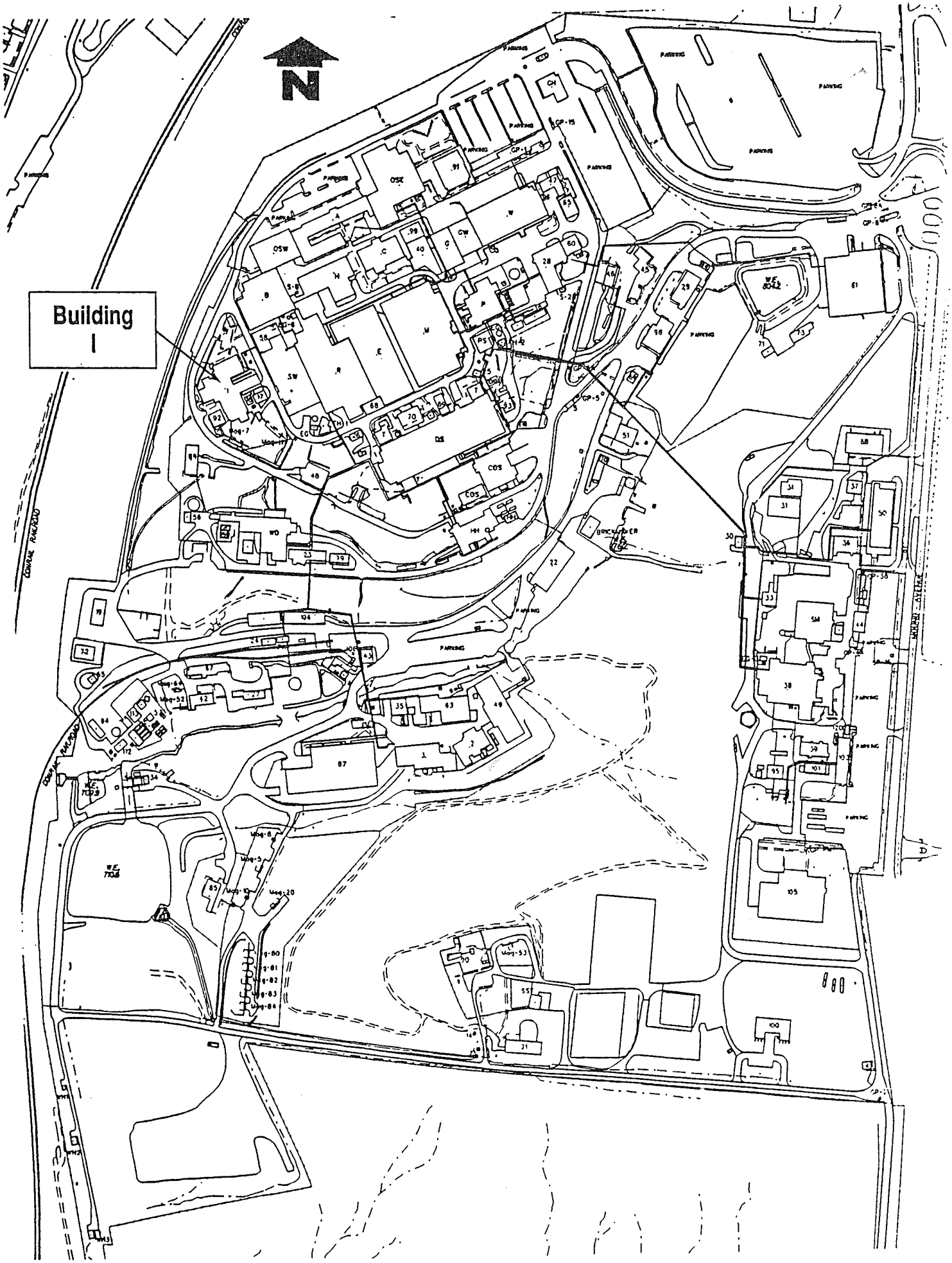
shut down blower for room 104

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

9.17-55

This page intentionally left blank.

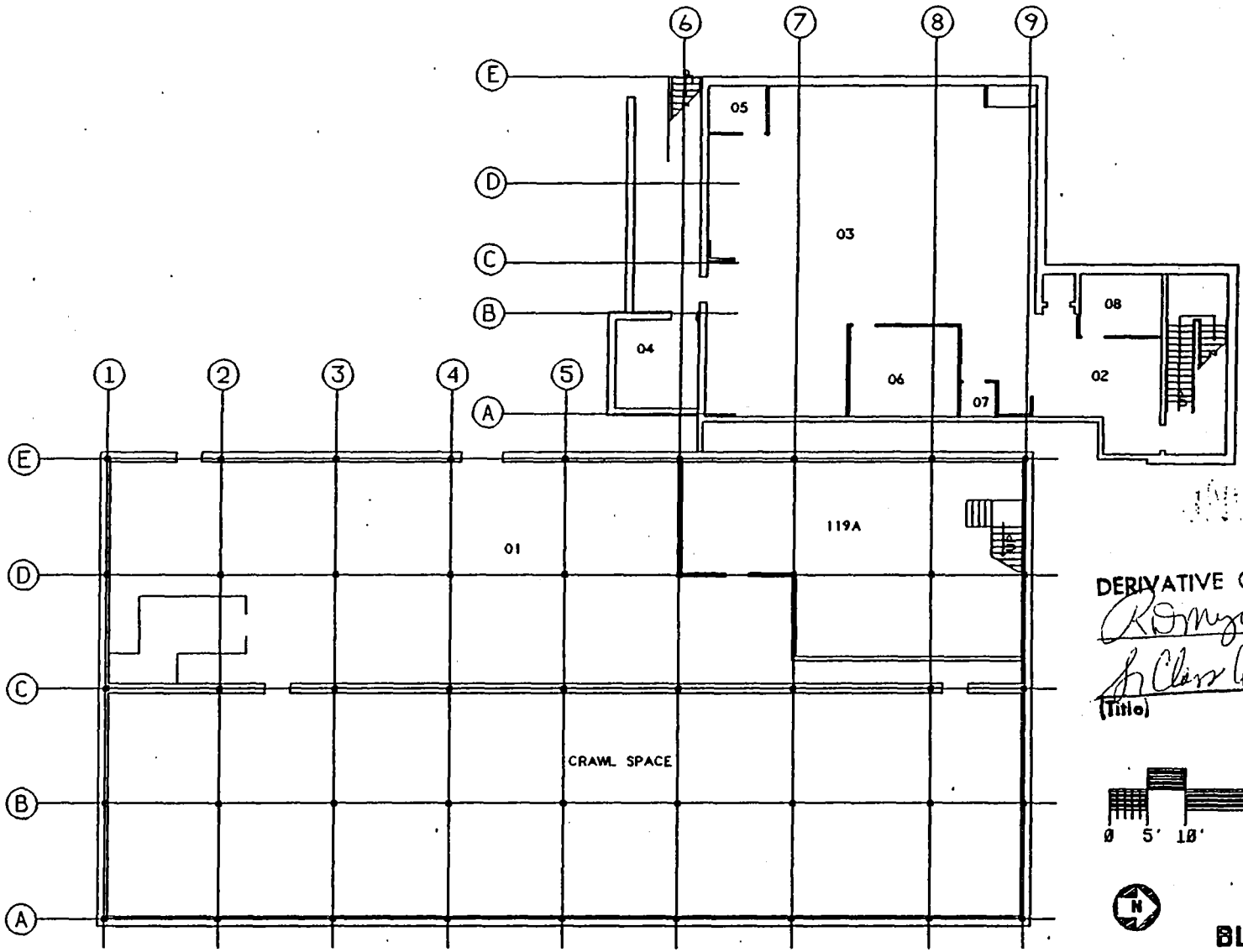
9.17.6.3 Location of Building I



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

9.17.6.4 Floor Plans for Building I

ISS	DATE	REVISION	BY	CHKR	DWN	LPVCI	APVD	N
Ø	12/12/91	ASBUILT ISSUE	DCW				DVD	



UNCLASSIFIED

DERIVATIVE CLASSIFIER

(Title) (Date) 2/20/96

0 5' 10' 20' 40'

N

I BLDG BASEMENT BLDG CODE:3510

APPROVALS: DATE:
SAFETY COMMITTEE REQUIRED:
___NONE ___TRUEBOC ___TEBOC ___EHBOC
TECH. REVP. ___
GR. MGR. ___
TRUEBOC ___
TEBOC ___
EHBOC ___

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 ENG | PROJ MGR
APVD | ENG SUPV
LP & DC | PEER REV
ENG MGR
APVD | DATE

SHEET	1	2	3	4	5	6
ISSUE	Ø	Ø	Ø			

PART CLASSIFICATION

TITLE: I BLDG FLOOR PLANS

(U) TITLE CLASSIFICATION

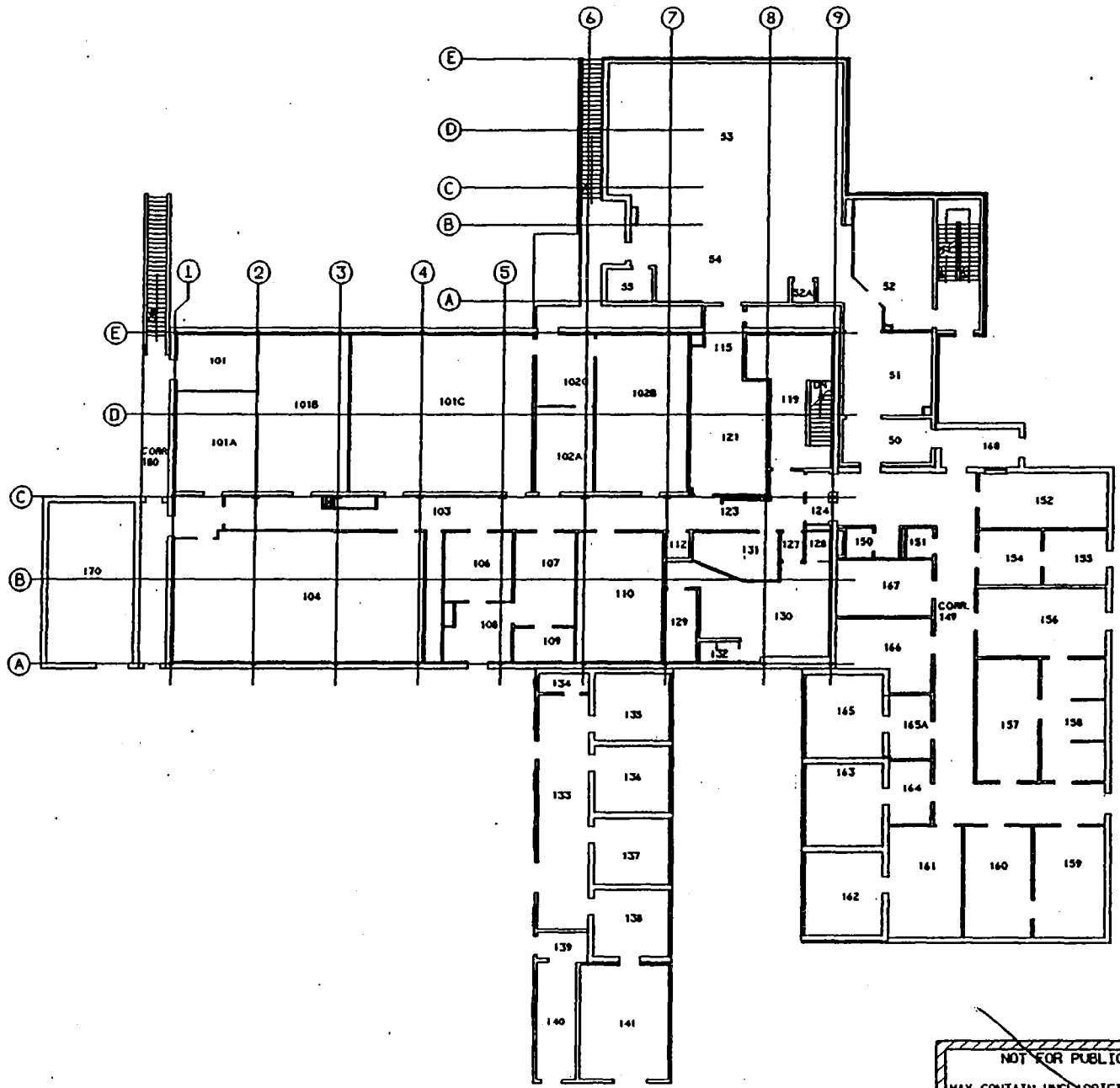
DRAWING CLASSIFICATION: UCNI

SIZE: C | DRAWING NUMBER: FSC911313 | JOB NUMBER: 12335

DWG TYPE: SFP | PROJ: I BLDG | CADD: 14065 | SCALE: AS NOTED | SHEET 1 OF 3

STATUS: MD-REL-12/12/91 | ORIGIN: MD-BR3-V3.Ø

9.17-63



DERIVATIVE CLASSIFIER

R D Myers

Sr Class Anal 2/20/96

(Title) (Date)

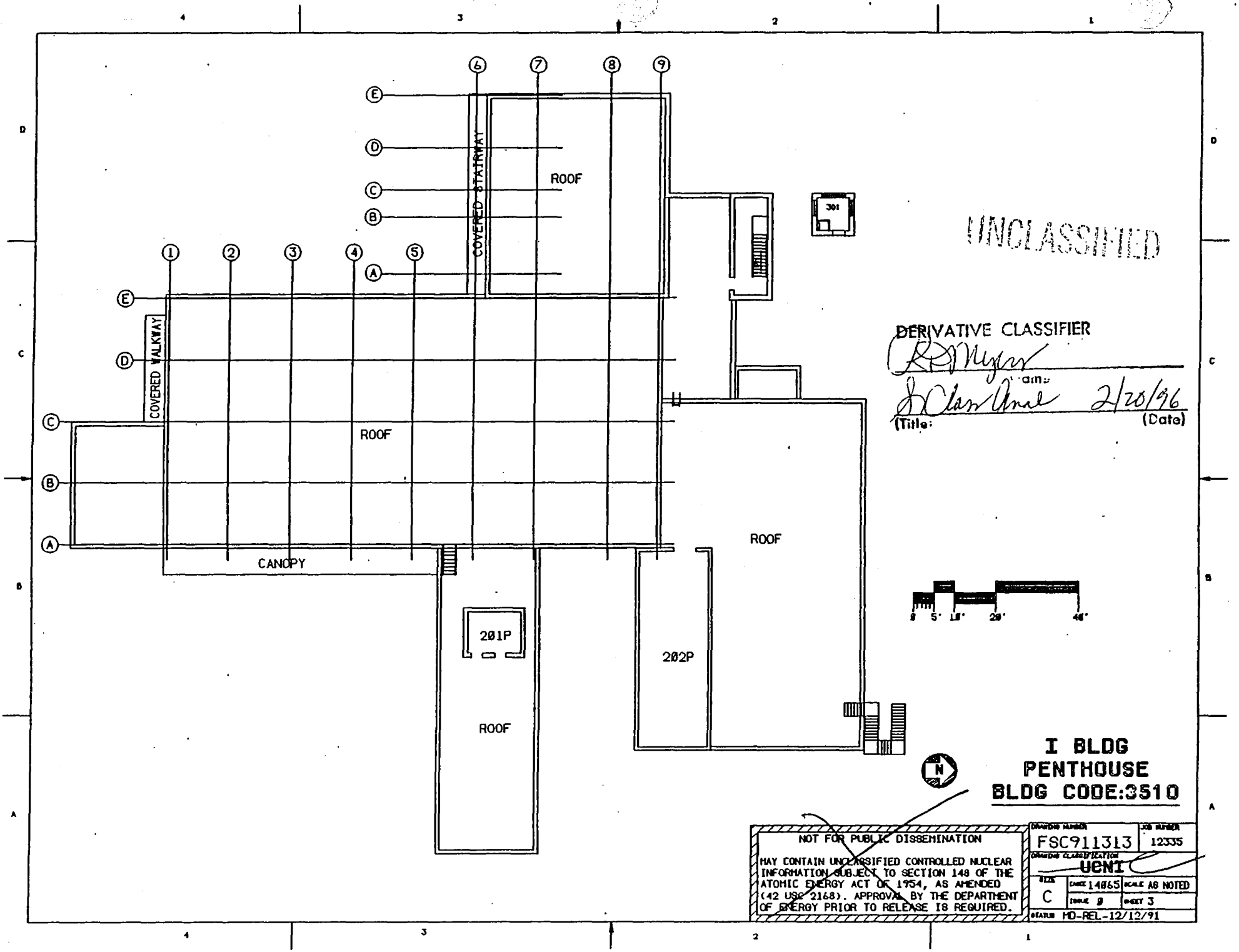
I BLDG
FIRST FLOOR
BLDG CODE:3510

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.

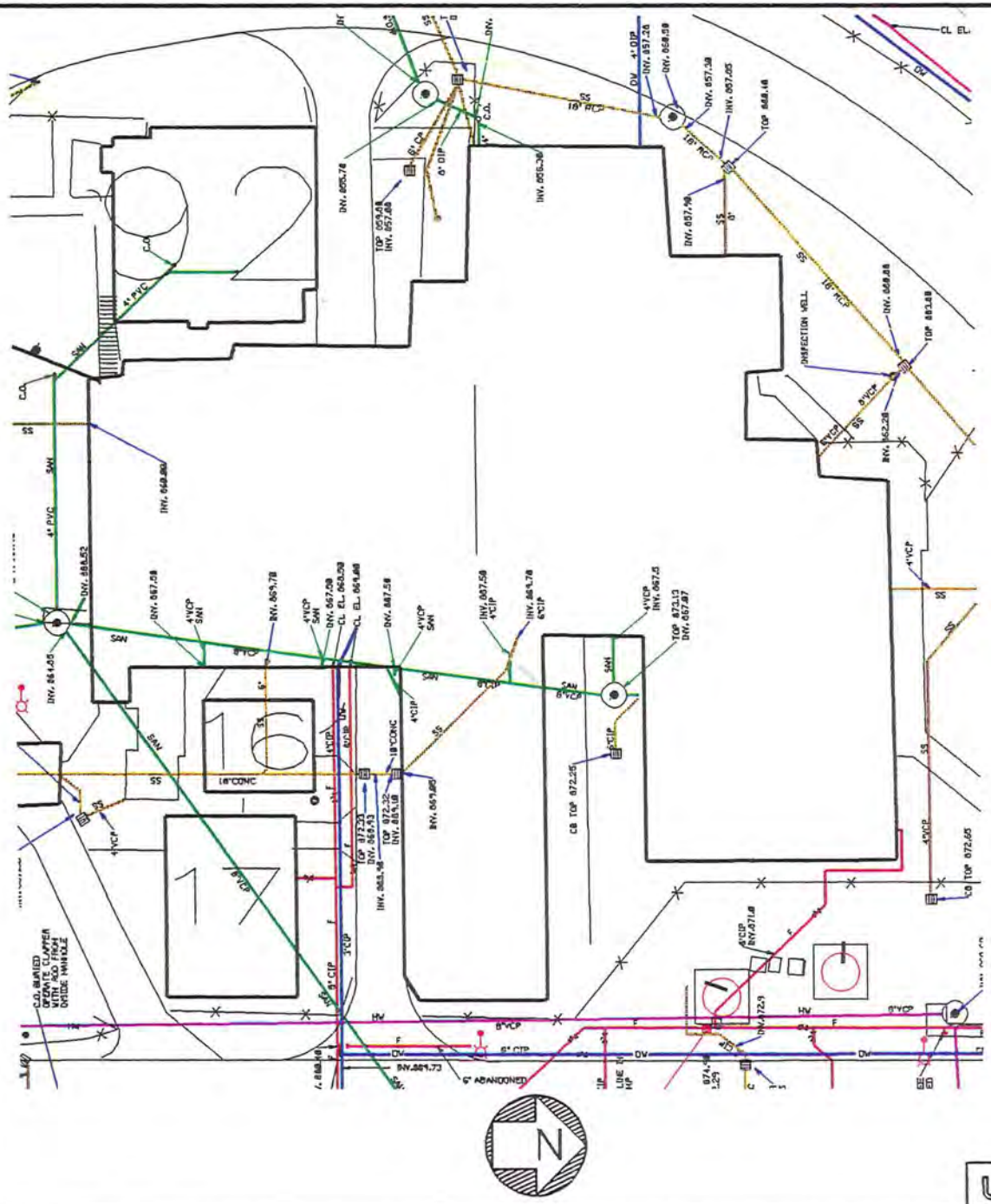
DRAWING NUMBER	FSC911313
JOB NUMBER	12335
DRAWING CLASSIFICATION	UCNI
SIZE	C
CODE	14865
SCALE	AS NOTED
ISSUE	0
SHEET	2
STATUS	MD-REL-12/12/91

9.17-65


COVERED STAIRWAY
ROOF
301
COVERED WALKWAY
ROOF
CANOPY
201P
ROOF
202P
ROOF
UNCLASSIFIED
DERIVATIVE CLASSIFIER
(Name)
(Title)
2/20/96
(Date)
I BLDG
PENTHOUSE
BLDG CODE:3510
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.
DRAWING NUMBER
FSC911313
JOB NUMBER
12335
DRAWING CLASSIFICATION
UCNI
SIZE
C
CODE 14065
SCALE AS NOTED
SHEET 3
STATUS MO-REL-12/12/91

9.17-67

9.17.6.5 Underground Utility Lines



FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL

E.G.&G.-MOUND

UNDERGROUND WATER & WASTE LINES

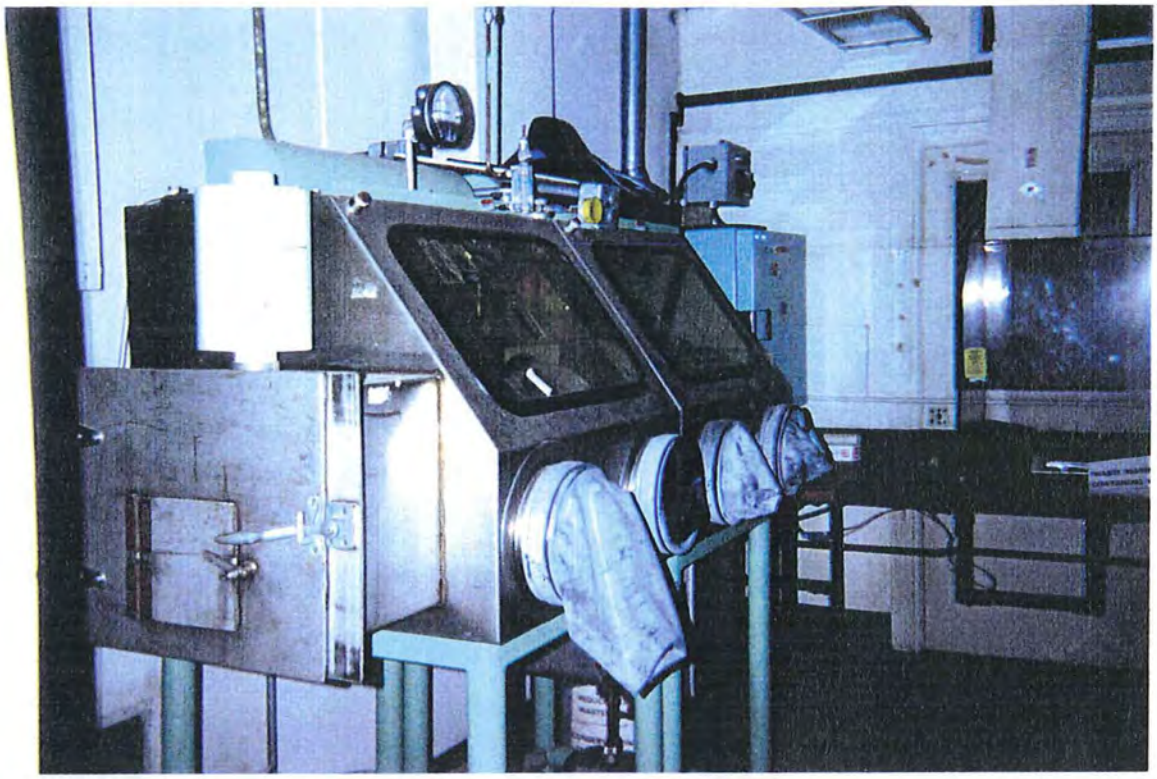
BLDG. 1
DATE: 03-12-96

UNCLASSIFIED

9.17.6.6 Photographs

Mound Plant Building I

9.17-75



(Above) A glovebox contaminated with MOCA in Building I, which is scheduled for Safe Shutdown.

(Left) Plastic bags collect leaking hydraulic oil from presses. Maintenance is required to avoid a potential spill.

9.17-77

9.18 Building M

9.18 BUILDING M

9.18.1 Scope of Building M 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 M on February 7, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.18.6.1). 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 9.18.6.2).

9.18.2 Description of Building M

Building M is a two-story structure of concrete block with brick facing. The roof is metal and built-up membrane of coal tar and asphalt. Building M was one of the original buildings constructed in 1948 and it is located on the main hill as shown in Attachment 3 (Section 9.18.6.3). The building is bordered on three sides by a roadway. Adjacent buildings are Building C to the north, Building P to the east, Building DS to the south, and Building E 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 M is the former machine shop and housed electroplating operations. These process areas are now out-of-service and the majority of the building is inactive. The building does support some activities including electronics maintenance, an electrical substation, and excess material staging and storing. Total area of Building M is 56,000 square feet, including two mezzanine office areas of 5,800 square feet. Floor plans are presented as Attachment 4 (Section 9.18.6.4). No research, development, or production activities using radioactive or energetic materials have occurred in the building. Unknown quantities of contaminants, consisting of arsenic, cyanide, heavy metals, and machine oils may be present (*Mound Facility Physical Characterization*, 12-1-93).

9.18.3 Summary of Findings

Many issues of environmental concern were identified during the walk-through. Applications on file for air emissions should be updated as the building shuts down. Two water fountains in the building should be removed because they are suspected of lead contamination based on Environmental Protection Agency (EPA) tests on some models. Friable asbestos needs to be cleaned up and contained to prevent further damage. Several operations should be reviewed with respect to preventing chemical releases to the sanitary or storm system. Compressed gas

cylinders and materials that are in secondary containers need to be properly tagged or labeled. Wastes from idle equipment and satellite accumulation areas need to be properly managed.

9.18.4 Observations

9.18.4.1 Air Emissions

There were two Permit to Operate (PTO) applications, for degreaser No. 2 and the plating shop, filed with the Regional Air Pollution Control Agency (RAPCA) for Building M. The degreaser was permitted (L002) with an expiration date of January 26, 1996. Mound's air emission database is inaccurate as all operations are now out-of-service. Although the operations have ceased, exhaust fans were still running in the plating shop. No air emissions were noted during the walk-through. There are no fuel-burning units in the building. There was no visual evidence of fugitive dust.

9.18.4.2 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.

9.18.4.2.2 Sanitary

The building has sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.18.6.5), the building is serviced by the sanitary system. Expected discharges to the sanitary system are by sinks, toilets, floor drains, and sumps. Chemicals have entered the sanitary system as an oily stain is in the sink basin in Room 28 and two metal plating rinse tanks are in the building. The metal plating rinse tank in Room 108 was monitored as part of the NPDES permit. Effluent from this tank has exceeded established discharge limits in the past. The plating shop in Room 108 is no longer in use. The other tank is listed inactive according to the Underground Storage Tank (UST) Program. 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. Based on current operations identified by the process owner, effluent from Building M should not deviate from that expected by the sanitary treatment plant manager.

9.18.4.2.2 Storm Wastewater

The building is also serviced by storm drains according to Attachment 5 (Section 9.18.6.5). Roof drains and condensate discharge to the storm sewer according to the BMQ which is presented as Attachment 2 (Section 9.18.6.2). 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 have entered the storm drainage system. The diagram of underground utility lines also indicates that several storm lines terminate inside the building. It was undetermined at the time of the assessment what these potential discharge points are.

9.18.4.2.3 Process Wastewater

This building does not create or discharge radioactive wastewater to the WD facility. According to Attachment 5 (Section 9.18.6.5), no radioactive wastewater lines service Building M.

9.18.4.2.4 Chemicals

The remaining chemicals in Building M were evaluated against Table V of Appendix D in 40 CFR 122 and none were listed Clean Water Act (CWA) pollutants. Chemical storage and handling procedures are in place for proper disposal of chemicals. There have been no reported spills from Building M. There is no visual evidence that chemicals have entered the storm drains, but the potential exist as a drum of hypochlorite was within 10 feet of a storm water drain.

9.18.4.3 Potable and Service Water

Potable water is supplied to the building. Backflow prevention devices are installed at all visible points of potential cross-connections. All potable and service water lines are uniquely marked and easily identified, except for one service line in Room 8 which was identified as domestic water. Four of the six water fountains that supply drinking water in the building are not EPA-listed models suspected of lead contamination. Model numbers for the other two water fountains were inaccessible. Although the model number was inaccessible, the Halsey Taylor brand in Room 26 is very similar to those identified as suspected of lead contamination based on EPA tests on some models.

9.18.4.4 Chemical Storage and Hazardous Materials

A chemical inventory for Building M is included in the BMQ which is presented in Attachment 2 (Section 9.18.6.2). The information was gathered as part of the annual chemical inventory. The inventory information dates to 1994. Data from 1995 were not available when the appraisal was performed. Conformation of the 1994 inventory by the appraisal team was not attempted, as the current year's inventory was ongoing. However, storage, handling. and disposal of chemicals observed during the appraisal were reviewed to assure conformance with 40 CFR 122, 40 CFR-260-265 and 268, and 29 CFR 1910. It was noted that most of the chemicals on the

Building M inventory have been removed from the building. The power house water laboratory and the electronics maintenance shop are the only tenants in the building using chemicals. There was no visual evidence of chemical storage incompatibility among remaining materials and janitorial supplies. Material Safety Data Sheets (MSDS's) sheets were present and were reviewed for completeness. Documentation is available for chemicals disposed of through Waste Management.

Chemicals used in the electronic shop and in Room 7C (power house lab) were properly identified and stored. Room 7 is used as a storage area for 55-gallon drums of chemicals (Ancotreat 1310, 2010, and 3710) for boiler water treatment in the power house. There is no spill prevention for this area. Another storage area was Room 38A, where five flammable cabinets were full of 1-gallon containers of BioAct EC-7. This material was claimed by the City of Miamisburg for one of the onsite lessees.

Numerous containers of chemicals were identified in the out-of-service parts of Building M. Several containers did not have bar codes on them. An unidentified white powder was scattered on the floor. On a follow-up visit, most of the material was cleaned up with an unlabeled bag of similar material located a short distance from the location. Several compressed gas cylinders remain throughout the building, both inside and outside. The majority of these gas cylinders did not have empty/full tags attached.

The building is equipped with appropriate emergency response equipment such as eyewashes, safety showers, and fire extinguishers. Halon 1211 is the predominant fire extinguisher. Eyewashes and safety showers in the plating shop were tagged "Do Not Use." Inspection tags on all the other eyewashes and safety showers were present and current. The electronic shop, where chemicals are used, does not contain eyewash and safety shower equipment. There is an Emergency Evacuation Plan and signs are posted throughout the building.

No aboveground storage tanks were observed in or around the building. Two liquid helium and argon aboveground chemical storage tanks are located across the street from Building M, next to Building 25. There is no secondary containment nor is any required. No aboveground tanks were observed inside the building during the walk-through even though they were listed in the BMQ, included as Attachment 2 (Section 9.18.6.2). There are no separators or catch basins, in or around the building. There are two sumps in this building and they are identified in the UST Program as tanks Nos. 119 and 225. Both are metal-plating rinse tanks. Tank No. 225 is listed as inactive and tank No. 119 was an active NPDES outfall until the plating shop shut down. There may be sludge in either tank.

The building was tested and does contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There was visual evidence of friable asbestos in Room 20. Signs of damage were observed on insulation in the northeast corner of Room 20; debris was noted on the floor. Otherwise, the areas containing asbestos material were identified and properly marked indicating the presence of asbestos.

There are no capacitors or transformers containing polychlorinated biphenyls (PCB's) located in the building. PCB transformers and capacitors were removed from Substation M, which is located within the building. Substation A, located outside and in front of Building M, has PCB capacitors and is properly labeled. A PCB transformer was observed being removed during Building M assessment. The PCB capacitors will also be removed during the spring of 1996 (1995 PCB Annual Document Log). There is no visual evidence of PCB oil contamination in the area.

9.18.4.5 Solid, Hazardous and Radioactive Wastes

Solid waste generated in the building is 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 was no visual evidence that hazardous materials or wastes are mixed with solid waste streams.

Hazardous waste generation ceased in the plating shop in Room 108 when it was shut down. The plating tanks appear to have been cleaned out and no waste remained in the area. Based on discussions with maintenance personnel, hazardous waste can be generated when equipment staged in Building M is prepared to be shipped offsite. Fluids, including oil and Freon, are removed from the equipment. Idle machinery in Building M contain oil and metal chips. In Room 20, the team observed that a piece of equipment was being drained of oil and residue into a 55-gallon black drum labeled "Hazardous Waste." It is Mound's policy for generators to characterize their waste before Waste Management collects it. No generators were present during walk-through to verify waste characterization. All hazardous waste is collected and transported by a representative of the EG&G Waste Management Group, 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. They conform to RCRA requirements.

A satellite accumulation area (SAA) is being established in the electronic shop for printed circuit boards as a result of the appraisal. Printed circuit boards may be hazardous waste because they may contain lead and silver in the solder. Other items being accumulated are batteries and aerosol cans.

There are three bag-houses on the air handling system. Two are located along the outside east wall and the other is in Room 42A. It was not possible to determine if the traps were empty.

Portions of Room 8 have a creosote wood-block floor which was observed to be discolored from spills or releases. It is noted in documents that unknown quantities of contaminants, consisting of arsenic, cyanide, heavy metals, and machine oils are suspected to be present throughout the building.

9.18.4.6 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. Aluminum cans and paper are being recycled in the electronics shop. Waste volume is minimized through cannibalism of damaged equipment to repair broken equipment.

9.18.5 Findings and Recommendations

The environmental appraisal of Building M 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. Photographs were taken to document the environmental appraisal.

M-1 Friable asbestos-containing building material (ACBM) needs to be managed to prevent exposure to workers. Damaged ACBM in Room 20 needs to be cleaned up and the source contained to prevent further damage.

M-2 Two water fountains located in Rooms 8 and 26 should be removed. The one located in room 26 is similar to others identified as EPA-listed fountains suspected of lead contamination. The other water fountain has no identification with respect to make or model number.

M-3 Secondary chemical containers such as boxes, bags, etc. should be properly identified and labeled. All chemicals and materials in the building should be labeled in accordance with site procedures.

M-4 Sumps used as plating rinse tanks may contain sludge from past operations. Since all processes have ended in Building M, these tanks should be checked to verify that there is no sludge in them. If the tanks contain sludge, the sludge should be characterized to determine if it is RCRA-regulated, and managed accordingly.

M-5 Hazardous waste regulations require that RCRA-regulated waste be removed from manufacturing process equipment within 90-days of the equipment becoming idle.

M-6 Prior to generating printed circuit boards as waste, the satellite accumulation process for printed circuit boards needs to be established so that they can be managed as hazardous waste.

M-7 Storage requirements should be reviewed for bulk chemicals and any measures that can be taken to prevent chemicals from entering the sanitary or storm systems. This review should include the storm water system that has lines terminating inside the building to ensure that chemicals or hazardous materials cannot enter the system.

M-8 Applications on file with the Regional Air Pollution Control Agency (RAPCA) for air emission sources should be updated as the building shuts down. Mound's air emissions database needs to be updated with respect to changing operations.

M-9 All gas cylinders should carry a legible label or marking identifying their contents, including full/empty tags (CGA P-1).

M-10 Bag-houses should be checked for wastes. If empty, they should be identified as such and measures taken to ensure that condition, otherwise the waste should be characterized to determine if it is RCRA-regulated and managed accordingly.

This page intentionally left blank.

Environmental Appraisal of the Mound Plant

9.18.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name M

Appraisers: Ronald Paulick
Name Discipline

Name Discipline

Name Discipline

Name Discipline

Building Manager:

Process Manager:

Date:

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: M Appraisers: Patrick, Atkins, Ross, Parker Date: 2-7-96

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) _____ _____	Storage area, Offices plating shop & machine shop shutdown
	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 _____ inactive (Y)/ N Y / (N)	One active NPDES site until Plating Shop shutdown. The other is listed as inactive. Both are metal plating rinse water sumps
	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	a sink in Rm 28 had oil staining in sink. a drum of hypochlorite is located on east side of building within 10' of a storm drain

9.18-13

9.18-14

Environmental Appraisal Checklist

Building Name: M

Appraisers: Adkins, Parker, Panlick, Ross Date: 2-7-96

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	109
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	Degreaser expired 1-26-96. All operations have ceased.
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	All operations have ceased.
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: M

Appraisers: Atkins, Parker, Patrick Ross

Date: 2-7-96

CAA Checklist

page intentionally left blank

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: _____

9.18-15

9.18-16

Environmental Appraisal Checklist

Building Name: 11 Appraisers: Adkins, Parker, Patrick Ross Date: 2-7-96

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)~~	See note Below.
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	(Y)/ N	Janitorial MSDS in area Electricians MSDS in Area.
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

All Chemicals are labeled, The Chemical list Provided with BMC is out of Date most Chemicals are gone too B.A.M except in The Powerhouse

Environmental Appraisal Checklist

Building Name: M

Appraisers: Adkins, Parker, Patrick Ross Date: 2-7-96

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	Eyewashes in Ground building inspected & up to date See Below
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	One cylinder in Rm 38 was unsecured. It was corrected in < 72 hours by BH Personnel
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	

* Eyewashes/Safety Showers in Plating lab Tagged "Do not use" are out of service Area is in safe shut down.

9.18-17

9.18-18

Environmental Appraisal Checklist

Building Name: M

Appraisers: Adkins, Parker, Pavlick Ross Date: 2-7-96

HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	(Y)/ N	Power house water quality Lab
	Does it have proper containment?	(Y)/ N	
	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)	BMQ is not Accurate

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: M Appraisers: Adkins, Parker, Patrick, Ross Date: 2-7-96

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	Drinking water / 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)/ N	
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	(Y)/ N	One to service line identified as Domestic
	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
M	Corr 48	PLF 3CP-D001	Oasis
M	Corr 37	~~Type 1~~ NSID-8	Sunroc
M	Rm 8		Unidentified. - No model # or marker ID
M	Rm 28	FD700-3	Elkay
M	Rm 26	"WM8A"	Halsey Taylor - ID Blocked - Appears to be WM8A model
	Corr 220A	5805	Halsey Taylor
	Rm 225		Bottled water

Source: _____

9.18-19

9.18-20

Environmental Appraisal Checklist

Building Name: M Appraisers: Atkins Parker Pontick Ross Date: 2-7-96

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 charactarization 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	Waste from Parts Cleaner Rm 20 & Electric Circuit Boards in Electronics maintenance area. - Using MSDS for solvent 1 bag: unknown cream colored powder in Rm 7
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	Rm 20, a drum of liquid from Parts Cleaner, labeled as a hazardous waste satellite, and circuit boards.

Environmental Appraisal Checklist

Building Name: M Appraisers: Atkins, Parker, Parlick, Ross Date: 2-7-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	(Y) / N (Y) / (N)	Parts Cleaner waste is a satellite, the chemical based auto not an SAA
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)	Drum was closed but not locked or in locked area
	Are containers moved within 3 days of being filled?	Y / N	N/A see note below.

- 1 Drum in Room 20 being managed as a satellite accumulation area for draining of a parts cleaner. Job was in progress. Less than 55 gallons of waste will be generated.
- George Jones has an MSR to have part of equipment removed to facilitate removal of sludge from bath. He stated that he believes safe shut down is lower priority and can't give a date for removal.
- George Jones indicated that waste is haz based on process knowledge and MSDS, prior credits used to change solvent & clean.

(interview with Jones 2-7-96)

9.18-21

9.18-22

Environmental Appraisal Checklist

Building Name: M

Appraisers: [illegible] Date: 2-7-96

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:		N/A
	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 / (N)	~~N/A~~
	If no go to next section.		
	If yes, note.		
	For Building 23, Building 72 & Burn Area use special checklist.		

Environmental Appraisal Checklist

Building Name: M Appraisers: Atkins Parker Parker Ross Date: 2-7-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	(Y) / N	11 pieces Idled Equipment have waste oil, sludge & chips
	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	Sump is a CWA discharge for Plating Lab
	Is it dry?	Y / N	Couldn't observe
	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	11 pieces Idle Equip Need to Perform Determination
	If the answer was no, then proceed with the following:		
	Has the tank or piece of equipment had an integrity assessment?	Y / N	N/A until determination
	Does the tank or equipment have secondary containment?	Y / N	N/A " "
	Does the tank or equipment have leak detection device(s)?	Y / N	N/A " "
	Has spill control prevention been enacted?	Y / N	N/A " "
	Is there a closure plan?	Y / N	N/A " "
	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)	

* Per site list of Tanks & Sumps.

9.18-23

9.18-24

Environmental Appraisal Checklist

Building Name: M

Appraisers: Adkins, Parker, Pavlick, Ross Date: 2-7-96

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 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:

Environmental Appraisal Checklist

Building Name: M Appraisers: Atkins Parker Prulick Ross Date: 2-7-96

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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos? If no for this building or area note this conclusion in the comment section.	(Y)/N	BQM indicates Asbestos Baseline performed, Ref: Manual Technical manual MA 10391
*	Is there any evidence of friable asbestos?	(Y)/N	Friable Asbestos Noted in BQM Damage noted in RM 20 No on-going abatement to observe
	Is the asbestos removal properly managed? (See questions listed below)	Y / N	If there is no asbestos removal, do not complete the following section.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			No on-going Abatement
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	

Rm 20 There are pieces of insulation and powder on floor beneath a pipe labeled Asbestos.

9.18-25

9.18-26

Environmental Appraisal Checklist

Building Name: M Appraisers: Atkins Parker Parlick Ross Date: 2-7-96 thru 3-7-96

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

Does this facility potentially contain any PCB's or PCB contaminated equipment?	(Y) N	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	Waste operations inventory 1991-1995 notes large quantities PCB oil removed from Bld M Bldg mgr stated Transformer Substation A removed 2-96
	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	Substation A still contains PCB Capacitors, are active will be removed this Spring. (Per discussions with Dave Wiemer)
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	N/A no PCB Storage
	If yes, are auditable records maintained.	Y / N	N/A
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	Substation A in use until 2-96
	Are they visually inspected quarterly? If yes, are auditable records maintained?	(Y) N	Terry Williams has records up To Replacing Transformer 3-7-96 Performed visual inspection of area where PCB Transformer was replaced, No evidence of release or contamination in the area

Environmental Appraisal Checklist

Building Name: M

Appraisers: Adkins Parker Pamlick Ross Date: 2-7-96

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	Substation A has PCB capacitors ~~N/A~~ that will be removed 1996
	Are labeled PCB articles and containers stored so that the labels can be referenced?	Y / N	N/A
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	N/A
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	N/A
40 CFR 761.62 (b) (1) (iv)	Are storage are floors curbed and constructed of continuous smooth and impervious materials?	Y / N	N/A
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y / N	N/A
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

Dive Wiemer. ~~Troy Williams~~ in Review: 3-7-96. Troy stated that Substation A has
x3323 PCB capacitors that will be removed this spring. They are inspected
Quarterly. Records kept by Troy Williams 3881

9.18-27

9.18-28

Environmental Appraisal Checklist

Building Name: M Appraisers: Adkins Parker Dunlick Ross Date: 2-7-96

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators 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	N/A
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: M Appraisers: Atkins Parker Patrick Ross Date: 2-7-96

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	No Rad was generated or stored
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	

Note: BQM indicates that Rad contamination has been identified on wood floor of the main Bay Area (Room 8 machine shop). No posted areas were noted during inspection.

9.18-29

9.18-30

Environmental Appraisal Checklist

Building Name: N1 Appraisers: Atkins Anker Paulick Ross Date: 2-7-96

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	No Rad waste generated or stored
	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: M

Appraisers: Atkins Parker Paulick Ross Date: 2-7-96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	No Rad waste Generated or Stored.
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

9.18-31

9.18-32

Environmental Appraisal Checklist

Building Name: M

Appraisers: Atkins Parrish Parker Ross Date: 2-7-96

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	no Rad waste generated or stored
	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: M Appraisers: Atkins Parker Paulick Rees Date: 2-7-96

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	No Rad Waste Generated or Stored.
	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:

9.18-33

9.18-34

Environmental Appraisal Checklist

Building Name: M Appraisers: Atkins Paulick Parker Rose Date: 2-7-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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)	Building is shut down Electric Shop is only active operation.
	Are there solvent wastes?	Y / N	Need to check idle equip
	Is vehicle maintenance performed?	Y / (N)	
	Are oils used ?	(Y) / N	
	Are these corrosive wastes?	Y / (N)	
	Are there sludges?	(Y) / N	Sludge in Idle Equip.
	Are there halogenated organic (nonsolvent) wastes?	Y / N	Unknown, No personnel in water lab
	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	Standard Site Practices
	Ion exchange process?	Y / (N)	
	Lead in gasoline lowered to reduce tank sludge toxicity?	Y / N	N/A
	Storage tank agitators installed?	Y / N	N/A
	Corrosive resistant materials used?	Y / N	N/A
	Prevention of crude oil oxidation ?	Y / N	N/A
	Drying?	Y / N	N/A

Environmental Appraisal Checklist

Building Name: M

Appraisers: Adkins Parker Patrick Ross Date: 2-7-96

Waste Minimization/Pollution Prevention Activities Checklist

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

9.18-35

9.18-36

Environmental Appraisal Checklist

Building Name: M

Appraisers: Adkins Parker Parrish Ross Date: 2-7-96

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	N/A
	Is crystallization used to remove corrosives from solution by cooling?	Y / N	N/A
	Is the process of evaporation of liquid wastes by heating used to leave behind a more concentrated solution?	Y / N	N/A
CYANIDE AND REACTIVE WASTES			
	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	N/A
	Refrigeration/crystallization?	Y / N	N/A
	Evaporation?	Y / N	N/A
	Ion exchange?	Y / N	N/A
	Membrane separation which includes reverse osmosis or electrodialysis?	Y / N	N/A
VEHICLE MAINTENANCE			
	How are auto parts cleaned?	Y / N	N/A
	Solvent sink?	Y / N	N/A
	Solvent dunk bucket?	Y / N	N/A
	Solvent dip tank?	Y / N	N/A
	Are parts cleaning solvents used for anything else besides cleaning parts?	Y / N	N/A ~~Nothing observed~~
	Are spills reduced by locating sinks or dunk buckets near auto service bays?	Y / N	N/A

Environmental Appraisal Checklist

Building Name: JM Appraisers: Atkins, Parker, Patrick, Rose Date: 2-7-96

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	N/A
	Is a solvent sink used for mineral solvents rather than a dunk bucket or dip tank?	Y / N	N/A
	Does a waste hauler collect solvent waste for recycling or treatment?	Y / N	N/A
OILS			
	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)	Boiling, Shutdown
	Are these good housekeeping and operation practices used to minimize oil waste production?		
	Use oils not contaminated with other liquids?	Y / N	Control of Distribution
	Oil spills prevented?	Y / (N)	evidence of past spills.
	Drip pans installed?	Y / (N)	
	Oil soaked rags laundered?	Y / N	N/A
	Rags and absorbants used to their limit?	Y / N	unknown

9.18-37

9.18-38

Environmental Appraisal Checklist

Building Name: M

Appraisers: Adkins Parker Pavlick Ross Date: 2-7-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are these treatment techniques used to promote separation of oil/water wastes?		No oil processing observed
	Reclaiming process to remove water and solvents by heat?	Y / N	
	Gravity setting?	Y / N	
	Screening?	Y / N	
	Centrifugation?	Y / N	
	Filtration?	Y / N	
SOLVENT WASTES			
	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	Not necessary
	Are waste solvents free from water and garbage?	Y / N	
	Are recycled solvent containers labeled as such?	Y / N	N/A
	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	N/A
	Is a method used to minimize the use of new materials such as a countercurrent process?	Y / N	not necessary building shaping frame

Some solvents are used in fixtures, these in use do not generate solid wastes

Environmental Appraisal Checklist

Building Name: M Appraisers: Atkins, Parker, Pavlik, Ross Date: 2-7-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	If there is a recycling program, what technique is used?	Y / N	No Program active
	Distillation?	Y / N	N/A
	Solids removal?	Y / N	N/A
	Dispersion breaking?	Y / N	N/A
	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	N/A
	Parts not allowed to enter the degreaser while wet?	Y / N	N/A
	Sludge from the bottom of the tank not allowed to accumulate?	Y / N	N/A
	Lids kept on tanks?	Y / N	
	Freeboard space on tanks increased?	Y / N	
	Are better operating practices used to reduce waste?	Y / N	N/A
	How long is solvent waste stored and where?	_____ _____	

Note for general building: High Bay Rm 8, The wood block floor has extensive evidence of spilled or released oil on floor. This will require corrective action during D&D.

9.18-39

This page intentionally left blank.

9.18.6.2 Building Manager's Questionnaire

DONE

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

NONE

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

NONE

TALK TO BILL DOWDY X3535.
HE TOLD ME HE DETECTED RAD. STUFF ON WOOD FLOOR IN MAIN BAY AREA.

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

TK.

4. Provide a physical description of the building.

Area of this building totals some 56,000 ft², including two mezzanine office areas of 5,800 ft² and other low bay areas totaling approximately 35,500 ft². Building is of concrete blocks with brick facing; roof is BUM of coal tar and asphalt. Building is not contaminated with radioactive or energetic materials. Unknown quantities of contaminants, consisting of arsenic, cyanide, heavy metals, and machine oils, may be present. HVAC systems are central steam and chilled water.

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 support activities including: ~~electroplating,~~ electronics maintenance, office space, an electrical substation, and an EXCESS ~~MW Heat Source surveillance~~ facility.

MATERIAL STORAGE/STAGING OUT

(ELECTROPLATING LABS ARE SHUT DOWN.)

Source: Mound Buildings, 5-9-95

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

MW HEAT SOURCE SURVEILLANCE, ELECTROPLATING, MACHINING

Source: Mound Buildings, 5-9-95

9.18-43

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow Phone: _____ Dat ALL OF THESE OPERATIONS HAVE CEASED.
Alternate: _____ Phone: _____

TK.

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

Process(es) Housed: PAST OPERATIONS, BLDG IS SHUTDOWN Production support, glass shop, gauge ...uction and maintenance, ceramics machining, tool development, milliwatt generator production, plating facility (production and development)

How Wastes Are Generated:

There are many different wastes generated in Building M. In this document these wastes are divided into two main groups: wastes from the Plating Shop and wastes from the rest of the areas in the building (Machine Shop). Wastes from the Machine Shop include waste water coolant which is the coolant used during the machining process, waste oil which is used to lubricate the machines, and various mixtures of Freon, alcohol, and trichloroethane which are used to clean machined parts. The oil with mercury and methyl ethyl ketone listed as wastes are not normally found in Building M and were disposed of when unnecessary chemicals were cleaned out.

Wastes from the Plating Shop are further subdivided into groups depending on their use. The primary uses of these materials are plating, coating, annodizing, passivating, cleaning, and oxide removal. Wastes generated during each of these processes are identified in the list under "Waste Volume." Wastes in the "Miscellaneous" category have been generated during other operations which are described in the following paragraph.

Floor waste was generated when a spill was cleaned up. The waste water is overflow from a rinse tank. Unichrome compound was disposed of during a general cleanup and is not currently used in the plating shop. Building M personnel have no record of using acetonitrile or Phill. Solution. It is possible the wastes on the Building M dock were generated elsewhere and carried to Building M for pickup by Waste Management.

Contact:
Phone:

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

9.18-44

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow 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? Yes

Process Source	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
Safe Shutdown	7		N					
Safe Shutdown	7A		N					
Safe Shutdown	8		N					
Plating Process	47,108		~~Y~~ N	<0.0001 all hoods				
Plating Process	048	M0480001	~~Y~~ N	Empty				
Safe Shutdown	47,108		N					
Plating Process	47		~~Y~~ N	<0.0001 all hoods				
Cleaning Process	108	M1080004	~~Y~~ N	sodium hydroxide potassium permanganate	0.0001 0.0001		0.8736 0.8736	
Cleaning Process	108	M1080005	~~Y~~ N	nitric acid hydrochloric acid sodium dichromate sulfuric acid	0.0001 0.0001 0.0001		0.8736 0.8736 0.8736	
Cleaning Process	108	M1080006	~~Y~~ N	nitric acid hydrochloric aacid	0.0001 0.0001		0.8736 0.8736	
Cleaning Process	108	M1080007	~~Y~~ N	hydrochloric acid	0.0001		0.8736	
Cleaning Process	108	M1080008	~~Y~~ N	hydrochloric acid	0.0001		0.8736	
Cleaning Process	108	M1080009	~~Y~~ N	hydrochloric acid	0.0001		0.8736	
Cleaning Process	108	M1080010	~~Y~~ N	hydrochloric acid nitric acid	0.0001 0.0001		0.8736 0.8736	
Cleaning Process	108	M1080011	~~Y~~ N	hydrochloric acid nitric acid	0.0001 0.0001		0.8736 0.8736	
Cleaning Process	108	M1080012	~~Y~~ N	nitric acid	0.0001		0.8736	
Cleaning Process	108	M1080013	~~Y~~ N	nitric acid	0.0001		0.8736	
Cleaning Process	108	M1080014	~~Y~~ N	nitric acid	0.0001		0.8736	
Cleaning Process	108	M1080001	~~Y~~ N	acetone ethanol freon	0.009 0.016 0.01		2.88 5.12 3.2	

9.18-45

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

	Room Number	Hood Number	Active	Chemicals Used	Quantity Used	Quantity to Waste Management	Lbs./Yr. Operation	Air Emissions
Cleaning Process	108	M1080002	~~Y~~ N	ethanol freon isopropanol	0.016 0.01 0.0009		32 20 1.8	
Cleaning Process	108	M1080003	~~Y~~ N	Bio-Act EC-7				
Safe Shutdown	103		N					
Safe Shutdown	38,108		N					
Safe Shutdown	17		N					
Safe Shutdown	20,27		N					
Vapor Degreaser								
Vapor Degreaser								

Source: _____

Exhaust still running on some equipment on the plating shop. No ongoing operations & all equipment is empty. Exhaust fans should be turned-off.

Process Source

9.18-46

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow 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? RAIN & CONDENSATE

15. Does the building discharge to the sanitary sewer? (Yes) No
Where? LAV. FLOOR DRAINS TOILETS SUMP

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: M Building Manager: W.H. Whitelow 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)
Attached		

Source: Chemical Inventory 1994

Some of the chemicals listed have been removed since the plating shop has been shutdown.

9.18-48

CHEMICAL	MANUFACT	USE		MAX	Unit	AVG	Unit	BD	RM	STATE	STOR	PRES	TMP	SUPER
ARGON	AIR PRODUCTS	0.25		2	CF	2	CF	M	225	G	L	1	4	WEIDENB
ROSIN CORE SOLDER 60/40	JW HARRIS CO	1	LB	5	LB	10	LB	M	225	S	K	1	4	WEIDENB
SOLDERING PASTE	BURNLEY MFG CO	2	OZ	10	OZ	12	OZ	M	225	S	F	1	4	WEIDENB
TAP MAGIC CUTTING FLUID	STECO CORP	1	OZ	8	OZ	16	OZ	M	225	L	F	1	4	WEIDENB
VC-3 VIBRA-TITE	OAKLAND CORP	0	OZ	1	OZ	0	OZ	M	225	L	M	1	4	WEIDENB
ACRYLIC SPRAY COATING	BORDEN CHEMICAL PRODUCTS	8	OZ	30	OZ	52	OZ	M	23	L	F	1	4	WEIDENB
PENTRATE ULTRA	HEATBATH CORP	650		650		178.7		M	47	L	D	1	4	MILLER
1,1,1-TRICHLOROETHANE	G E CORPORATE RESEARCH &	12	(O	24	(O	48	(O	M	CAGE	ML	L	2	4	CLAWSO
IMS SILICONE SPRAY	IMS COMPANY, CHAGRIN FALLS, OH	8	(O	72	(O	288	(O	M	CAGE	ML	L	2	4	CLAWSO
LOCTITE #242 THREADLOCKER	LOCTITE CORP., CLEVELAND, OHIO	1	(O	6	(O	36	(O	M	CAGE	ML	N	1	4	CLAWSO
MOBIL 1 FORMULA 15 W 50	MOBIL OIL CORP., FAIRFAZ, VA 22037	5	(G	5	(G	5	(G	M	CAGE	ML	F	1	4	CLAWSO
MOBILUX EP1	MOBIL OIL CORP., FAIRFAX, VA 22037	12	(O	288	(O	288	(O	M	CAGE	ML	R	1	4	CLAWSO
MOBILUX EP2	MOBIL OIL CORP., FAIRFAX, VA 22037	12	(O	288	(O	288	(O	M	CAGE	ML	R	1	4	CLAWSO
PAX-SOLV WATERLESS HAND CLEANER	CALGON	5	(O	20	(L	25	(L	M	CAGE	ML	F	1	4	CLAWSO
RTV SILICONE RUBBER SEALANT 108	GENERAL ELECTRIC, WATERFORD, NY	8	(O	96	(O	96	(O	M	CAGE	ML	R	1	4	CLAWSO
RTV SILICONE RUBBER SEALANT 108 5P1	GENERAL ELECTRIC, WATERFORD, NY	11	(O	132	(O	132	(O	M	CAGE	ML	R	1	4	CLAWSO
GRAPHITE POWDER, FIBERS	MORTON THIOKOL, INC., DANVERS, MA	2	(O	8	(O	8	(O	M	SHOP	PS		1	4	CLAWSO
MINERAL SEAL OIL 5062	TOTAL PETROLEUM, INC., EAST	0	(G	0	(G	0	(G	M	SHOP	ML		1	4	CLAWSO
MOBIL 600W CYLINDER OIL	MOBIL OIL CORP., FAIRFAX VA 22037	5	(G	5	(G	10	(G	M	SHOP	ML	F	1	4	CLAWSO
MOBIL DTE OIL HEAVY MEDIUM	MOBIL OIL CORP., 3225 GALLOWS RD.,	55	(G	110	(G	550	(G	M	SHOP	ML	D	1	4	CLAWSO
MOBIL DTE OIL LIGHT	MOBIL OIL CORP., 3225 GALLOWS RD.,	55	(G	110	(G	550	(G	M	SHOP	ML	D	1	4	CLAWSO
MOBIL FLUID 350	MOBIL OIL CORP., 3225 GALLOWS RD.,	24	(Q	48	(Q	48	(Q	M	SHOP	ML	F	1	4	CLAWSO
MOBIL VACTRA OIL NO. 4	MOBIL OIL CORP., 3225 GALLOWS RD.,	55	(G	55	(G	55	(G	M	SHOP	ML	D	1	4	CLAWSO
MOBILGEAR 629	MOBIL OIL CORP., FAIRFAX VA 22037	55	(G	55	(G	55	(G	M	SHOP	ML	D	1	4	CLAWSO
MOBILUBE HD 85W-140	MOBIL OIL CORP., FAIRFAX, VA 22037	5	(G	5	(G	10	(G	M	SHOP	ML	F	1	4	CLAWSO
NEV-SZ-REG	BOSTIK, MIDDLETON, MA 01949	8	(O	96	(O	96	(O	M	SHOP	ML	R	1	4	CLAWSO
PERMATEX #1 FORM-A-GASKET	LOCTITE CORP., CLEVELAND, OH 44128	10	(O	60	(O	40	(O	M	SHOP	ML	R	1	4	CLAWSO
PERMATEX #2 FORM-A-GASKET	LOCTITE CORP., CLEVELAND, OH 44128	10	(O	60	(O	40	(O	M	SHOP	ML	R	1	4	CLAWSO
QUICK METAL, LOCTITE	LOCTITE CORP., NEWINGTON, CT 06111	10	(O	60	(O	30	(O	M	SHOP	ML	R	1	4	CLAWSO
RTV SILICONE RUBBER SEALANT 102	GENERAL ELECTRIC CO.,	8	(O	96	(O	96	(O	M	SHOP	ML	R	1	4	CLAWSO
RTV SILICONE RUBBER SEALANT 102 5P1	GENERAL ELECTRIC CO., WATERFORD,	11	(O	132	(O	132	(O	M	SHOP	ML	R	1	4	CLAWSO
RUBBER-TO-METAL CEMENT	GC ELECTRONICS, ROCKFORD,IL	2	(O	4	(O	40	(O	M	SHOP	ML	M	1	4	CLAWSO
STODDARD SOLVENT, TYPE I	VARIOUS	55	(G	55	(G	165	(G	M	SHOP	ML	D	1	4	CLAWSO
TAP MAGIC CUTTING FLUID	THE STECO CORP., LITTLE ROCK, AR	12	(O	72	(O	288	(O	M	SHOP	ML	F	1	4	CLAWSO
THREE-IN-ONE HOUSEHOLD OIL	BOYLE-MIDWAY, CRANFORD, NJ 07016	4	(O	24	(O	48	(O	M	SHOP	ML	F	1	4	CLAWSO
TRIM TAP HEAVY	MASTER CHEMICAL CORPORATION, 501	55	(G	55	(G	55	(G	M	SHOP	ML	D	1	4	CLAWS
VALVOLINE AUTOMATIC TRANSMISSION	VALVOLIINE OIL CO., ASHLAND, KY 41114	24	(Q	48	(Q	48	(Q	M	SHOP	ML	F	1	4	CLAWS
WD-40	WD-40 COMPANY,1061 CUDAHY PL.,P.O.	8	(O	24	(O	96	(O	M	SHOP	ML	L	2	4	CLAWS
WHITMORE #1 GREASE	WHITMORE MANUFACTURING CO.,	12	(O	288	(O	144	(O	M	SHOP	ML	R	1	4	CLAWS
MOBIL DTE OIL HEAVY MEDIUM	MOBIL OIL CORP., 3225 GALLOWS RD.,	1	(G	1	(G	1	(G	M	STOR	ML	D	1	4	CLAWS

CHEMICAL	MANUFACT	USE		MAX	Unit	AVG	Unit	BD	RM	STATE	STOR	PRES	TMP	SUPER
NICKEL CHLORIDE	FISHER	138.8		138.8		5		M	108	S	M	1	4	MILLER
NICKEL SULFATE	JOHNSON MATTHEY	8.81		8.81		2.64		M	108	S	N	1	4	MILLER
NITRIC ACID	FISHER	43.2		43.2		66.08		M	108	L	M	1	4	MILLER
OAKITE DYANDET	OAKITE PRODUCTS	1		1		0		M	108	S	F	1	4	MILLER
PHOSPHORIC ACID	FISHER	11.13		11.13		20		M	108	L	M	1	4	MILLER
POTASSIUM PERMANGANATE	FISHER	3.3		3.3		20		M	108	S	M	1	4	MILLER
SODIUM BICARBONATE	FISHER	1		1		6.6		M	108	S	N	1	4	MILLER
SODIUM DICHROMATE	FISHER	1		1		0.5		M	108	S	N	1	4	MILLER
SODIUM HYDROXIDE	FISHER	26.43		26.43		50		M	108	S	N	1	4	MILLER
SULFURIC ACID	FISHER	70.7		70.7		30.4		M	108	L	M	1	4	MILLER
TOLUENE	FISHER	0.5		0.5		0.1		M	108	L	M	1	4	MILLER
VASELINE INTENSIVE CARE LOTION	CHEESEBROUGH PONDS	0.5		0.5		2		M	108	L	N	1	4	MILLER
WD-40	WD-40 CO	0.56		0.56		0.1		M	108	L	F	1	4	MILLER
ZINC OXIDE	FISHER	3.3		3.3		0		M	108	S	N	1	4	MILLER
AGENT Y-17	M&T HARSHAW	18.9		18.9		6 01		M	110	L	F	1	4	MILLER
ALUM. FAST RED B3LW DYE	SANDOZ CHEMICALS	5		5		1		M	110	S	F	1	4	MILLER
ALUM. TURQUOISE PLW DYE	SANDOZ CHEMICALS	2.5		2.5		1		M	110	S	F	1	4	MILLER
ALUM. VIOLET 3D DYE	SANDOZ CHEMICALS	10		10		2		M	110	S	N	1	4	MILLER
ANODAL MS-1 LIQUID	SANDOZ CHEMICALS	40		40		0		M	110	S	F	1	4	MILLER
BLACK LABEL II	M&T HARSHAW	40		40		0		M	110	L	N	1	4	MILLER
COPPER CYANIDE	FISHER	110		110		2		M	110	S	F	1	4	MILLER
DEEP BLACK MLW DYE	SANDOZ CHEMICALS	7		7		1		M	110	S	F	1	4	MILLER
FREON TF	ASHLAND CHEMICAL CO	200		200		200		M	110	L	D	1	4	MILLER
GREEN LABEL II	M&T HARSHAW	3		3		1		M	110	L	N	1	4	MILLER
LENS CLEANER	EASTERN SAFETY EQ CO	8.34		8.34		0.5		M	110	L	N	1	4	MILLER
MORPLAS ERO BLUE DYE	MORTON INTERNATIONAL	5		5		0.5		M	110	S	E	1	4	MILLER
NICKEL ACETATE	SHEPPARD CHEMICAL	80		80		5.28		M	110	S	I	1	4	MILLER
SA-1 ADDITIVE	M&T HARSHAW	18.9		18.9		1		M	110	L	N	1	4	MILLER
SODIUM CYANIDE	GEM CITY CHEMICALS	10		10		2		M	110	S	D	1	4	MILLER
SODIUM HYDROXIDE SOLUTION	MAYS	674		674		200		M	110	L	E	1	4	MILLER
SOLDERING FLUX	RUBY CHEMICAL CO	0.63		0.63		0.1		M	110	L	N	1	4	MILLER
WINDOW SHINE GLASS CLEANER	VALLEY JANITOR SUPPLY	16.7		16.7		1		M	110	L	N	1	4	MILLER
1,1,1-TRICHLOROETHANE SOLVENT	MILLER-STEPHENSON	1	OZ	8	OZ	8	OZ	M	223	L	N	1	4	WEIDENBACH
DRIERITE	WA HAMMOND	0	LB	2	LB	0	LB	M	223	S	M	1	4	WEIDENBACH
DRIVE GRIP	OAKLAND CORP	0	OZ	1	OZ	0	OZ	M	223	S	R	1	4	WEIDENBACH
ELECTRICAL INSULATING RESIN	SCOTCHCAST 3M	3	OZ	12	OZ	12	OZ	M	223	S	K	1	4	WEIDENBACH
ELECTRONIC CLEANER	BOWMAN	1	OZ	30	OZ	1	OZ	M	223	L	F	1	4	WEIDENBACH
ELECTRONIC DEGREASER	CHARDON LABORATORIES	0	OZ	12	OZ	12	OZ	M	223	L	F	1	4	WEIDENBACH
EPOXY	COLE PARMER CO	2	OZ	24	OZ	36	OZ	M	223	L	J	1	4	WEIDENBACH
FREEZE MIST SPRAY	GC ELECTRONICS	12	OZ	36	OZ	36	OZ	M	223	L	F	1	4	WEIDENBACH
FREON SOLVENT FLUX REMOVER	MILLER-STEPHENSON	8	OZ	48	OZ	64	OZ	M	223	L	F	1	4	WEIDENBACH
FREON TF SOLVENT CLEANER	EI DUPONT	0	OZ	20	OZ	24	OZ	M	223	L	F	1	4	WEIDENBACH
FURNITURE POLISH	CARROLL COMPANY	0	OZ	10	OZ	0	OZ	M	223	L	F	1	4	WEIDENBACH
HIGH VAC[illegible] GREASE	DOW CORNING	1	OZ	10	OZ	15	OZ	M	223	S	N	1	[illegible]	WEIDENBACH
RTV SILI[illegible] UBBER	GENERAL ELECTRIC	2	OZ	6	OZ	12	OZ	M	223	S	N	1	[illegible]	WEIDENBACH
THERMAL COMPOUND	WAKEFIELD ENG	1	OZ	12	OZ	16	OZ	M	223	S	N	1	4	WEIDENBACH

2-PROPANOL	FISHER	600	[illegible]	600	ML	0		HL	104	PL	M	1	[illegible]	BARTON
1,1,1-TRICHLOR[illegible]NE		25	[illegible]	55	GA	45	GA	M	103	L	D	1	[illegible]	KOEHLER
ARGON		1000	LB	4000	LB	2000	LB	M	103	G	L	2	4	KOEHLER
ETHYL ALCOHOL		0.5	GA	4	GA	4	GA	M	103	L	N	1	4	KOEHLER
HELIUM		220	CF	440	CF	110	CF	M	103	G	L	2	4	KOEHLER
2-PROPANOL	FISHER	13.74		13.74		2		M	108	L	M	1	4	MILLER
3 IN 1 OIL	BOYLE MIDWAY	0.19		0.19		0.01		M	108	L	F	1	4	MILLER
ACETIC ACID	FISHER	4.8		4.8		0.6		M	108	L	M	1	4	MILLER
ACETONE	FISHER	10.44		10.44		174		M	108	L	M	1	4	MILLER
ALODINE 1200S	PARKER AND AMCHEM	10		10		1		M	108	L	N	1	4	MILLER
AMMONIUM HYDROXIDE	MALLINCKRODT	1		1		0		M	108	L	M	1	4	MILLER
BIOACT EC-7	PETROFERM	35.6		35.6		50		M	108	L	F	1	4	MILLER
BORIC ACID	FISHER	6.6		6.6		6.6		M	108	S	M	1	4	MILLER
BUFFER SOLUTION	FISHER	1		1		3		M	108	L	N	1	4	MILLER
E-BRITE 30/31	ELECTROCHEMICAL PRODUCTS	12.6		12.6		0		M	108	L	N	1	4	MILLER
E-BRITE 30/32	ELECTROCHEMICAL PRODUCTS	12.6		12.6		0		M	108	L	N	1	4	MILLER
ELECTRODW SOLUTION	ORION RESEARCH	0.56		0.56		0.1		M	108	L	N	1	4	MILLER
ETHYL ALCOHOL	MIDWEST GRAIN CO	23.8		23.8		396		M	108	L	N	1	4	MILLER
FERRIC CHLORIDE	FISHER	0.22		0.22		0		M	108	S	M	1	4	MILLER
GOLD BRIGHTENER	ENGELHARD	3.3		3.3		2.5		M	108	L	N	1	4	MILLER
GOLD REPLENISHER	ENGELHARD	1.13		1.13		0.25		M	108	L	N	1	4	MILLER
HYDROCHLORIC ACID	FISHER	39.6		39.6		79.3		M	108	L	M	1	4	MILLER
HYDROFLUORIC ACID	FISHER	3.3		3.3		1		M	108	L	M	1	4	MILLER
ISOPROPYL ALCOHOL	FISHER	13.2		13.2		20.9		M	108	L	M	1	4	MILLER
JOY LIQUID SOAP	PROCTOR & GAMBLE	1.4		1.4		2.8		M	108	L	N	1	4	MILLER
MICROSHIELD	MICRO PRODUCTS	6.8		6.8		1.1		M	108	L	F	1	4	MILLER
MICROSTOP	MICRO PRODUCTS	3.4		3.4		3.4		M	108	L	F	1	4	MILLER

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow 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

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

ATTACHED

23. Where do excess janitorial supplies go?

Room 2, 9, 10

Source: _____

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

ATTACHED

Chemical	Amount	Chemical	Amount
ROUNDUP - HERB	AS NEEDED		

Source: INDUSTRIAL HYGIENE

9.18-52

ecord#	COMMON	CHEMICAL
1	BLUE MAX SPRAY BUFF	BLUE MAX SPRAY BUFF
2	CLEAN-N-DRY	CLEAN-N-DRY
3	CLR WINDOW	CLR WINDOW
4	CONQUEST	CONQUEST
5	DD/85 SPRAY	DD/85 SPRAY
6	DMQ	DMQ
7	DUO-POWDER	DUO-POWDER
8	FLOOR FINISH/ABOVE	FLOOR FINISH/ABOVE
9	FOUNTAIN HEAD	FOUNTAIN HEAD
10	GLOSS-EXTENDERA	GLOSS-EXTENDERA
11	GREASE-BE-GONE	GREASE-BE-GONE
12	HEAD START	HEAD START
13	INSECT SPRAY/CHERRY	INSECT SPRAY/CHERRY
14	INSECTICIDE/WAS	INSECTICIDE/WAS
15	KINDEST CARE	KINDEST CARE
16	LAVA HAND SOAP	LAVA HAND SOAP
17	LIL BROTHER SAM	LIL BROTHER SAM
18	NABC	NABC
19	NEUT. FLOOR CORP.	NEUT. FLOOR CORP.
20	ODOR BANE	ODOR BANE
21	ON-BASE SEALER	ON-BASE SEALER
22	ONE-STEP/SURE BET	ONE-STEP/SURE BET
23	POLISH/LEMON	POLISH/LEMON
24	PUMMEL HAND SOAP	PUMMEL HAND SOAP
25	RINSE FREE/STRIP	RINSE FREE/STRIP
26	SBS-61 LOTION SOAP	SBS-61 LOTION SOAP
27	SCRUB-ENDER	SCRUB-ENDER
28	SEAL, CON-SEAL	SEAL, CON-SEAL
29	SEALER/IRONSTONE	SEALER/IRONSTONE
30	SHINELINE BASE	SHINELINE BASE
31	SNAPOUT	SNAPOUT
32	SPIN-OUT	SPIN-OUT
33	SPOT, PILE DRIVER	SPOT, PILE DRIVER
34	SPOTTER, PULL OUT	SPOTTER, PULL OUT
35	STAINLESS CLEANER	STAINLESS CLEANER
36	STATCIDE, GP	STATCIDE, GP
37	STRIPPER, ZIP	STRIPPER, ZIP
38	SURFACE GLEEM	SURFACE GLEEM
39	TREATMENT/DUST	TREATMENT/DUST
40	TRIPLE SSS	TRIPLE SSS
41	VESTA POWER	VESTA POWER
42	WINDOW SHINE	WINDOW SHINE

Cus Todial Chemical list

9.18-53

12-95

☐ INITIAL SERVICE
☑ REGULAR SERVICE
☐ EXTRA SERVICE

TERMINIX.

TERMITE and PEST CONTROL

COPY

COMMERCIAL SERVICE AND INSPECTION REPORT

BRANCH	ACCOUNT	RT	TELEPHONE	GRID	S DAY	F	T	PRODUCTION	TIME IN	TIME OUT
2418	006092-	07	000/000-0000 513/865-3921	E30 -	2FR	S	P	00004577 09	7:00 AM	8:25 A

SERVICE PROPERTY AT

E G & G MOUND
P. O. #38224
MOUND AVE
MIAMISBURG OH 45342-0000

BRANCH

TERMINIX INTERNATIONAL
4712 PAYNE AVENUE
DAYTON OH 45414-0000
513/274-5800

OPERATOR NAME & CERTIFICATION NUMBER: [illegible] 1107

SUPERVISOR NAME & CERTIFICATION NUMBER: DANIEL J. STECK #1207

TARGET PEST(S): ☐ T2 Cockroaches ☑ T18 Rats ☐ Other: ____
☐ T3 Ants ☐ T19 Mice ☐ Other: ____

SERVICE AREAS:	INSPECTED	TREATED
☐ C1 FOOD AREAS:	☐	☐
☐ C2 OFFICES:	☐	☐
☐ C3 STORAGE/UTILITY:	☐	☐
☐ C4 PUBLIC AREAS:	☐	☐
☐ C5 REST ROOMS:	☐	☐
☐ C6 EXTERIOR AREAS:	☐	☐
☐	☐	☐
☐	☐	☐

PESTICIDE(S) TO BE APPLIED	EPA'S	T/C	AMOUNT	EQU
☐ P24 PT279 Engage (Chlorpyrifos) 0.5%	499-292			
☐ ~~P10~~ PT565 + XLO (Pyrethrin) 0.5%	499-310	C	3	A
☐ P04 Dursban L.O. (Chlorpyrifos) 0.5%	62719-55			
☐ ~~P11~~ Conquer (Esfenvalerate) 0.05%	1021-1565-57076	C	[illegible]	A
☐ P23 Tempo 20 WP (Cyfluthrin) 0.05%	3125-380			
☐ P06 Ficam W (Bendiocarb) 0.5%	45639-1			
☐ P21 Knox-Out 2FM (Diazinon) 1%	4581-335-AA-499			
☐ P07 Gentrol (Hydroprene) 0.125%	2724-304-50809			
☐ P12 Precor (Methoprene) 0.008%	2724-352-50809			
☐ ~~P02~~ Drione Dust (Silica/Pyrethrin) 1%	4816-353AA			
☐ P05 Ficam D (Bendiocarb) 1%	45639-3			
☐ P03 Dursban G (Chlorpyrifos) 0.5%	10370-36-432			
☐ P08 Maxforce Bait (Hydramethylnon) 1.65%	64248-1			
☐ P27 Avert Roach Bait (Avermectin) 0.05%	499-294			
☐ P09 PT270 Dursban (Chlorpyrifos) 0.5%	499-147			
☐ P25 PT280 Orthene (Acephate) 1%	499-230			
☐ P26 Maxforce Gel (Hydramethylnon) 2.15%	64248-5			
☐ P14 Ditrac All Weather Cake (Diphacinone) 0.005%	12455-5			
☐ P20 Talon G (Brodifacoum) 0.005%	10182-38			
☐ P47 Contrac Blox (Bromadiolone) 0.005%	12455-79			
☐ P34 Ditrac Bait Pack (Diphacinone) 0.005%	12455-19			
☐ P16 Glue Boards				
☐ P17 Ketch-All/Tin Cat				
☐ P19 Snap Traps				

TREATMENT CODE:
C = Crack & Crevice
S = Spot
G = General
T = Space Treatment
B = 3' Band

Supervisor's Comments: ☐ Treat for Infestation/Prevention or Inspect areas indicated.

EQUIP. CODE
F = Fogger
HD = Hand Dust
B&G = Comp. Air

SPECIAL SERVICE INSTRUCTIONS

SER. OLD CAFE, SMPP, GUARDS REST ROMS AND BASINS IN MEDICAL AREA
P. O. # 38224

BALANCE AS OF NOVEMBER 29
DEC CHARGE
SALES TAX
TOTAL DUE

CUSTOMER'S SIGNATURE: [illegible]

SERVICE TECHNICIAN'S SIGNATURE: [illegible] DATE: 12-15-94

AMOUNT PAID: ____ CASH ☐ CHECK ☐

9.18-54

12-95

☐ INITIAL SERVICE
☑ REGULAR SERVICE
☐ EXTRA SERVICE

TERMINIX.

TERMITE and PEST CONTROL

COPY

COMMERCIAL SERVICE AND INSPECTION REPORT

BRANCH	ACCOUNT	RT	TELEPHONE	GRID	S DAY	F	T	PRODUCTION	TIME IN	TIME OUT
2410	006093-4	07	000/000-0000 513/865-4585	E30 -	2FR	S	P	00005000 05	7:00 AM	7:25 AM

SERVICE PROPERTY AT	BRANCH
E G & G MOUND EARNIE HAYES 865-4310 MOUND AVENUE MIAMISBURG OH 45342-0000	TERMINIX INTERNATIONAL 4712 PAYNE AVENUE DAYTON OH 45414-0000 513/274-5800

OPERATOR NAME & CERTIFICATION NUMBER: [illegible] 1467

SUPERVISOR NAME & CERTIFICATION NUMBER: DANIEL J. STECK #1207

TARGET PEST(S): ☑ T2 Cockroaches ☑ T18 Rats ☐ Other: _____
☐ T3 Ants ☐ T19 Mice ☐ Other: _____

SERVICE AREAS:	INSPECTED	TREATED
☐ C1 FOOD AREAS:	☐	☐
☐ C2 OFFICES:	☐	☐
☐ C3 STORAGE/UTILITY:	☐	☐
☐ C4 PUBLIC AREAS:	☐	☐
☐ C5 REST ROOMS:	☐	☐
☐ C6 EXTERIOR AREAS:	☐	☐
☐	☐	☐
☐	☐	☐

PESTICIDE(S) TO BE APPLIED	EPA'S	T/C	AMOUNT	EQ
☐ P24 PT279 Engage (Chlorpyrifos) 0.5%	499-292			
☑ P10 PT565 + XLO (Pyrethrin) 0.5%	499-310			M
☐ P04 Dursban L.O. (Chlorpyrifos) 0.5%	62719-55			
☑ P11 Conquer (Esfenvalerate) 0.05%	1021-1565-57076	C	[illegible]	M
☐ P23 Tempo 20 WP (Cyfluthrin) 0.05%	3125-380			
☐ P06 Ficam W (Bendiocarb) 0.5%	45639-1			
☐ P21 Knox-Out 2FM (Diazinon) 1%	4581-335-AA-499			
☐ P07 Gentrol (Hydroprene) 0.125%	2724-304-50809			
☐ P12 Precor (Methoprene) 0.008%	2724-352-50809			
☑ P02 Drione Dust (Silica/Pyrethrin) 1%	4816-353AA	C	[illegible]	M
☐ P05 Ficam D (Bendiocarb) 1%	45639-3			
☐ P03 Dursban G (Chlorpyrifos) 0.5%	10370-36-432			
☐ P08 Maxforce Bait (Hydramethylnon) 1.65%	64248-1			
☐ P27 Avert Roach Bait (Avermectin) 0.05%	499-294			
☐ P09 PT270 Dursban (Chlorpyrifos) 0.5%	499-147			
☐ P25 PT280 Orthene (Acephate) 1%	499-230			
☐ P26 Maxforce Gel (Hydramethylnon) 2.15%	64248-5			
☐ P14 Ditrac All Weather Cake (Diphacinone) 0.005%	12455-5			
☐ P20 Talon G (Brodifacoum) 0.005%	10182-38			
☐ P47 Contrac Blox (Bromadiolone) 0.005%	12455-79			
☐ P34 Ditrac Bait Pack (Diphacinone) 0.005%	12455-19			
☐ P16 Glue Boards				
☐ P17 Ketch-All/Tin Cat				
☐ P19 Snap Traps				

TREATMENT CODE:
C = Crack & Crevice
S = Spot
G = General
T = Space Treatment
B = 3' Band

Supervisor's Comments: ☐ Treat for Infestation/Prevention or Inspect areas indicated.

EQUIP. CODE
F = Fogger B = [illegible]
HD = Hand Dust A = [illegible]
B&G = Comp. Air T = [illegible]

SPECIAL SERVICE INSTRUCTIONS

GENERAL PC , C-BLDG. A-BLDG, MEDICAL, GH BLDG
SM CAFETERIA.(MONTHLY) -- OS-EAST CAFETERIA,
NEW CAFETERIA ONLY PO #38224

BALANCE AS OF
NOVEMBER 29
DEC CHARGE
SALES TAX
TOTAL DUE

9.18-55

CUSTOMER'S SIGNATURE: [illegible]

SERVICE TECHNICIAN'S SIGNATURE: [illegible] DATE: 12/15/95

AMOUNT PAID: 0 CASH ☐ CHECK ☐

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow 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.

No Above Ground tanks were identified during walk-through

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
7697-37-2	NITRIC ACID	01C		Y/N	
7440-37-1	ARGON	02C		Y/N	103
7440-59-7	HELIUM	01C		Y/N	103
7664-93-9	SULFURIC ACID	01C			108

WHERE IN 108? → I DON'T KNOW OF ANY H_2SO_4 STORAGE!

Source: Emergency and Hazardous Ch - Chemical Storage Tanks on EGG Mound .ned by Outside Contractors 8/8/94 TK.

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

M108 ← IN M108.

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

Source: TK.

27. Does th or dispose of hazardous waste? Yes No OK

Materials
ATTACHED

NOT ANY MORE.

Source: Characterization of Mounds Hazardc Mixed Wastes 08/15/90 TK.

Not any more - plating shop shutdown

9.18-56

M BLDG	BIOACT EC-7, ACETONE WASTE, M-536	D001 F003	263.8
M BLDG	BIOACT EC7, M-309	D001 F003	229.0
M BLDG	BIOACT EC7, M-310	D001 F003	213.0
[illegible]	BIOACT WASTE	D001	210.2
M [illegible]G	BLACK OXIDE RINSE WATER	D002	625.2
M BLDG	BLACK OXIDE RINSE WATER	D002 D007	295.7
M BLDG	BLACK OXIDE RINSE WATER	D002 D007	698.7
M BLDG	BREWER COAT DRIVEWAY SEALER	NONE	30.0
M BLDG	BREWER COAT DRIVEWAY SEALER	NONE	25.0
M BLDG	BREWER COAT DRIVEWAY SEALER	NONE	50.1
M BLDG	BRIGHT NICKEL PLATING WASTE	F007 F009	33.5
M BLDG	BRIGHTENER BATH DEBRIS, M-553	D004 D006 F007 F009	311.0
M BLDG	BRIGHTENER BATH DEBRIS, M-554	D004 D006 F007 F009	330.0
M BLDG	BRIGHTENER BATH DEBRIS, M-556	D004 D006 F007 F009	287.0
M BLDG	BRIGHTENER BATH DEBRIS, M-557	D004 D006 F007 F009	298.0
M BLDG	CADMIUM CYANIDE PLATING DEBRIS	D003 D006 F007 F009	11.8
M BLDG	CADMIUM CYANIDE PLATING RODS	D003 D006 F007 F009	24.9
M BLDG	CADMIUM CYANIDE, SODIUM HYPOCHLORITE WASTE	D002 D006 F007 F009	524.0
M BLDG	CADMIUM CYANIDE, SODIUM HYPOCHLORITE WASTE	D002 D006 F007 F009	403.5
M BLDG	CADMIUM CYANIDE, SODIUM HYPOCHLORITE WASTE	D002 D006 F007 F009	505.9
M BLDG	CHLOROFORM	D001 D022	1.0
M BLDG	CHROMIC ACID DEBRIS	D007	18.5
M BLDG	CHROMIC ACID PLATING DEBRIS	D007 F007 F009	12.0
M BLDG	CHROMIC ACID SOLUTION	D002 D007	281.7
M BLDG	CHROMIC ACID SOLUTION	D002 D007	471.5
[illegible]G	CHROMIC ACID SOLUTION	D002 D007	463.3
M [illegible]LDG	CHROMIC ACID SOLUTION	D002 D007	438.0
M BLDG	CHROMIC ACID WASTE	D001 D007	125.0
M BLDG	COPPER CYANIDE	D003 P029	165.4
M BLDG	COPPER CYANIDE	D003 F007 F009	36.5
M BLDG	COPPER CYANIDE ANODES	F007 F009	605.9
M BLDG	COPPER CYANIDE PLATING ELECTRODES	D003 F007 F009	12.2
M BLDG	COPPER CYANIDE PLATING RODS	D003 F007 F009	187.4
M BLDG	COPPER CYANIDE PLATING RODS	D003 D006 F007 F009	52.3
M BLDG	COPPER CYANIDE PLATING RODS	D003 F007 F009	45.6
M BLDG	COPPER CYANIDE PLATING RODS	D003 F007 F009	100.0
M BLDG	COPPER CYANIDE WASTE	F007 F009	27.4
M BLDG	COPPER CYANIDE, EMPTY DRUM (FORMERLY LP93-391)	D003 P029	90.2
M BLDG	COPPER CYANIDE, SODIUM CYANIDE WASTE, M-212	D003 F007	240.0
M BLDG	COPPER CYANIDE, SODIUM CYANIDE WASTE, M-223	D003 F007	240.0
M BLDG	COPPER CYANIDE, WATER WASTE	F007 F009	466.5
M BLDG	COPPER CYANIDE, WATER WASTE	F007 F009	539.5
M BLDG	COPPER CYANIDE, WATER WASTE	F007 F009	431.8
M BLDG	COPPER CYANIDE, WATER WASTE	F007 F009	419.7
M BLDG	COPPER CYANIDE, WATER WASTE	F007 F009	425.4
M BLDG	COPPER PHOSPHATE RINSE WATER	D002	462.1
[illegible]LDG	COPPER PHOSPHATE RINSE WATER	D002	332.9
[illegible]DG	COPPER PHOSPHATE RINSE WATER	D002	532.9
[illegible]DG	CYANIDE CONTAMINATED DEBRIS	F007 F009	8.1

9.18-57
Bldg. M

M BLDG	CYANIDE RINSE WATERS	F007 F009	434.0
M BLDG	DOWTHERM, WATER	NONE	46.6
M BLDG	DYE TANK DEBRIS	D006 D007	66.5
[illegible]DG	DYE TANK DEBRIS	D006 D007	61.1
M BLDG	DYE TANK DEBRIS	D006 D007	65.8
M BLDG	DYE TANK DEBRIS	D006 D007	71.8
M BLDG	DYE TANK DEBRIS	D006 D007	66.1
M BLDG	DYE TANK DEBRIS	D006 D007	65.1
M BLDG	DYE TANK DEBRIS	D006 D007	65.9
M BLDG	DYE TANK DEBRIS	D006 D007	66.7
M BLDG	DYE TANK DEBRIS	D006 D007	65.5
M BLDG	DYE TANK DEBRIS	D006 D007	65.0
M BLDG	DYE TANK DEBRIS	D006 D007	64.9
M BLDG	DYE WASTE	D007	242.6
M BLDG	DYE WASTE	D007	453.7
M BLDG	DYE WASTE	D007	266.9
M BLDG	DYE WASTE	D007	279.4
M BLDG	DYE WASTE	D007	258.1
M BLDG	DYE WASTE DEBRIS	D006 D007	3.7
M BLDG	E-BRITE 30/30 WASTE	NONE	234.8
M BLDG	ELECTRO POLISH WITH METALS, M-299	D002 D006 D007	339.0
M BLDG	ELECTRO POLISH WITH METALS, M-315	D002 D006 D007	245.0
M BLDG	ETHANOL	D001	43.6
M BLDG	ETHYLENE GLYCOL CLEANUP	NONE	3.9
M BLDG	ETHYLENE GLYCOL RAGS	NONE	4.7
M BLDG	ETHYLENE GLYCOL, XYLENE WASTE	D001 D007 F003	131.0
M BLDG	FERRIC CHLORIDE WASTE	D002	574.2
M BLDG	FERRIC CHLORIDE WASTE	D002	558.8
[illegible]DG	FREON WASTE, M-196	F001	343.2
[illegible]DG	FREON WASTE, M-232	F001	563.2
M BLDG	FREON WASTE, M-264	F001	287.0
M BLDG	FREON WASTE, M-291	F001	244.5
M BLDG	GOLD CYANIDE (DRY)	D003	20.0
M BLDG	GOLD CYANIDE FILTERS, DEBRIS WASTE	D003 F007	12.3
M BLDG	GOLD CYANIDE PUMP, FILTER UNIT	D003 F007 F009	17.0
M BLDG	GOLD CYANIDE SOLUTION	D003 F007	239.0
M BLDG	HEAT TRANSFER CEMENT	NONE	75.8
M BLDG	HEXANE, METHANOL, WATER WASTE	D001 F003	277.0
M BLDG	HYDROCHLORIC ACID RINSE WATER	D002 D006 D007 D008	425.1
M BLDG	HYDROCHLORIC, SULFURIC, NITRIC ACIDS RINSE WATER	D002	468.3
M BLDG	HYDROCHLORIC, SULFURIC, NITRIC ACIDS RINSE WATER	D002	454.9
M BLDG	LEAD ANODES	D008	120.3
M BLDG	LEAD ANODES	D008	157.1
M BLDG	LEAD TAPE	D008	25.0
M BLDG	LEAD, CHROMIUM PLATING RODS	D007 D008 F007 F009	52.3
M BLDG	M DYE WASTE, M-210	D006 D007	451.0
M BLDG	M DYE WASTE, M-214	D006 D007	488.4
M BLDG	M DYE WASTE, M-222	D006 D007	473.0
M BLDG	M DYE WASTE, M-225	NONE	473.0
M BLDG	M DYE WASTE, M-231	D006 D007	470.8
M BLDG	M DYE WASTE, M-236	D006 D007	457.6
M BLDG	M DYE WASTE, M-241	D006 D007	462.0
[illegible]DG	M DYE WASTE, M-308	D006 D007	281.0

9.18-58

Bldg. M

M BLDG	M FLOOR WASTE, M-242	NONE	400.4
M BLDG	M FLOOR WASTE, M-253	NONE	60.0
M BLDG	M FLOOR WASTE, M-253	NONE	50.0
[illegible]G	M FLOOR WASTE, M-267	NONE	55.0
[illegible]DG	M FLOOR WASTE, M-268	NONE	60.0
M BLDG	M WASTE WATER COOLANT	NONE	495.1
M BLDG	M WASTE WATER COOLANT	NONE	497.4
M BLDG	M WASTE WATER COOLANT	NONE	496.1
M BLDG	M WASTE WATER COOLANT	NONE	274.3
M BLDG	M WASTE WATER COOLANT	NONE	472.2
M BLDG	M WASTE WATER COOLANT	NONE	389.8
M BLDG	M WASTE WATER COOLANT	NONE	437.3
M BLDG	M WASTE WATER COOLANT	NONE	391.9
M BLDG	M WASTE WATER COOLANT	NONE	454.2
M BLDG	M WASTE WATER COOLANT	NONE	234.4
M BLDG	M WASTE WATER COOLANT	NONE	504.8
M BLDG	M WASTE WATER COOLANT	NONE	451.1
M BLDG	M WASTE WATER COOLANT	F002	400.0
M BLDG	M WASTE WATER COOLANT	F002	450.0
M BLDG	M WASTE WATER COOLANT	F002	442.2
M BLDG	M WASTE WATER COOLANT	F002	447.0
M BLDG	M WASTE WATER COOLANT, M-195	F002	488.4
M BLDG	M WASTE WATER COOLANT, M-195	F002	444.4
M BLDG	M WASTE WATER COOLANT, M-195	F002	490.6
M BLDG	M WASTE WATER COOLANT, M-195	F002	501.6
M BLDG	M WASTE WATER COOLANT, M-195	F002	506.0
M BLDG	M WASTE WATER COOLANT, M-195	F002	457.6
M BLDG	M WASTE WATER COOLANT, M-195	F002	433.4
[illegible]DG	M WASTE WATER COOLANT, M-195	F002	490.6
[illegible]DG	M WASTE WATER COOLANT, M-226	F002	308.0
M BLDG	M WASTE WATER COOLANT, M-229	F002	448.8
M BLDG	M WASTE WATER COOLANT, M-234	F002	440.0
M BLDG	M WASTE WATER COOLANT, M-235	F002	493.9
M BLDG	M WASTE WATER COOLANT, M-243	F002	466.4
M BLDG	M WASTE WATER COOLANT, M-245	F002	479.6
M BLDG	M WASTE WATER COOLANT, M-247	F002	451.0
M BLDG	M WASTE WATER COOLANT, M-258	F002	475.2
M BLDG	M WASTE WATER COOLANT, M-260	F002	470.0
M BLDG	M WASTE WATER COOLANT, M-261	F002	464.2
M BLDG	M WASTE WATER COOLANT, M-262	F002	356.3
M BLDG	M WASTE WATER COOLANT, M-272	F002	463.4
M BLDG	M WASTE WATER COOLANT, M-277	F002	465.7
M BLDG	M WASTE WATER COOLANT, M-278	F002	501.9
M BLDG	M WASTE WATER COOLANT, M-281	F002	448.2
M BLDG	M WASTE WATER COOLANT, M-286	F002	442.0
M BLDG	M WASTE WATER COOLANT, M-287	F002	457.0
M BLDG	M WASTE WATER COOLANT, M-288	F002	479.0
M BLDG	M WASTE WATER COOLANT, M-292	F002	468.0
M BLDG	M WASTE WATER COOLANT, M-294	F002	452.0
M BLDG	M WASTE WATER COOLANT, M-295	F002	460.8
M BLDG	M WASTE WATER COOLANT, M-316	F002	453.6
M BLDG	M WASTE WATER COOLANT, M-317	F002	464.5
[illegible] BLDG	M WASTE WATER COOLANT, M-318	F002	452.9
[illegible] BLDG	M WASTE WATER COOLANT, M-320	F002	456.6
[illegible]G	M WASTE WATER COOLANT, M-321	F002	488.8

9.18-59
Bldg. M

M BLDG	M WASTE WATER COOLANT, M-322	F002	452.4
M BLDG	M WASTE WATER COOLANT, M-323	F002	452.6
M BLDG	M WASTE WATER COOLANT, M-324	F002	465.0
M BLDG	M WASTE WATER COOLANT, M-326	F002	474.3
M BLDG	M WASTE WATER COOLANT, M-327	F002	446.2
M BLDG	M WASTE WATER COOLANT, M-345	F002	434.7
M BLDG	M&T BLACK LABEL 2	NONE	23.6
M BLDG	M&T BLACK LABEL 2	NONE	20.0
M BLDG	M&T GREEN LABEL 2 NICKEL ADDITIVE	NONE	10.3
M BLDG	MACUBOND	D001 D002	9.1
M BLDG	MACUBOND 9804	D002	48.7
M BLDG	MACUBOND 9805	D002	48.5
M BLDG	MERCURY	D009	30.1
M BLDG	MERCURY, ASBESTOS MATERIAL	D009	64.0
M BLDG	METHYLENE CHLORIDE	F002 U080	116.6
M BLDG	MINERAL OIL TRANSFORMERS (1)	NONE	630.0
M BLDG	NICKEL ACETATE TETRAHYDRATE	NONE	42.8
M BLDG	NICKEL ACETATE TETRAHYDRATE	NONE	10.0
M BLDG	NICKEL ACETATE TETRAHYDRATE	NONE	10.0
M BLDG	NICKEL ACETATE TETRAHYDRATE	NONE	10.0
M BLDG	NICKEL ACETATE TETRAHYDRATE	NONE	10.0
M BLDG	NICKEL ACETATE WASTE	NONE	463.7
M BLDG	NICKEL ACETATE WASTE	NONE	258.2
M BLDG	NICKEL ACETATE WASTE	NONE	257.6
M BLDG	NICKEL ACETATE WASTE	NONE	264.1
M BLDG	NICKEL ACETATE WASTE	NONE	252.8
M BLDG	NICKEL ACETATE, M-306	D007 D009	286.0
M BLDG	NICKEL ACETATE, SODIUM HYDROXIDE RINSE WATER	D002	334.4
M BLDG	NICKEL ADDITIVE SA-1	NONE	48.3
M BLDG	NICKEL ADDITIVE Y-17	NONE	20.5
M BLDG	NICKEL ADDITIVE Y-17	NONE	21.0
M BLDG	NICKEL BRIGHT WASTE	D002 D004 D007 D008	531.7
M BLDG	NICKEL BRIGHT WASTE	D002 D004 D007 D008	590.5
M BLDG	NICKEL CHLORIDE, HYDROCHLORIC ACID WASTE	D002 D004 D006	552.9
M BLDG	NICKEL CHLORIDE, M-314	D002 D007	450.0
M BLDG	NICKEL SULFAMATE	D002	400.0
M BLDG	NICKEL WASTE, BORIC ACID, NICKELOUS CHLORIDE, M-206	NONE	240.0
M BLDG	NICKEL WASTE, M-259	D002	200.0
M BLDG	NICKEL WASTE, M-279	D002	147.4
M BLDG	NICKEL WASTE, M-282	NONE	271.0
M BLDG	NITRIC ACID DUCT RINSE WASTE, M-319	D002 D006 D007	148.2
M BLDG	NITRIC ACID RINSE WATER	D002	498.2
M BLDG	NITRIC ACID RINSE WATER	D002 D007 D008	531.5
M BLDG	NITRIC ACID WASTE, M-238	D002 D006 D007	286.0
M BLDG	NITRIC ACID WASTE, M-311	D002 D006 D007	462.0
M BLDG	OAKITE 191	NONE	198.0
M BLDG	OAKITE 30	NONE	34.5
M BLDG	OAKITE 30	NONE	7.3
M BLDG	OAKITE 30 RINSE WATER	D002	501.2
M BLDG	OAKITE 30 RINSE WATER	D002	519.4
M BLDG	OAKITE 30 RINSE WATER	D002	488.4
M BLDG	OAKITE 30 RINSE WATER	D002	472.7

p 7d

Bldg. M

M BLDG	OAKITE 30 RINSE WATER	D002	493.2
M BLDG	OAKITE 30 RINSE WATER	D002	618.4
M BLDG	OAKITE ALUMINUM CLEANER	D002	145.3
[illegible]JG	OAKITE CITRIDET	D001	40.3
[illegible]DG	OIL WASTE	NONE	400.9
M BLDG	OIL WASTE	NONE	302.4
M BLDG	OIL WASTE	NONE	433.2
M BLDG	OIL WASTE	NONE	434.4
M BLDG	OIL WASTE	NONE	233.6
M BLDG	OIL WASTE	NONE	415.1
M BLDG	OIL WASTE, ABSORBED	D004	120.7
M BLDG	OIL WASTE, HYDRAULIC OIL	NONE	235.0
M BLDG	OIL WASTE, M-746	NONE	282.1
M BLDG	OIL WASTE, SILICON, MINERAL OIL	NONE	307.1
M BLDG	OIL, WATER WASTE	NONE	412.0
M BLDG	OXIDE REMOVAL DEBRIS	NONE	58.0
M BLDG	PASSIVATING WASTE DEBRIS	D007	9.3
M BLDG	PASSIVATING WASTE DEBRIS	D007	28.3
M BLDG	PERCHLOROETHYLENE	D039 F001	408.5
M BLDG	PERCHLOROETHYLENE DEBRIS	D039	2.2
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
[illegible]DG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
[illegible]DG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPHTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPHTHA, UNIT 341-01314	D001 D018 D039	75.0
M BLDG	PETROLEUM NAPHTHA, UNIT 341-01314	D001 D018 D039	75.0
M BLDG	PETROLEUM NAPHTHA, UNIT 341-01314	D001 D018 D039	75.0
M BLDG	PETROLEUM NAPHTHA, UNIT 341-01330	D001 D018 D039	75.0
M BLDG	PETROLEUM NAPHTHA, UNIT 341-01330	D001 D018 D039	75.0
M BLDG	PETROLEUM NAPHTHA, UNIT 341-01330	D001 D018 D039	75.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	86.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	45.0
M BLDG	PETROLEUM NAPTHA	D001 D018 D039	86.0
[illegible]G	PHOSPHORIC ACID DEBRIS	NONE	27.1
[illegible]DG	PHOSPHORIC ACID DEBRIS	NONE	30.0

9.18-61

Bldg. M

M BLDG	PHOSPHORIC ACID RINSE WATER	D002	530.6
M BLDG	PHOSPHORIC ACID RINSE WATER	D002	640.3
M BLDG	PHOSPHORIC ACID, M-250	D002	100.0
M BLDG	POTASSIUM PERMANGANATE WASTE, M-276	D002	393.3
M BLDG	PYROLITE ADDITION AGENT	D002	14.6
M BLDG	RINSE WATER	NONE	456.2
M BLDG	RINSE WATER	NONE	480.5
M BLDG	SANODOL BLACK POWDER	NONE	47.0
M BLDG	SCRAP DYE TANK	D006 D007	11.4
M BLDG	SODIUM CYANIDE	D003 P106	103.0
M BLDG	SODIUM CYANIDE DEBRIS	D003	11.1
M BLDG	SODIUM HYDROXIDE DEBRIS	NONE	93.6
M BLDG	SODIUM HYDROXIDE POTASSIUM HYDROXIDE DEBRIS	NONE	4.7
M BLDG	SODIUM HYDROXIDE RINSE WATER	D002	614.4
M BLDG	SODIUM HYDROXIDE RINSE WATER	D002	457.3
M BLDG	SODIUM HYDROXIDE RINSE WATER	D002	496.8
M BLDG	SODIUM HYDROXIDE SOLUTION	D002	543.7
M BLDG	SODIUM HYDROXIDE SOLUTION, M-289	NONE	182.0
M BLDG	SODIUM HYDROXIDE WASTE, M-283	NONE	402.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM HYDROXIDE DEBRIS	NONE	4.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	482.8
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	525.8
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	199.7
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	286.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	225.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-204	D002	240.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-207	D002	240.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-215	D002	240.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-218	D002	240.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-225	D002	240.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-230	D002	240.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-233	D002	240.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-240	D002	240.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-251	D002	450.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-257	D002	200.0
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-263	D002	265.5
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-269	D002	258.0

M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-270	D002	243.2
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-271	D002	250.5
[illegible]DG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-273	D002	239.6
M BLDG	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-300	D002	232.2
M BLDG	SODIUM HYDROXIDE, RINSE WATER	D002	588.7
M BLDG	SODIUM HYDROXIDE, ZINC OXIDE RINSE WATER	D002	507.8
M BLDG	SOIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-248	D002	240.0
M BLDG	SPARTAN DC-13 CLEANER	D002	38.9
M BLDG	STODDARD SOLVENT, M-266	D001	103.9
M BLDG	SULFURIC ACID	D002	28.6
M BLDG	SULFURIC ACID RINSE WATER	D002	523.6
M BLDG	SULFURIC ACID SOLUTION	D002	330.1
M BLDG	TETRA ETCH	D001	1.1
M BLDG	TRIM-SOL WASTE	NONE	134.2
M BLDG	TURCO KWIK SOLVE	D001	108.0
M BLDG	TURCO NITRAD	D002	66.5
M BLDG	UNICROME C11-X-B	D007	72.2
M BLDG	VINYL PYRROLIDONE	NONE	3.2
M BLDG	WOODS NICKEL RINSE WATER	D004	573.6
M BLDG	WOODS NICKEL, BRIGHT NICKEL DEBRIS	NONE	571.8
M BLDG	WOODS NICKEL, BRIGHT NICKEL DEBRIS	NONE	167.4
M BLDG	WOODS NICKEL, BRIGHT NICKEL DEBRIS	NONE	446.9
[illegible]DG	ZINCATE WASTE	D002	63.8
[illegible]DG	ZINCATE WASTE, M-244	D002	110.0
M BLDG	ZINCATE WASTE, M-265	D002	250.0
M BLDG (PS-01)	ACETONE, ALCOHOL WASTE	D001 F003	265.0
M BLDG (PS-01)	ACETONE, ALCOHOL WASTE, M-484	D001 F003	295.2
M BLDG (PS-01)	ACETONE, ALCOHOL WASTE, M-493	D001 F003	235.0
M BLDG (PS-01)	ACETONE, ALCOHOL WASTE, M-706	D001 F003	413.5
M BLDG (PS-02)	RINSE WATER, NITRIC	D002 D006 D007 D008	480.0
M BLDG (PS-02)	RINSE WATER, NITRIC, M-449	D002	253.0
M BLDG (PS-02)	RINSE WATER, NITRIC, M-473	D002	596.6
M BLDG (PS-02)	RINSE WATER, NITRIC, M-474	D002 D006 D007	559.5
M BLDG (PS-02)	RINSE WATER, NITRIC, M-518	D002 D006 D007 D008	491.3
M BLDG (PS-02)	RINSE WATER, NITRIC, M-560	D002 D007	466.4
M BLDG (PS-02)	RINSE WATER, NITRIC, M-73	D002 D006 D007 D008	532.0
M BLDG (PS-02)	RINSE WATER, SULFURIC, M-477	D002	361.6
M BLDG (PS-02)	RINSE WATER, SULFURIC, M-478	D002	366.6
M BLDG (PS-02)	RINSE WATER, SULFURIC, M-483	D002	462.0
M BLDG (PS-03)	CHROMIC ACID SOLUTION, M-487	D002 D007	645.3
M BLDG (PS-03)	CHROMIC ACID SOLUTION, M-488	D002 D007	601.4
M BLDG (PS-03)	RINSE WATER, FLOOR WASTE	D007 D008	414.0
M BLDG (PS-03)	RINSE WATER, FLOOR WASTE	D007 D008	407.0
M BLDG (PS-03)	RINSE WATER, FLOOR WASTE	D007 D008	411.0
M BLDG (PS-03)	RINSE WATER, FLOOR WASTE	D007 D008	433.0
M BLDG (PS-03)	RINSE WATER, FLOOR WASTE	D007 D008	421.0
[illegible] BLDG (PS-03)	RINSE WATER, FLOOR WASTE	D007 D008	398.0
[illegible]LDG (PS-03)	RINSE WATER, FLOOR WASTE	D007 D008	402.0
[illegible]DG (PS-03)	RINSE WATER, FLOOR WASTE	D007 D008	451.0

P 7

9.18-63
Bldg. M1

M BLDG (PS-05)	RINSE WATER, M-69	NONE	508.4
M BLDG (PS-05)	RINSE WATER, M-70	NONE	474.0
M BLDG (PS-05)	RINSE WATER, M-71	NONE	242.4
M BLDG (PS-08)	RINSE WATER, COPPER CYANIDE	F007 F009	451.2
M BLDG (PS-08)	RINSE WATER, COPPER CYANIDE	F007 F009	535.7
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-491	D004 D006 F007 F009	475.6
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-497	D004 D006 F007 F009	456.3
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-498	D004 D006 F007 F009	462.6
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-499	D004 D006 F007 F009	461.0
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-500	D004 D006 F007 F009	475.6
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-501	D004 D006 F007 F009	468.2
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-502	D004 D006 F007 F009	476.6
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-503	D004 D006 F007 F009	475.4
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-504	D004 D006 F007 F009	475.5
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-505	D004 D006 F007 F009	476.7
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-506	D004 D006 F007 F009	476.6
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-507	D004 D006 F007 F009	474.3
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-508	D004 D006 F007 F009	474.8
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-509	D004 D006 F007 F009	476.9
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-510	D004 D006 F007 F009	476.8
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-511	D004 D006 F007 F009	476.8
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-512	D004 D006 F007 F009	476.6
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-513	D004 D006 F007 F009	478.5
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-514	D004 D006 F007 F009	468.2
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-515	D004 D006 F007 F009	476.0
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-516	D004 D006 F007 F009	475.4
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-519	D004 D006 F007 F009	477.4
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-520	D004 D006 F007 F009	482.2
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-521	D004 D006 F007 F009	484.4
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-522	D004 D006 F007 F009	484.4
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-523	D004 D006 F007 F009	481.1
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-524	D004 D006 F007 F009	487.2
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-525	D004 D006 F007 F009	484.0
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-526	D004 D006 F007 F009	474.2
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-527	D004 D006 F007 F009	480.2
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-528	D004 D006 F007 F009	474.8
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-529	D004 D006 F007 F009	481.8
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-530	D004 D006 F007 F009	228.4
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-531	D004 D006 F007 F009	472.1
M BLDG (PS-09)	BRIGHTENER BATH WASTE WATER, M-532	D004 D006 F007 F009	486.6
M BLDG (PS-09)	CYANIDE PIT WASTE	D006 D007 F007 F009	132.4
M BLDG (PS-10)	DYE WASTE, M-481	D007	475.4
M BLDG (PS-10)	DYE WASTE, M-562	D006 D007	426.5
M BLDG (PS-10)	DYE WASTE, M-75	D007	446.6
M BLDG (PS-12)	PHOSPHORIC ACID RINSE WASTE, M-475	D002	623.3
M BLDG (PS-12)	PHOSPHORIC ACID RINSE WASTE, M-476	D002	801.6
M BLDG (PS-13)	FREON WASTE, M-088	F001	638.6
M BLDG (PS-13)	FREON WASTE, M-468	F001	622.6
M BLDG (PS-13)	FREON WASTE, M-495	F001	734.0
M BLDG (PS-14)	NICKEL ACETATE WASTE	D006 D007	488.2
M BLDG (PS-14)	NICKEL ACETATE WASTE, M-479	NONE	496.6
M BLDG (PS-15)	NICKEL FLOOR WASTE	D002 D007	172.5
M BLDG (PS-15)	NICKEL FLOOR WASTE, M-489	D002 D007	474.7
M BLDG (PS-16)	OAKITE POWDER	NONE	433.4
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	504.1

M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-469	D002	400.0
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-480	D002	498.2
[illegible]DG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-482	D002	480.4
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-485	D002 D007	651.3
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-486	D002 D007	415.4
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-490	D002	489.1
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-492	D002	450.3
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-494	D002	507.5
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-496	D002 D007	501.4
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-535	D002	275.7
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-542	D002	411.0
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-551	D002	422.0
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-552	D002	377.0
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-555	D002	424.0
[illegible]DG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-558	D002	428.9
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-559	D002	471.2
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-564	D002	489.1
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-68	D002	437.4
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-72	D002	489.6
M BLDG (PS-17)	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-87	D002	494.4
M BLDG (PS-21)	BIOACT EC-7 WASTE, M-696	D001	446.5
M BLDG SUBSTATION	PCB CAPACITORS >500PPM, SN: 50K-2764GG, -2876C, -2758GG, -2866C, -2016B, -2807A	PCB1	356.4
M BLDG SUBSTATION	PCB DEBRIS >500PPM, FROM SN: PAV024001	PCB2	99.0
M BLDG SUBSTATION	PCB OIL >500PPM, FROM SN: PAV024001	PCB2	688.6
M BLDG SUBSTATION	PCB OIL >500PPM, FROM SN: PAV024001	PCB2	627.0
M BLDG SUBSTATION	PCB OIL >500PPM, FROM SN: PAV024001	PCB2	688.6
M BLDG SUBSTATION	PCB OIL >500PPM, FROM SN: PAV024001	PCB2	688.6
M BLDG SUBSTATION	PCB TRANSFORMER >500PPM, SN: PAV024001, OUT OF SERVICE DATE 12-09-91	PCB1	5288.8
[illegible]DG, BLDG 27	EXPLOSIVE PROCESS SOLVENT WASTE	D001 F003	187.7
[illegible]DG, PS-01	ACETONE, ALCOHOL WASTE	D001 F003	131.5

P7i

9.18-65
Bldg. M

M BLDG, PS-01	ACETONE, ALCOHOL WASTE	D001 F003	241.1
M BLDG, PS-09	CYANIDE PIT WASTE	D003 D006 D007 D011 F007 F009	213.1
M BLDG, PS-10	DYE WASTE	D007	477.5
M BLDG, PS-10	DYE WASTE	D006 D007	357.7
M BLDG, PS-10	DYE WASTE	D007	472.7
M BLDG, PS-10	DYE WASTE	D006 D007	493.6
M BLDG, PS-10	DYE WASTE, M-77	D007	427.5
M BLDG, PS-13	FREON WASTE	F001	283.8
M BLDG, PS-13	FREON WASTE	F001	510.3
M BLDG, PS-14	NICKEL ACETATE WASTE	NONE	471.4
M BLDG, PS-14	NICKEL ACETATE WASTE	NONE	355.5
M BLDG, PS-14	NICKEL ACETATE WASTE	NONE	479.1
M BLDG, PS-16	OAKITE 30 WASTE	D002	430.3
M BLDG, PS-17	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	461.7
M BLDG, PS-17	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	501.8
M BLDG, PS-17	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	476.3
M BLDG, PS-17	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	486.3
M BLDG, PS-17	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE	D002	493.3
M BLDG, PS-21	BIOACT EC7 WASTE	D001	318.4
M BLDG- BRINE LINE	ASBESTOS WASTE, DEBRIS, PIPE	NONE	7100.0
M BLDG- BRINE LINE	ASBESTOS WASTE, DEBRIS, PIPE	NONE	5600.0
M BLDG- BRINE LINE	ASBESTOS WASTE, DEBRIS, PIPE	NONE	8000.0
M BLDG- BRINE LINE	ASBESTOS WASTE, DEBRIS, PIPE	NONE	8000.0
M BLDG- BRINE LINE	ASBESTOS WASTE, DEBRIS, PIPE	NONE	8000.0
M BLDG- BRINE LINE	ASBESTOS WASTE, DEBRIS, PIPE	NONE	8000.0
M-008	ETHYLENE GLYCOL, XYLENE CLEANUP	F003	44.1
M-008	FREON WASTE	F001	388.1
M-008	FREON WASTE, M-331	F001	492.6
M-008	FREON WASTE, M-415	F001	625.0
M-008	FREON WASTE, M-450	F001	571.8
M-008	M WASTE WATER COOLANT	NONE	464.8
M-008	M WASTE WATER COOLANT	NONE	484.8
M-008	M WASTE WATER COOLANT, M-346	F002	468.6
M-008	M WASTE WATER COOLANT, M-354	F002	467.1
M-008	M WASTE WATER COOLANT, M-355	F002	493.2
M-008	M WASTE WATER COOLANT, M-361	F002	434.0
M-008	M WASTE WATER COOLANT, M-365	F002	419.0
M-008	M WASTE WATER COOLANT, M-366	F002	461.0
M-008	M WASTE WATER COOLANT, M-370	F002	461.0
M-008	M WASTE WATER COOLANT, M-381	F002	461.5
M-008	M WASTE WATER COOLANT, M-386	F002	467.3
M-008	M WASTE WATER COOLANT, M-387	F002	473.0
M-008	M WASTE WATER COOLANT, M-388	F002	487.0
M-008	M WASTE WATER COOLANT, M-392	F002	409.0
M-008	M WASTE WATER COOLANT, M-393	F002	449.0
M-008	M WASTE WATER COOLANT, M-395	F002	492.9
M-008	M WASTE WATER COOLANT, M-397	F002	462.7
M-008	M WASTE WATER COOLANT, M-398	F002	465.3
M-008	M WASTE WATER COOLANT, M-399	F002	497.0
M-008	M WASTE WATER COOLANT, M-400	F002	473.2

M-008	M WASTE WATER COOLANT, M-401	F002	487.8
M-008	M WASTE WATER COOLANT, M-402	F002	465.9
M-008	M WASTE WATER COOLANT, M-405	F002	475.0
[illegible]8	M WASTE WATER COOLANT, M-406	F002	455.0
[illegible]8	M WASTE WATER COOLANT, M-411	F002	452.6
M-008	M WASTE WATER COOLANT, M-414	F002	466.1
M-008	M WASTE WATER COOLANT, M-418	F002	431.8
M-008	M WASTE WATER COOLANT, M-420	F002	483.8
M-008	M WASTE WATER COOLANT, M-448	F002	486.7
M-008	M WASTE WATER COOLANT, M-452	NONE	485.8
M-008	M WASTE WATER COOLANT, M-457	NONE	476.0
M-008	M WASTE WATER COOLANT, M-459	NONE	476.2
M-008	M WASTE WATER COOLANT, M-464	NONE	282.2
M-008	M WASTE WATER COOLANT, M-465	NONE	483.3
M-008	M WASTE WATER COOLANT, M-467	NONE	485.1
M-008	OIL WASTE	NONE	427.1
M-008	OIL WASTE	NONE	436.5
M-008	OIL WASTE	NONE	420.1
M-008	OIL WASTE	NONE	375.1
M-008	OIL WASTE	NONE	369.8
M-008	OIL WASTE	NONE	434.1
M-008	OIL WASTE	NONE	331.2
M-008	OIL WASTE	NONE	354.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
[illegible]8	PETROLEUM NAPHTHA	D001 D018 D039	62.6
[illegible]8	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
[illegible]008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
[illegible]08	PETROLEUM NAPHTHA	D001 D018 D039	62.6
[illegible]8	PETROLEUM NAPHTHA	D001 D018 D039	62.6

P 7K

9.18-67 Bldg. M

M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
[illegible]8	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	62.6
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	86.0
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-008	PETROLEUN NAPHTHA	D001 D018 D039	62.6
M-019	CHROMIUM SLUDGE WITH NITRIC ACID	D007	618.4
M-019	CHROMIUM SYSTEM DEBRIS (#28)	D007	154.7
M-019	CHROMIUM SYSTEM DEBRIS (#29)	D007	160.9
M-019	CHROMIUM SYSTEM DEBRIS (#30)	D007	116.2
M-019	CHROMIUM SYSTEM DEBRIS (#63)	D007	230.0
M-019	CLEANUP MATERIALS AND PPE (#26)	D006 D007 D010	96.6
M-019	CLEANUP MATERIALS AND PPE (#27)	D006 D007 D010	94.7
M-019	CLEANUP MATERIALS AND PPE (#53)	D006 D007 D010	88.9
M-019	PCB BALLASTS >500PPM, (24) OUT OF SERVICE DATE 04-07-92	PCB2	241.5
M-019	PLATING SHOP CLEANUP MATERIALS (#104)	D006 D007 D010	86.4
M-019	PLATING SHOP CLEANUP MATERIALS (#105)	D006 D007 D010	82.5
M-019	PLATING SHOP CLEANUP MATERIALS (#94)	D006 D007 D010	104.0
[illegible]19	PLATING SHOP FLOOR DEBRIS (#102)	D006 D007 D010	216.6
M-019	PLATING SHOP WASH WATER (#100)	D007	423.0
M-019	PLATING SHOP WASH WATER (#101)	D006 D007 D008	120.5
M-019	PLATING SHOP WASH WATER (#103)	D006 D007	356.0
M-019	PLATING SHOP WASH WATER (#19)	D006	503.7
M-019	PLATING SHOP WASH WATER (#20)	D006	466.9
M-019	PLATING SHOP WASH WATER (#25)	D006 D007	459.8
M-019	PLATING SHOP WASH WATER (#31)	D006 D007	484.1
M-019	PLATING SHOP WASH WATER (#33)	D006 D007 D008	504.7
M-019	PLATING SHOP WASH WATER (#35)	D006 D007 D008	493.5
M-019	PLATING SHOP WASH WATER (#37)	D008	469.3
M-019	PLATING SHOP WASH WATER (#38)	D006 D007 D008	402.1
M-019	PLATING SHOP WASH WATER (#39)	D006 D007 D008	332.3
M-019	PLATING SHOP WASH WATER (#40)	D006 D007 D008	460.9
M-019	PLATING SHOP WASH WATER (#41)	D006 D007 D008	489.2
M-019	PLATING SHOP WASH WATER (#43)	D006 D007	460.2
M-019	PLATING SHOP WASH WATER (#44)	D006 D007 D008	489.2
M-019	PLATING SHOP WASH WATER (#45)	D007	479.7
M-019	PLATING SHOP WASH WATER (#49)	D007	154.7
M-019	PLATING SHOP WASH WATER (#54)	D007 D008	475.9
M-019	PLATING SHOP WASH WATER (#57)	D006	484.0
M-019	PLATING SHOP WASH WATER (#58)	D006 D007 D008	465.0
M-019	PLATING SHOP WASH WATER (#59)	D006 D007	476.0
M-019	PLATING SHOP WASH WATER (#61)	D006	484.0
M-019	PLATING SHOP WASH WATER (#62)	D006 D007	439.0
M-019	PLATING SHOP WASH WATER (#65)	D006 D007	501.1
[illegible]9	PLATING SHOP WASH WATER (#66)	D006 D007 D008	478.6

M-019	PLATING SHOP WASH WATER (#71)	D006 D007 D008	502.3
M-019	PLATING SHOP WASH WATER (#73)	D007	431.9
M-019	PLATING SHOP WASH WATER (#79)	D006 D007	489.3
[illegible]	PLATING SHOP WASH WATER (#87)	D007	473.5
[illegible]9	PLATING SHOP WASH WATER (#88)	D006 D007 D008	486.2
[illegible]19	PLATING SHOP WASH WATER (#88)	D007	485.5
M-019	PLATING SHOP WASH WATER (#89)	D006	481.1
M-019	PLATING SHOP WASH WATER (#95)	D007	491.0
M-019	PLATING SHOP WASH WATER (#96)	D007	489.3
M-019	PLATING SHOP WASH WATER (#97)	D006 D007	483.5
M-019	PLATING SHOP WASH WATER (#98)	D006 D007	487.0
M-019	PLATING SHOP WASH WATER (#99)	D006 D007	476.6
M-019	PLATING SHOP WASH WATER- ACID (#21)	D002 D006 D007	461.5
M-019	PLATING SHOP WASH WATER- ACID (#22)	D002 D006 D007	517.5
M-019	PLATING SHOP WASH WATER- ACID (#23)	D002 D006 D007	485.9
M-019	PLATING SHOP WASH WATER- ACID (#24)	D002 D006 D007	487.6
M-019	PLATING SHOP WASH WATER- ACID (#34)	D002 D006 D007 D008	468.6
M-019	PLATING SHOP WASH WATER- BASE (#14)	D002 D006	304.4
M-019	PLATING SHOP WASH WATER- BASE (#15)	D002 D006	490.0
M-019	PLATING SHOP WASH WATER- BASE (#16)	D002 D006	486.0
M-019	PLATING SHOP WASH WATER- CYANIDES (#36)	D006 D007 D008 F007 F009	480.8
M-019	PLATING SHOP WOOD DEBRIS (#92)	D006 D007 D010	189.6
M-019	PLATING SHOP WOOD DEBRIS (#93)	D006 D007 D010	431.0
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#1)	D006 D007 D010	162.7
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#10)	D006 D007 D010	140.6
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#11)	D006 D007 D010	207.5
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#12)	D006 D007 D010	194.6
[illegible]19	WOOD DEBRIS, CLEANUP DEBRIS (#13)	D006 D007 D010	113.0
[illegible]9	WOOD DEBRIS, CLEANUP DEBRIS (#2)	D006 D007 D010	183.9
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#3)	D006 D007 D010	169.2
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#4)	D006 D007 D010	169.0
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#46)	D006 D007 D010	92.0
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#47)	D006 D007 D010	146.7
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#48)	D006 D007 D010	65.1
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#5)	D006 D007 D010	185.6
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#6)	D006 D007 D010	157.2
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#60)	D006 D007 D010	180.0
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#7)	D006 D007 D010	164.6
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#8)	D006 D007 D010	136.9
M-019	WOOD DEBRIS, CLEANUP DEBRIS (#9)	D006 D007 D010	155.2
M-038	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-038	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-038	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-038	PETROLEUM NAPHTHA	D001 D018 D039	65.5
M-102	ASPHALT	NONE	89.3
M-103	EPON 828 RESIN	NONE	1.4
M-103	MARKER BOARD CLEANER	D002	2.5
M-103	VERSAMID 140	NONE	0.9
M-108	ACETONE, ISOPROPANOL WASTE, M-347	D001 F003	227.1
M-108	ACETONE, ISOPROPANOL WASTE, M-379	D001 F003	353.0
M-108	ACETONE, ISOPROPANOL WASTE, M-409	D001 F003	364.2
M-108	ACETONE, ISOPROPANOL, TRACE PCB WASTE	PCB2 D001 F001 F003	426.5
[illegible]3	CHROMATE SOLUTION	D007	197.7

P7m

9.18-69
Bldg. m

M-108	CHROMIUM SYSTEM DEBRIS	D007	160.9
M-108	CYANIDE RINSE WATER, M-330	D006 D007 F007 F009	445.7
M-108	CYANIDE WASTE SOLUTION, M-296	D011 F007 F009	387.7
[illegible]8	DYE WASTE, M-350	D006 D007	274.7
M-108	DYE WASTE, M-385	D007	462.0
M-108	DYE WASTE, M-389	D007	487.8
M-108	DYE WASTE, M-396	D007	437.0
M-108	DYE WASTE, M-444	NONE	261.0
M-108	FERRIC CHLORIDE	D002	586.0
M-108	FERRIC CHLORIDE	D002	536.0
M-108	FERRIC CHLORIDE	D002 D006 D007 D008	574.7
M-108	FERRIC CHLORIDE	D002 D006 D007 D008	643.1
M-108	FREON WASTE, M-364	F001	741.9
M-108	M DYE WASTE, M-380	D007	378.0
M-108	M DYE WASTE, M-382	D007	100.0
M-108	M FLOOR WASTE, M-442	D007 F003	198.3
M-108	M RINSE WATER, M-334	NONE	479.1
M-108	M RINSE WATER, M-335	NONE	482.7
M-108	M RINSE WATER, M-338	NONE	265.6
M-108	M RINSE WATER, M-340	NONE	281.0
M-108	M RINSE WATER, M-344	NONE	231.6
M-108	M RINSE WATER, M-348	NONE	427.5
M-108	M RINSE WATER, M-349	NONE	498.5
M-108	M RINSE WATER, M-352	NONE	480.5
M-108	M RINSE WATER, M-353	NONE	498.5
M-108	M RINSE WATER, M-356	D002	355.2
M-108	M RINSE WATER, M-357	D006 D007	115.0
M-108	M RINSE WATER, M-367	D002	262.0
M-108	M RINSE WATER, M-371	NONE	176.0
M-108	M RINSE WATER, M-383	NONE	400.5
M-108	M RINSE WATER, M-384	D002 D006 D007	272.0
M-108	M RINSE WATER, M-410	NONE	133.1
M-108	M RINSE WATER, M-416	NONE	283.1
M-108	M RINSE WATER, M-419	NONE	279.2
M-108	M RINSE WATER, M-421	D007 F003	75.3
M-108	M RINSE WATER, M-422	NONE	277.7
M-108	M RINSE WATER, M-423	NONE	279.9
M-108	M RINSE WATER, M-424	NONE	280.9
M-108	M RINSE WATER, M-425	NONE	278.8
M-108	M RINSE WATER, M-426	NONE	282.0
M-108	M RINSE WATER, M-427	NONE	281.2
M-108	M RINSE WATER, M-428	NONE	255.7
M-108	M RINSE WATER, M-429	NONE	498.1
M-108	M RINSE WATER, M-438	NONE	341.6
M-108	M RINSE WATER, M-451	D002	269.5
M-108	M RINSE WATER, M-454	D002	234.4
M-108	M RINSE WATER, M-461	NONE	368.4
M-108	M RINSE WATER, M-462	NONE	465.8
M-108	M RINSE WATER- ACID, M-333	D002	482.7
M-108	M RINSE WATER- ACID, M-336	D002	264.4
M-108	M RINSE WATER- ACID, M-337	D002	262.4
M-108	M RINSE WATER- ACID, M-341	D002	280.4
M-108	M RINSE WATER- ACID, M-342	D002	169.6
M-108	M RINSE WATER- ACID, M-343	D002	258.4
[illegible]8	M RINSE WATER- ACID, M-439	D002	202.3

P 7

Bldg. M

M-108	M RINSE WATER- ACID, M-447	D002	260.0
M-108	M RINSE WATER- BASE, M-329	D002	257.6
M-108	M RINSE WATER- CYANIDES, M-373	D006 D007 F007 F009	494.0
[illegible]18	NICKEL ACETATE WASTE, M-435	NONE	470.0
[illegible]8	NICKEL ACETATE WASTE, M-436	NONE	271.9
[illegible]8	NICKEL ACETATE, M-351	D006 D007	110.0
M-108	NICKEL SULFATE CLEANUP MATERIAL	NONE	96.7
M-108	NICKEL SULFATE, M-441	NONE	306.0
M-108	NITRIC ACID RINSE WATER, M-412	D001 D002 D007	371.7
M-108	NITRIC ACID WASTE, M-456	D001 D002	298.3
M-108	OAKITE 30 WASTE, M-358	D002	200.0
M-108	PERCHLOROETHYLENE, M-275	D039	174.5
M-108	PHOSPHORIC ACID WASTE, M-443	D002 D006 D007 F003	226.7
M-108	PHOSPHORIC ACID WASTE- M-332	D002 D006 D007	342.8
M-108	SCUBBER FLOOR WASTE, M-360	NONE	186.0
M-108	SODIUM HYDROXIDE WASTE, M-328	D002	554.6
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-339	D002	130.9
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-359	D002	254.0
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-378	D002	461.2
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-390	D002	453.0
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-394	D002	506.7
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-407	D002	488.2
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-408	D002	425.9
M-[illegible]8	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-413	D002	491.7
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-417	D002	492.5
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-430	D002	500.2
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-445	D002	509.2
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-453	D002	510.4
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-455	D002	511.6
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-458	D002	283.7
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-460	D002	284.7
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-463	D002	504.2
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE WASTE, M-466	D002	430.5
M-108	SODIUM HYDROXIDE, POTASSIUM PERMANGANATE, M-437	D002	449.8
M-108	SULFURIC ACID RINSE WASTE, M-374	D002	400.0
M-[illegible]	SULFURIC ACID RINSE WASTE, M-375	D002	400.0
M[illegible]	SULFURIC ACID WASTE, M-362	D002 D007	290.0

9.18-71
Bldg.m

M-108	SULFURIC ACID WASTE, M-363	D002 D007	531.0
M-108	TASBLACK BL-11	D001	287.8
M-108	WATTS NICKEL, M-440	D002 D008	299.8
[illegible]8	ZINCATE WASTE, M-377	D002	98.0
M-223	GLYCERIN	NONE	1.5
M-225	CITRIC ACID SOLUTION	D002	6.9
M-225	GC CEMENT SOLVENT	D001 D035 F005	0.8
M-225	PDS PIGMENT	NONE	8.4
M-225	PHOSPHORIC ACID	D002	0.1
M-226	MERCURY SWITCHES	D009	4.0
M BLDG	3M LAPPING VEHICLE	D001	32.2
M BLDG	ACETONE	D001 F003 U002	19.5
M BLDG	ACETONE, ISOPROPANOL WASTE	D001 F003	240.0
M BLDG	ACETONE, ISOPROPANOL WASTE	D001 F003	219.0
M BLDG	ACETONE, ISOPROPANOL WASTE	D001 F003	158.3
M BLDG	ACETONE, ISOPROPANOL WASTE, M-221	D001 F003	444.4
M BLDG	ACETONE, ISOPROPANOL WASTE, M-235	D001 F003	240.0
[illegible]DG	ACETONE, ISOPROPANOL WASTE, M-256	D001 F003	216.7
[illegible]DG	ALCOHOL WASTE, M-89	D001	154.2
M BLDG	ALODINE 1200S	D007 F007 F009	30.0
M BLDG	ALODINE 1200S	D007 F007 F009	23.8
M BLDG	ALODINE DYE WASTE	D006 D007	1.2
M BLDG	ALODINE WASTE SOLUTION	D007 F007 F009	467.3
M BLDG	ALODINE WASTE SOLUTION	D007 F007 F009	397.8
M BLDG	ALODINE WASTE, M-307	D007 F007	146.0
M BLDG	ALUMINUM BLUE POWDER	NONE	7.2
M BLDG	ALUMINUM FAST RED POWDER	NONE	3.4
M BLDG	ALUMINUM TURQUOISE POWDER	NONE	5.8
M BLDG	ALUMINUM VIOLET POWDER	NONE	5.0
M BLDG	ALUMINUM VIOLET POWDER	NONE	5.2
M BLDG	AMMONIUM BIFLUORIDE ACID WASTE	D002	209.0
M BLDG	AMMONIUM HYDROXIDE	D002	1.7
M BLDG	AMMONIUM PERSULFATE	D001	10.1
M BLDG	ANODIZE CHROME DEBRIS	D007	89.7
M BLDG	ANODIZE PIT WASTE	NONE	5.3
M BLDG	ANODOL MS-1 NICKEL ACETATE	NONE	43.4
M BLDG	AROJET ATC ACCELERATOR	NONE	3.1
M BLDG	ASBESTOS WASTE	NONE	85.0
M BLDG	ASBESTOS WASTE	NONE	210.0
M BLDG	BARRET ADDITIVE A	NONE	27.3
M BLDG	BARRETT SNAC	NONE	43.7
M BLDG	BIOACT EC-7	D001	8.4
M BLDG	BIOACT EC-7 WASTE	D001	230.1
[illegible]DG	BIOACT EC-7, ACETONE WASTE, M-534	D001 F003	510.1

PLATING SHOP	DILUTE HCL	D002	36.2
PLATING SHOP	DILUTE NITRIC ACID	D002	31.6
PLATING SHOP	DOW THERM SR-1	NONE	4.0
PLATING SHOP	DURO SUPER GLUE REMOVER	D001	3.0
PLATING SHOP	DYCHEM LAYOUT FLUID	D001 F003	2.2
PLATING SHOP	DYE TANKS	D006 D007	33.8
PLATING SHOP	E BRITE 20/20	NONE	86.0
PLATING SHOP	E BRITE 20/20	NONE	143.4
PLATING SHOP	E-BRIGHT 30/31	NONE	10.9
PLATING SHOP	E-BRIGHT 30/32	NONE	9.5
PLATING SHOP	ELECTROLESS NICKEL WASTE	NONE	1.7
PLATING SHOP	ELECTROLYTE	NONE	0.2
PLATING SHOP	ELECTROLYTE	NONE	0.3
PLATING SHOP	ELECTROLYTE	NONE	0.3
PLATING SHOP	ELECTROLYTE LNC-3	NONE	2.0
PLATING SHOP	ELECTROLYTE MSC-4	D002	1.5
PLATING SHOP	ELECTROLYTE STAINLESS STEEL	NONE	0.6
PLATING SHOP	ELECTROPHORIC SOLUTION	D001	4.9
PLATING SHOP	EMERSON ECCOCOAT CC-2	D001 D011 F005	0.5
PLATING SHOP	ENGRAVERS ENAMEL PAINT	D001	2.0
PLATING SHOP	ETHYLENE GLYCOL RAGS	NONE	4.5
PLATING SHOP	FERRIC CHLORIDE	NONE	1.8
PLATING SHOP	FERRIC CHLORIDE	NONE	1.0
PLATING SHOP	FLEXCO EPOXY RESIN	NONE	3.0
PLATING SHOP	FLEXIBLE FOAM ADHESIVE	D040 F002	2.2
PLATING SHOP	FLOOR WASTE- ACID	D002	8.1
PLATING SHOP	GRAPHITE	NONE	25.6
PLATING SHOP	GRIND SAFE CUTTING FLUID	NONE	1.0
PLATING SHOP	HYDROCHLORIC ACID	D002	0.2
PLATING SHOP	HYDROFLUORIC ACID	D002 U134	2.0
PLATING SHOP	HYDROFLUORIC ACID	D002 U134	1.9
PLATING SHOP	LAMP BLACK	NONE	1.0
PLATING SHOP	LEAD	D008	25.0
PLATING SHOP	LOCTITE WATER PROOFING SOLUTION	D001 D035 F005	7.0
PLATING SHOP	M&T BLACK LABEL	NONE	25.0
PLATING SHOP	M&T GREEN LABEL	NONE	32.0
PLATING SHOP	M&T MAKEUP BRIGHTNER	NONE	7.8
PLATING SHOP	M&T NICKEL ADDITIVE	NONE	32.5
PLATING SHOP	M&T NICKEL ADDITIVE	NONE	16.0
PLATING SHOP	MARKER BOARD CLEANER 202	D001	2.2
PLATING SHOP	MERCURIC CHLORIDE	D009	0.1
PLATING SHOP	MERCURY SALTS	D009	1.0
PLATING SHOP	MERCURY WASTE	D009	2.1
PLATING SHOP	MERCURY WASTE	D009	1.8
PLATING SHOP	METHYL ETHYL KETONE PEROXIDE	D001 D003	0.1
PLATING SHOP	MICROCLEANER	NONE	2.6
PLATING SHOP	MORPLAS ERO BLUE	NONE	12.2
PLATING SHOP	NEUTROLAIR	F002	0.6
PLATING SHOP	NIBCO CPVC PIPE CEMENT	D001 D035 F003 F005	0.6
PLATING SHOP	NICKEL ACETATE	NONE	102.6
PLATING SHOP	NICKEL ACETATE SOLID	NONE	106.0
PLATING SHOP	NICKEL ADDITIVE B	NONE	42.9
PLATING SHOP	NICKEL CHLORIDE	NONE	42.0
PLATING SHOP	NICKEL CHLORIDE	NONE	10.0
PLATING SHOP	NICKEL CHLORIDE	NONE	10.0

PLATING SHOP	NICKEL CHLORIDE	NONE	10.0
PLATING SHOP	NICKEL CHLORIDE	NONE	10.0
PLATING SHOP	NICKEL CHLORIDE	NONE	20.0
PLATING SHOP	NICKEL CHLORIDE	NONE	15.0
PLATING SHOP	NICKEL CHLORIDE	NONE	23.0
PLATING SHOP	NICKEL CHLORIDE	NONE	15.0
PLATING SHOP	NICKEL CHLORIDE	NONE	20.0
PLATING SHOP	NICKEL CHLORIDE	NONE	20.0
PLATING SHOP	NICKEL CHLORIDE	NONE	15.0
PLATING SHOP	NICKEL CHLORIDE	NONE	25.0
PLATING SHOP	NICKEL CHLORIDE	NONE	15.0
PLATING SHOP	NICKEL FILTERS	NONE	60.0
PLATING SHOP	NICKEL FLOOR WASTE	NONE	10.8
PLATING SHOP	NICKEL SULFAMATE	NONE	7.2
PLATING SHOP	NICKEL SULFAMATE	NONE	0.7
PLATING SHOP	NICKEL SULFAMATE	NONE	24.1
PLATING SHOP	NICKEL SULFATE	NONE	6.4
PLATING SHOP	NICKEL WASTE	NONE	9.7
PLATING SHOP	NICKEL, CADMIUN PLATES	D006	30.0
PLATING SHOP	NITRIC ACID FLOOR WASTE	NONE	5.4
PLATING SHOP	NITRIC ACID, >40%	D001 D002	63.7
PLATING SHOP	NITRIC ACID, PHOSPHORIC ACID, WATER, ALUMINUM	D001 D002	17.6
PLATING SHOP	OAKITE 30 CLEANUP RAGS	NONE	4.0
PLATING SHOP	OAKITE DYNANET	NONE	0.8
PLATING SHOP	OTASSIUM PERMANGANATE	D001	1.2
PLATING SHOP	OX 311	D002	6.6
PLATING SHOP	OXIDE WASTE	D001	1.3
PLATING SHOP	PANNIER BLACK INK 1001	D001	2.8
PLATING SHOP	PANNIER INK SOLVENT	D001	1.7
PLATING SHOP	PHOSPHORIC ACID	D002	4.5
PLATING SHOP	PHOSPHORIC ACID	D002	20.0
PLATING SHOP	PHOSPHORIC ACID	D002	9.5
PLATING SHOP	PHOSPHORIC ACID WASTE	D002	0.9
PLATING SHOP	PHOSPHORIC WASTE	D002	1.9
PLATING SHOP	PLIOBOND ADHESIVE	D001 D035	0.5
PLATING SHOP	PLIOBOND ADHESIVE	D001 D035 F005	2.2
PLATING SHOP	POTASSIUM PERSULFATE	D001	0.2
PLATING SHOP	RAGS WITH HCL	NONE	10.9
PLATING SHOP	RECORDER INK	D001	0.1
PLATING SHOP	ROBOND CU BLACK	D002	43.1
PLATING SHOP	ROCHELLE SALT	NONE	4.6
PLATING SHOP	RTV 102	NONE	1.2
PLATING SHOP	RTV 630 PART A	NONE	3.0
PLATING SHOP	RTV 630 PART B	NONE	0.2
PLATING SHOP	SANDOZ DYE WITH CHROMIUM	D007	8.5
PLATING SHOP	SANDOZ DYES, VARIOUS	NONE	12.0
PLATING SHOP	SEL REX AUROBOND TN	NONE	84.6
PLATING SHOP	SEL REX AUTRONEX 55 GV	D003	56.8
PLATING SHOP	SILICON CARBIDE	NONE	30.8
PLATING SHOP	SILVER CYANIDE SOLID	D011	1.6
PLATING SHOP	SILVER NITRATE	D001 D011	4.0
PLATING SHOP	SILVER PERMANGANATE	D001 D011	0.2
PLATING SHOP	SILVER SOLDER FLUX	D011	0.8
PLATING SHOP	SODIUM BICARBONATE	NONE	1.0

PLATING SHOP	ACETIC ACID	D002	0.2
PLATING SHOP	ACETIC ACID	D001 D002	3.7
PLATING SHOP	ACETONE, ETHANOL WASTE	D001 F003	18.0
PLATING SHOP	ACTANE 70	NONE	1.0
PLATING SHOP	ALODINE 1200S	D001 D005	9.1
PLATING SHOP	ALODINE 1200S	D001 D007	1.0
PLATING SHOP	ALUMINUM CLEANER	NONE	1.0
PLATING SHOP	AMMONIOUM FLUORIDE	NONE	0.1
PLATING SHOP	AMMONIUM ACETATE SOLUTION	NONE	0.1
PLATING SHOP	AMMONIUM HYDROXIDE	D002	12.0
PLATING SHOP	AMMONIUM HYDROXIDE	D002	1.5
PLATING SHOP	AMMONIUM THIOCYANATE	D003	0.2
PLATING SHOP	AMMONIUM THIOCYANATE	NONE	1.0
PLATING SHOP	ANTISTATIC PLASTIC POLISH	NONE	2.2
PLATING SHOP	AREMCO BASE	NONE	0.5
PLATING SHOP	ARSENIC TRIOXIDE	D004	0.5
PLATING SHOP	BARRET SNAP	NONE	10.9
PLATING SHOP	BERRYLIUM, COPPER ALLOY	P015	13.7
PLATING SHOP	BIOACT EC-7	D001	2.2
PLATING SHOP	BIOACT EC-7	D001	8.0
PLATING SHOP	BIOACT EC7	D001	2.2
PLATING SHOP	BIOACT EC7	D001	23.6
PLATING SHOP	BIOACT EC7	D001	23.0
PLATING SHOP	BORIC ACID	NONE	1.6
PLATING SHOP	BORON CARBIDE	NONE	3.8
PLATING SHOP	CADMIUM METAL	D006	0.1
PLATING SHOP	CADMIUM WASTE	D006	0.5
PLATING SHOP	CADMIUM WIRE	D006	8.2
PLATING SHOP	CERIUM OXIDE	NONE	0.5
PLATING SHOP	CHROMIC ACID	D001 D007	34.4
PLATING SHOP	CHROMIC ACID SOLUTION	D002 D007	0.9
PLATING SHOP	CHROMIC ACID, PHOSPHORIC ACID, AND ALUMINUM WASTE	D002	9.6
PLATING SHOP	CHROMIUM METAL	D007	0.1
PLATING SHOP	CHROMIUM TRAYS	D007	58.1
PLATING SHOP	CHROMIUM WASTE	D007	4.1
PLATING SHOP	CLEAR ARCRYLIC 670C16	D001	46.0
PLATING SHOP	COOL SPAR CUTTING FLUID	NONE	1.8
PLATING SHOP	COPPER CYANIDE	D003	8.7
PLATING SHOP	COPPER CYANIDE	D003	7.9
PLATING SHOP	COPPER CYANIDE CLEANUP RAGS	D003	2.0
PLATING SHOP	COPPER CYANIDE WASTE RAGS	D003	0.9
PLATING SHOP	COPPER CYANIDE WASTE RAGS, FILTERS	D003 F007	5.6
PLATING SHOP	CRAFTICS SUPER GLUE REMOVER	D001	2.2
PLATING SHOP	CRYSTAL CAST	D001	13.0
PLATING SHOP	CYANIDE PLATING WASTE	D003 F007	2.4
PLATING SHOP	CYANIDE WASTE	D003	2.5
PLATING SHOP	DIETHYL (2) AMINOETHANOL	D001	2.2

PLATING SHOP	SODIUM DICHROMATE	D001 D007	1.0
PLATING SHOP	SODIUM DICHROMATE	D001 D007	9.2
PLATING SHOP	SODIUM DICHROMATE	D007	2.4
PLATING SHOP	SODIUM DICHROMATE	D007	0.7
PLATING SHOP	SODIUM FERROCYANIDE	NONE	0.1
PLATING SHOP	SODIUM HYDROXIDE PELLETS	NONE	32.8
PLATING SHOP	SODIUM HYDROXIDE SOLID	NONE	31.4
PLATING SHOP	SODIUM HYDROXIDE SOLUTION	D002	47.9
PLATING SHOP	SODIUM HYDROXIDE WASTE	D002	6.8
PLATING SHOP	SODIUM HYPOCHLORITE, <10%	D001	4.8
PLATING SHOP	SODIUM HYPOCHLORITE, >10%	D001	9.6
PLATING SHOP	SODIUM SULFITE	NONE	1.3
PLATING SHOP	SPARTAN CLEANER	D002	183.0
PLATING SHOP	STAY CLEAN FLUX	NONE	0.8
PLATING SHOP	STOP-OFF LACQUER	D001 D035 F005	14.0
PLATING SHOP	STOP-OFF LACQUER	D001 D035 F005	14.9
PLATING SHOP	SULFAMATE SNAP-AM	D002	42.0
PLATING SHOP	SULFURIC ACID	D002	29.0
PLATING SHOP	SULFURIC ACID MIX	D002	6.7
PLATING SHOP	TAP MAGIC	D001	1.8
PLATING SHOP	TERGITOL 7	D002	2.0
PLATING SHOP	THERMAL COMPOUND	NONE	0.5
PLATING SHOP	TOUCH UP PAINT	D001 D008	0.7
PLATING SHOP	TRICHLOROETHYLENE	D040 F002 U228	10.5
PLATING SHOP	TURCO AQUASORB	D001	5.0
PLATING SHOP	UNICHROME CR-110	D001 D007	101.0
PLATING SHOP	WELD-ON 3 PIPE SOLVENT	D001 D035 F003 F005	0.8
PLATING SHOP	WELDWOOD CONTACT CEMENT	D001 F002 F005	1.6
PLATING SHOP	ZINC OXIDE	NONE	3.0

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow 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~~ printed circuit boards – potentially lead contaminated

32. Is mixed waste generated, stored, or disposed of from the bu #31. NOT ANYMORE
Where are logs found? NO

#32 NO.

Process	Waste	Stored	Dispose	
		Y / N	Y / N	TK.
		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: _____

9.18-77

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow 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: _____

9.18-78

Building Manager's Questionnaire

Building Name: M Building Manager: W.H. Whitelow 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? #34 NO.

Process	Waste	Stored	D	
		Y / N		TK.
		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

9.18-79

Building Name: M Building Manager: W.H. Whitelow 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.

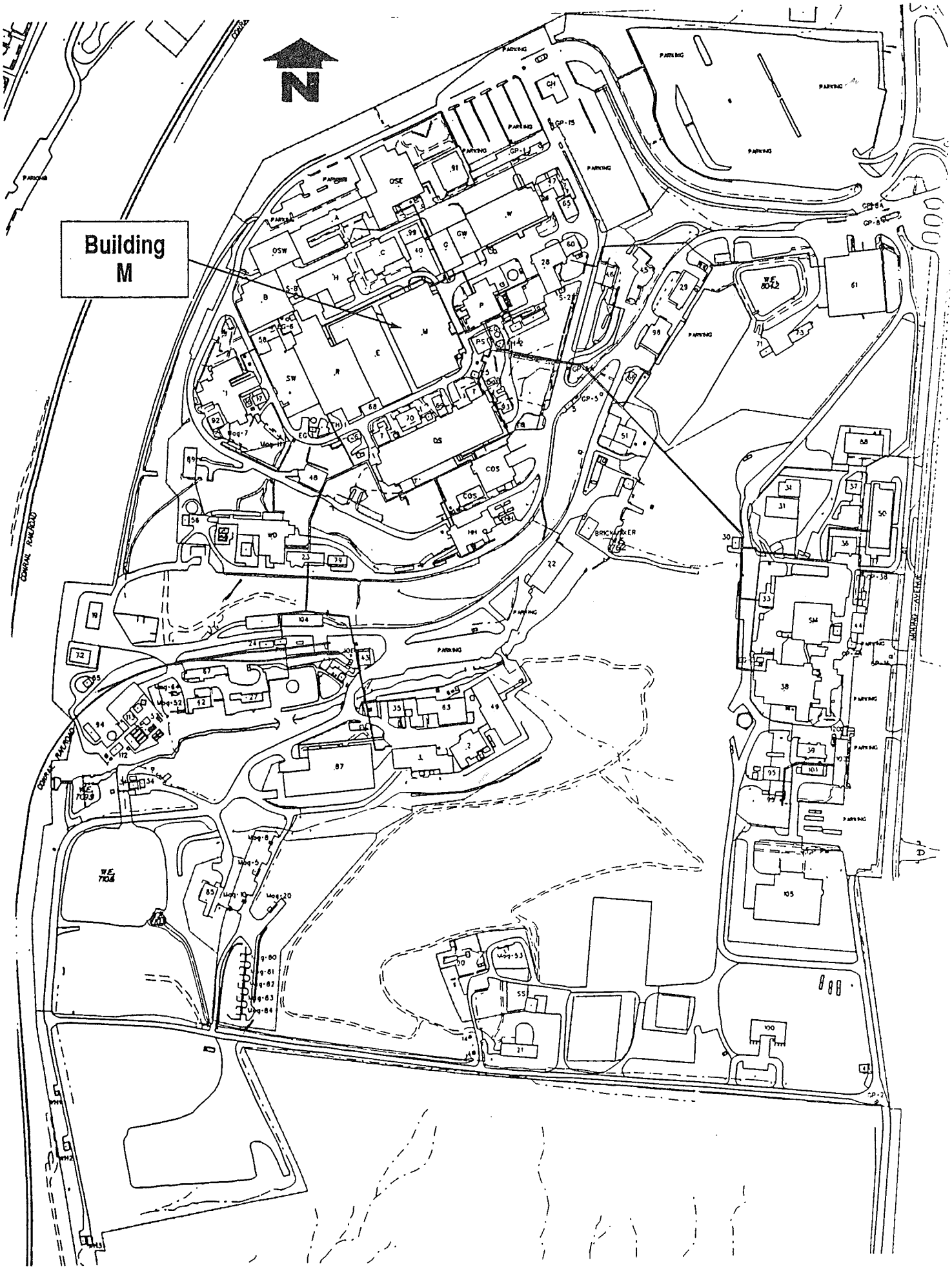
#36 NO.

TK.

37. Has a pollution prevention program been developed for the bu

UNKNOWN

9.18.6.3 Location of Building M



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

9.18-83

9.18.6.4 Floor Plans for Building M

ISS	DATE	REVISION	BY	CHKR	ENG	LP&EC	APVD	M
Ø	12/12/91	ASBUILT ISSUE	DCW				DVD	

UNCLASSIFIED

DERIVATIVE CLASSIFIER

R D Myers
Class Anal 2/20/96
(Title) (Date)

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.

M BLDG
FIRST FLOOR
BLDG CODE:3509

APPROVALS: DATE:
SAFETY COMMITTEE REQUIRED:
___NONE ___TRUEBOC ___TEBOC ___EMBOC
TECH. REAP. ___ ___
GR. MGR. ___ ___
TRUEBOC ___ ___
TEBOC ___ ___
EMBOC ___ ___

DESIGN ENG | PROJ MGR
SPONS | ENG SUPV
LP & EC | PEER REV
ENG MGR
APVD | DATE

SHEET	1	2	3	4	5	6
ISSUE	Ø	Ø				

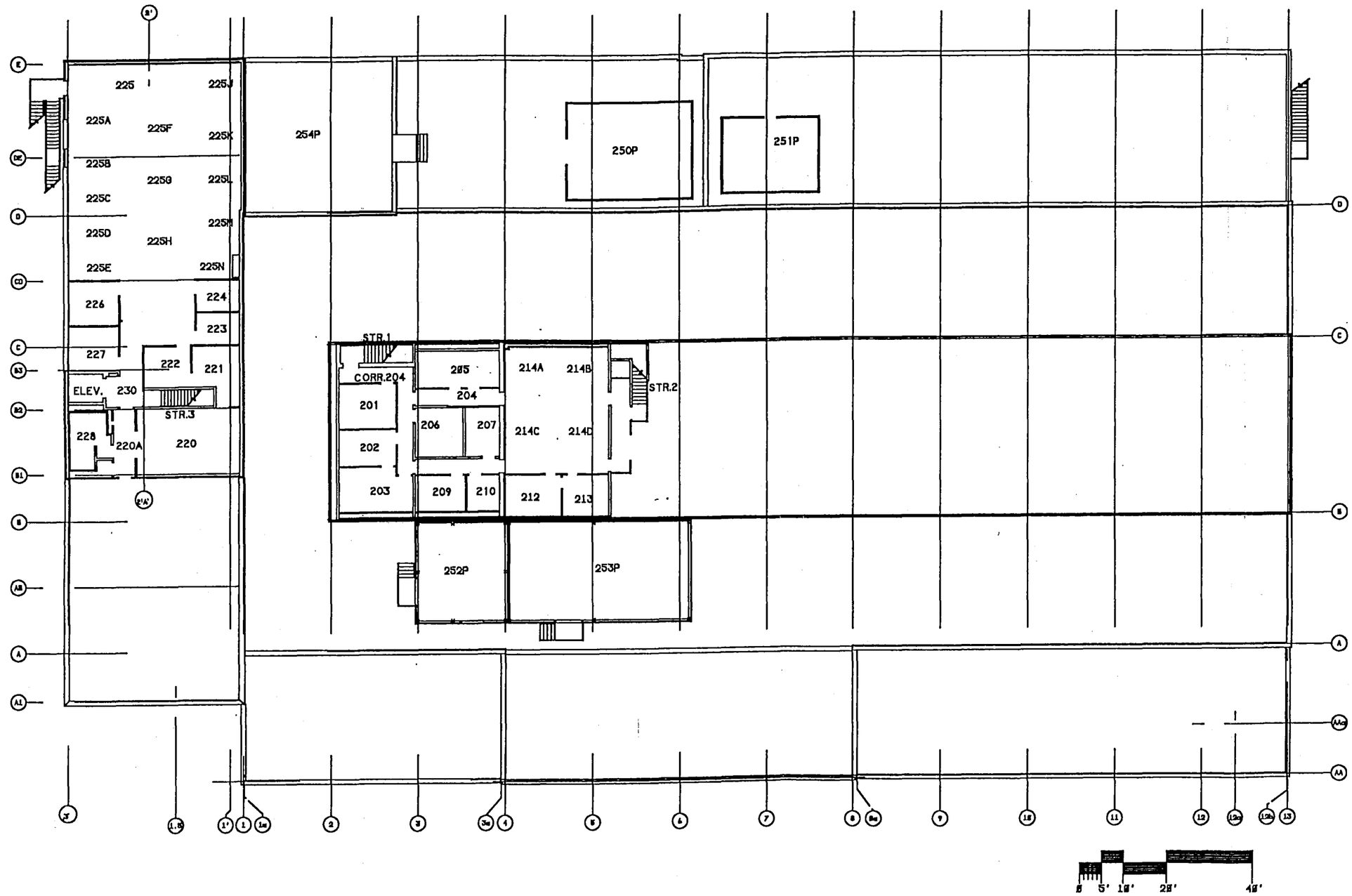
PART CLASSIFICATION

TITLE (U) TITLE CLASSIFICATION
M BLDG
FLOOR PLANS

DRAWING CLASSIFICATION UCNI

SIZE	DRAWING NUMBER	JOB NUMBER
D	FSD911314	12335

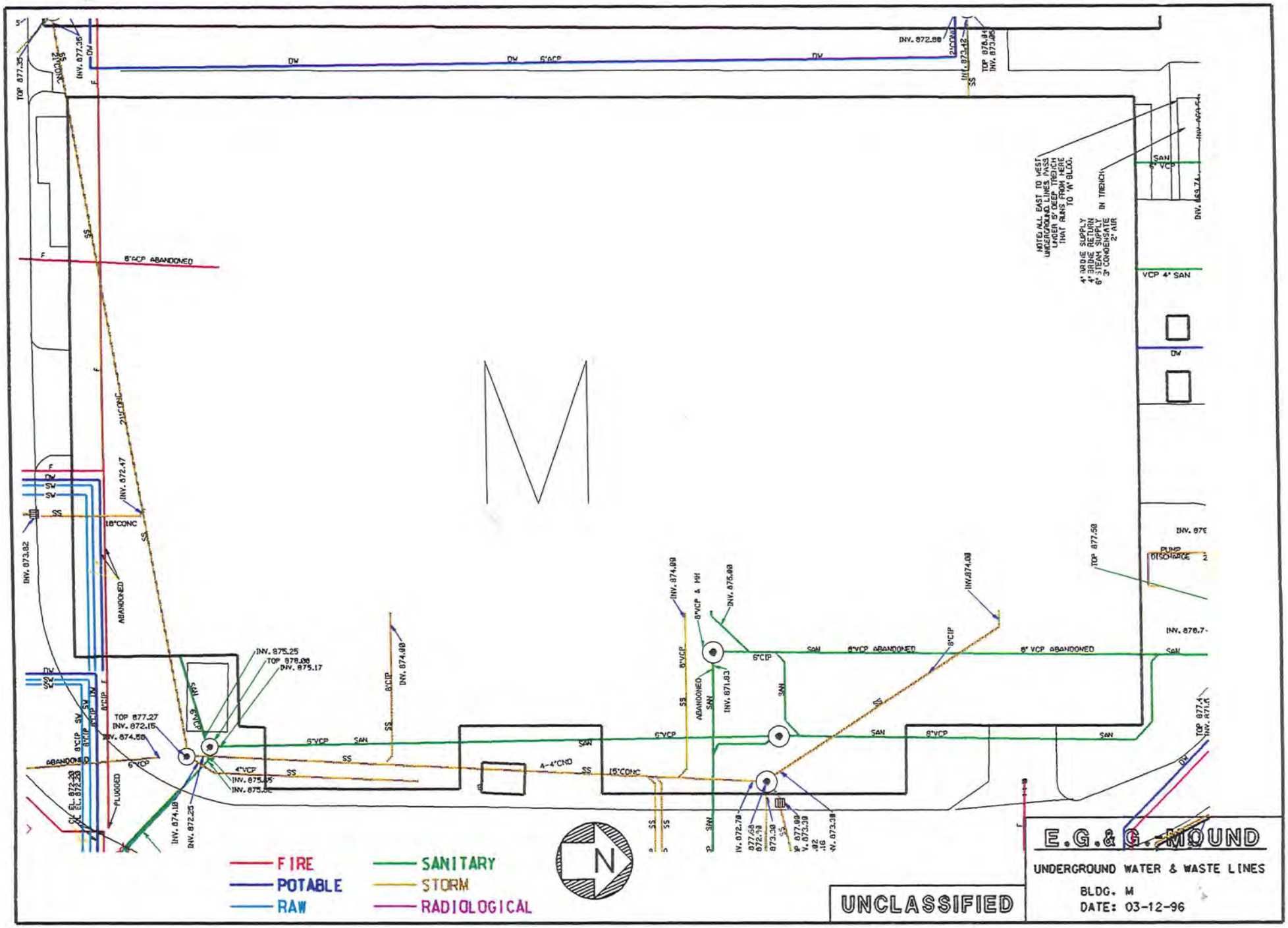
DWG TYPE SFP | PROM M BLDG | CADEC 14065 | SCALE AS NOTED | SHEET 1 OF 2
STATUS MD-REL-12/12/91 | ORIGIN MD-BR3-V3.Ø



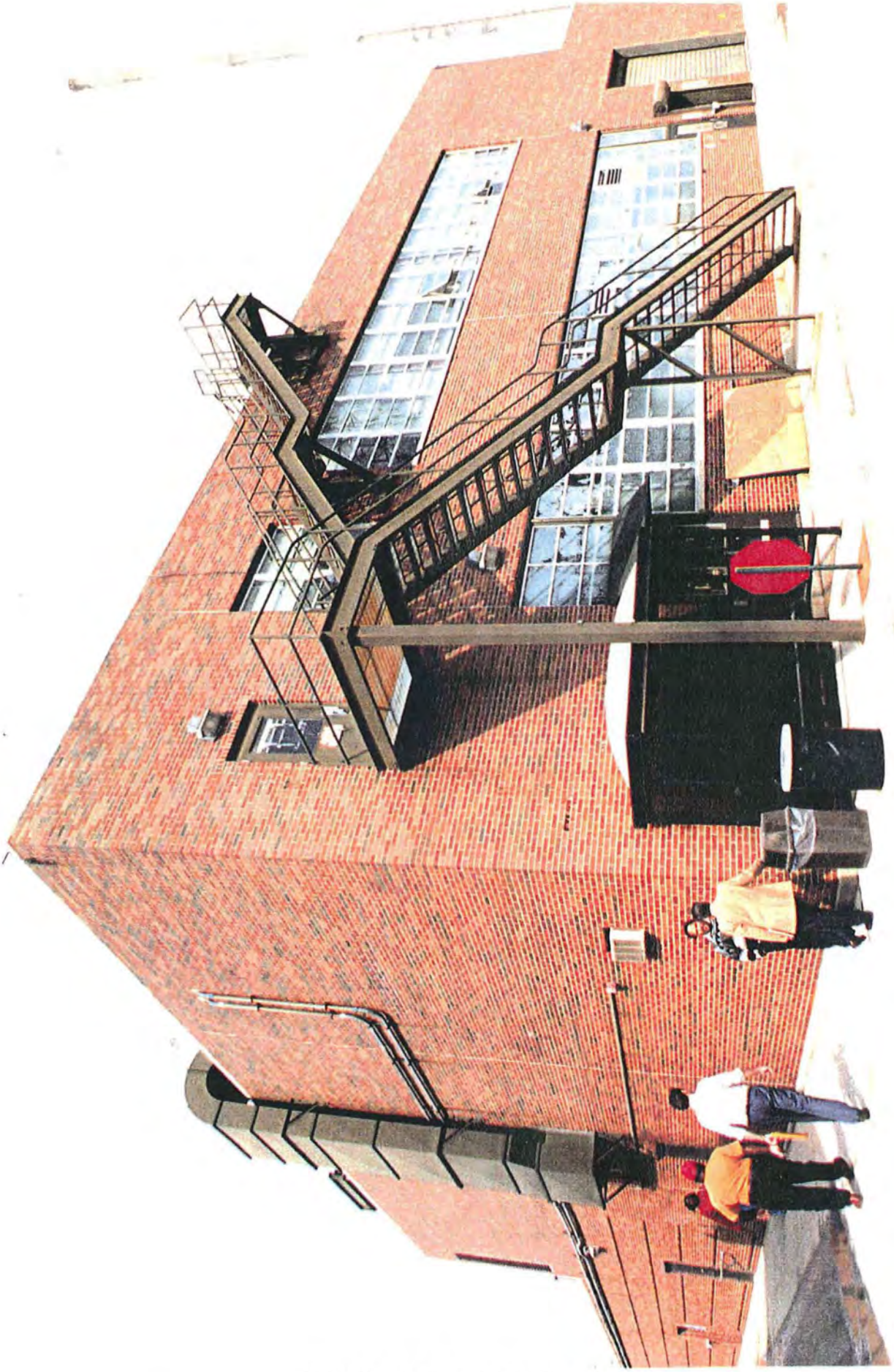
M BLDG
SECOND FLOOR
BLDG CODE:3509

DRAWING NUMBER FSD911314		JOB NUMBER 12335
DRAWING CLASSIFICATION UNCLASSIFIED		
SIZE D	CAMEC 14065	SCALE AS NOTED
	ISSUE 0	SHEET 2
STATUS	MD-REL-12/12/91	

9.18.6.5 Underground Utility Lines


M
FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL
N
UNCLASSIFIED
E.G.&G. MOUND
UNDERGROUND WATER & WASTE LINES
BLDG. M
DATE: 03-12-96
NOTED ALL EAST TO WEST UNDERGROUND LINES PASS UNDER 5' DEEP TRENCH THAT RUNS FROM HERE TO "A" BLDG.
4" NRDHE SUPPLY
4" BRDHE RETURN
6" STEAM SUPPLY
3" CONDENSATE
2" AIR
IN TRENCH
VCP 4" SAN
8"VCP ABANDONED
6" VCP ABANDONED
18"CONC
6"VCP
8"VCP
6"CIP
8"CIP
4-4"CND
PLUGGED
ABANDONED
PUMP DISCHARGE

9.18.6.6 Photographs



Mound Plant Building M

9.18-97

9.19 BUILDING MODULAR 4

9.19.1 Scope of Building Modular 4 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 Modular 4 on the morning of February 7, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.19.6.1). The appraisers were accompanied by the building manager and the process manager. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.19.6.2).

9.19.2 Description of Building Modular 4

Building Modular 4 is an empty building. It was previously used as an office for contractor orientation. It is located east of Building 100 and southeast of Building 105, close to the contractor's gate. Its location is shown in Attachment 3 (Section 9.19.6.3).

The building is a one-story, 685-square-foot modular structure built in 1980. The exterior is wooden. There is a flat metal roof. There is electrical service of 240V. Heat is provided by electric heaters. Little documentation exists about the building; it was not included in the *Capital Assets Management Process, CAMP Report, FY96.*

9.19.3 Summary of Findings

Building Modular 4 is an empty building. No issues of environmental concern were identified during the walk-through. There was no information related to the building in the reference materials reviewed.

9.19.4 Observations

9.19.4.1 Air Emissions

There is no active process or fuel-burning unit in the building. There is no evidence of fugitive dust. No permits have been submitted for activities in the building.

9.19.4.2 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.

9.19.4.2.1 Sanitary Wastewater

The building has sanitary service. There is no drawing of underground lines. It is assumed that the building is serviced by a sanitary line as the building has a toilet. Floor drains are assumed to drain to the sanitary line as well.

9.19.4.2.2 Storm Wastewater

Downspouts from the roof of the building drain onto the ground. Although there are no site drawings, the building does not appear to be serviced by storm drains. There are no exterior grates and drains around the building.

9.19.4.3 Potable and Service Water

Potable water is supplied to the building. There is a drinking fountain in room 1; it has not been tested for lead. According to Environmental Protection Agency (EPA) protocol, annual sampling criteria do not require testing of each fountain. It is assumed that there is no service water supplied to the building, although site drawings do not show connections to Building Modular 4.

9.19.4.4 Chemical Storage and Hazardous Materials

There are no chemicals or hazardous materials stored in the building. Based on past use as an office for contractor orientation and health physics, it would not be expected that in the past, the building contained chemicals or hazardous materials other than janitor's supplies.

There are no aboveground storage tanks in the area. There are no sumps, separators, or catch basins visually evident in or around the building.

Building Modular 4 is not contained in MD-10391, *Asbestos Program Manual* (9-14-95). There is no visual evidence of friable asbestos.

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

9.19.4.5 Solid, Hazardous, and Radioactive Wastes

There is no solid, hazardous, or radioactive waste generated in Building Modular 4 through any process.

9.19.4.6 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. There is no waste minimization or pollution activity appropriate to this building.

9.19.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 5 (Section 9.19.6.5). There are no findings related to the environmental appraisal of Building Modular 4. There is a recommendation related to management practice. The building is empty and not in use, however, there is no evidence that maintenance procedures typical to unused buildings have been performed. For example, light, heat, and water are available. It is recommended that if the building is not scheduled for near-term use, that utilities be secured.

This page intentionally left blank.

Environmental Appraisal of the Mound Plant

9.19.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name Modular 4

Appraisers:

N Vyas
Name Discipline

J Hausfeld
Name Discipline

M Merker
Name Discipline

Name Discipline

Building Manager: K. Koehler

Process Manager:

Date: 2-7-96 am

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 A[illegible]alsal Checklist

Building Name: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96am

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?	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	roof drains go to ground

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	NONE USED; NONE LISTED
	Is the building in operation? What are the processes and where do they discharge to?	Y N _____ _____	Building is empty & not in use.
	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	NO SITE DRAWINGS ARE AVAILABLE TO CONFIRM
	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	NOT VISUALLY OBVIOUS.
	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	

9.19-9

9.19-10

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96am

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: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96am

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:_____

9.19-11

9.19-12

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas / Hausfeld / Merker Date: 2-7-96am

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 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: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96am.

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	
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	

9.19-13

9.19-14

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas / Hausfeld / Merker Date: 2-7-96am

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
	none			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: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96 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 NA	
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	Y / N NA	
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	(Y) / N yes	see below - NOT TESTED

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
Mod 4	main room	Halsey Taylor	
		020039829591	

Source: No service water provide to that area of site per drawings

NO SITE DRAWINGS AVAILABLE TO CONFIRM SERVICE WATER.

9.19-15

9.19-16

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96

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 charactarization 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	
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: Mod 4 Appraisers: Vyas / Hausfeld / Merker Date: 2-7-96 am

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	Y / N Y / N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y / N	
	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	

9.19-17

9.19-18

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas/Haugfeld/Nerker Date: 2-7-96

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:		
	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 / 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: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96

NOT COMPLETED

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	
	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	

9.19-19

9.19-20

Environmental Appraisal Checklist

Building Name: Mod 4

Appraisers: Vigas/Hausfeld/Merker

Date: 2-7-96

NOT COMPLETED

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:

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vigus/Hausfeld/Merker Date: 2-7-96

Asbestos Screening Checklist

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

NOT KNOWN

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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos? If no for this building or area note this conclusion in the comment section.	Y / N	
	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.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of 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	

9.19-21

- Building not included in Asbestos Program Manual
Review to determine presence of Asbestos

9.19-22

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96 am

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

Does this facility potentially contain any PCB's or PCB contaminated equipment?	Y / 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	
	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	

Building not on PCB Annual Document Log.

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96 am

NOT COMPLETED

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 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	

9.19-23

9.19-24

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96 am

NOT COMPLETED

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators 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: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96 am

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	
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	

9.19-25

9.19-26

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96 am

NOT COMPLETED

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	

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vigas/Hausfeld/Merker Date: 2-7-96 am

NOT COMPLETED

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

9.19-27

9.19-28

Environmental Appraisal Checklist

Building Name: MOD 4 Appraisers: Vigas/Hancofed/Merker Date: 2-7-96

NOT COMPLETED

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 Appraisal Checklist

Building Name: MOD4

Appraisers: Vyas/Hausfeld/Merker

Date: 2-7-96 am

Low-Level Waste and Transuranic Waste Checklist

NOT COMPLETED

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:

9.19-29

9.19-30

Environmental Appraisal Checklist

Building Name: MOD 4 Appraisers: Vyas/Hausfeld/Meeker Date: 2-7-96am

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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: Mod 4 Appraisers: Vigo / Dauenfeld / Merker Date: 2-7-96 am

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES		NA	
	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	
METAL WASTES		NA	
	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	
CORROSIVE WASTES		NA	
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

9.19-31

9.19-32

Environmental Appraisal Checklist

Building Name: MOD 4 Appraisers: Vigo/Hausfeld/Merker Date: 2-7-96 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	
CYANIDE AND REACTIVE WASTES		NA	
	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	
VEHICLE MAINTENANCE		NA	
	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: MOD 4 Appraisers: Vyas/Hanefed/Merker Date: 2-7-96am

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	
OILS	NA		
	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	

9.19-33

9.19-34

Environmental Appraisal Checklist

Building Name: Mod 4 Appraisers: Vyas/Hausfeld/Merkey Date: 2-7-96am

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	
SOLVENT WASTES		NA	
	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: Mod 4 Appraisers: Vyas/Hausfeld/Merker Date: 2-7-96am

NOT COMPLETED

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?	_____ _____	

9.19-35

This page intentionally left blank.

9.19.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: _____ Building Manager: K Koehler Phone: _____ Date: 3/19/96

Alternate: _____ Phone: _____

by Smith/Vyas

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

   no

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.

   680 square foot
   wood frame / prefab
   hypalon roof
   on concrete piles
   electric heat & AC
   Potable water.

   Source: inspection

5. Provide a drawing of the building.

   not available

6. What is the current building use?

   not in use

   Source: inspection

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

9.19-39

Building Manager's Questionnaire

Building Name:_ Building Manager: _____ Phone: _____ Date: __

Alternate: _____ Phone: _____

Source: _____

9.19-40

Building Manager's Questionnaire

Building Name:_ Building Manager: _____ Phone: _____ Date: __
_____ _____ _____
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:

How Wastes Are Generated:

Contact:
Phone #:

Source: _____
____, (8-15-90).

Building Manager's Questionnaire

Building Name:_ Building Manager: _____ Phone: _____ Date: _

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? Yes 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: _____

9.19-42

Building Manager's Questionnaire

Building Name:_ Building Manager: _____ Phone: _____ Date: _

Alternate: _____ Phone: _____

Not available

9.19-43

Building Manager's Questionnaire

Building Name:__ Building Manager: _____ Phone: _____ Date: __

Alternate: _____ Phone: _____

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

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

Source: _____

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

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

Source: _____

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 No
What are the results? Unknown

Source: Visual observation

9.19-44

Building Manager's Questionnaire

Building Name:_ Building Manager: _____ Phone: _____ Date: _

Alternate: _____ Phone: _____

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

Source: _____

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

Source: _____

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: _____

9.19-45

Building Manager's Questionnaire

Building Name:__ Building Manager: _____ Phone: _____ Date: __

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?

None

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

9.19-46

Building Manager's Questionnaire

Building Name:_ Building Manager: _____ Phone: _____ Date: __
_____ _____ _____

Alternate: _____ Phone: _____
_____ _____

Source: _____
____

Building Manager's Questionnaire

Building Name:_ Building Manager: _____ Phone: _____ Date: _

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
				Y/N	
				Y/N	

Source: _____

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: _____

9.19-48

Building Manager's Questionnaire

Building Name:__ Building Manager: _____ Phone: _____ Date: __

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: _____

9.19-49

Building Manager's Questionnaire

Building Name:__ Building Manager: _____ Phone: _____ Date: __

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: _____

9.19-50

Building Manager's Questionnaire

Building Name:_ Building Manager: _____ Phone: _____ Date: __

Alternate: _____ Phone: _____

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

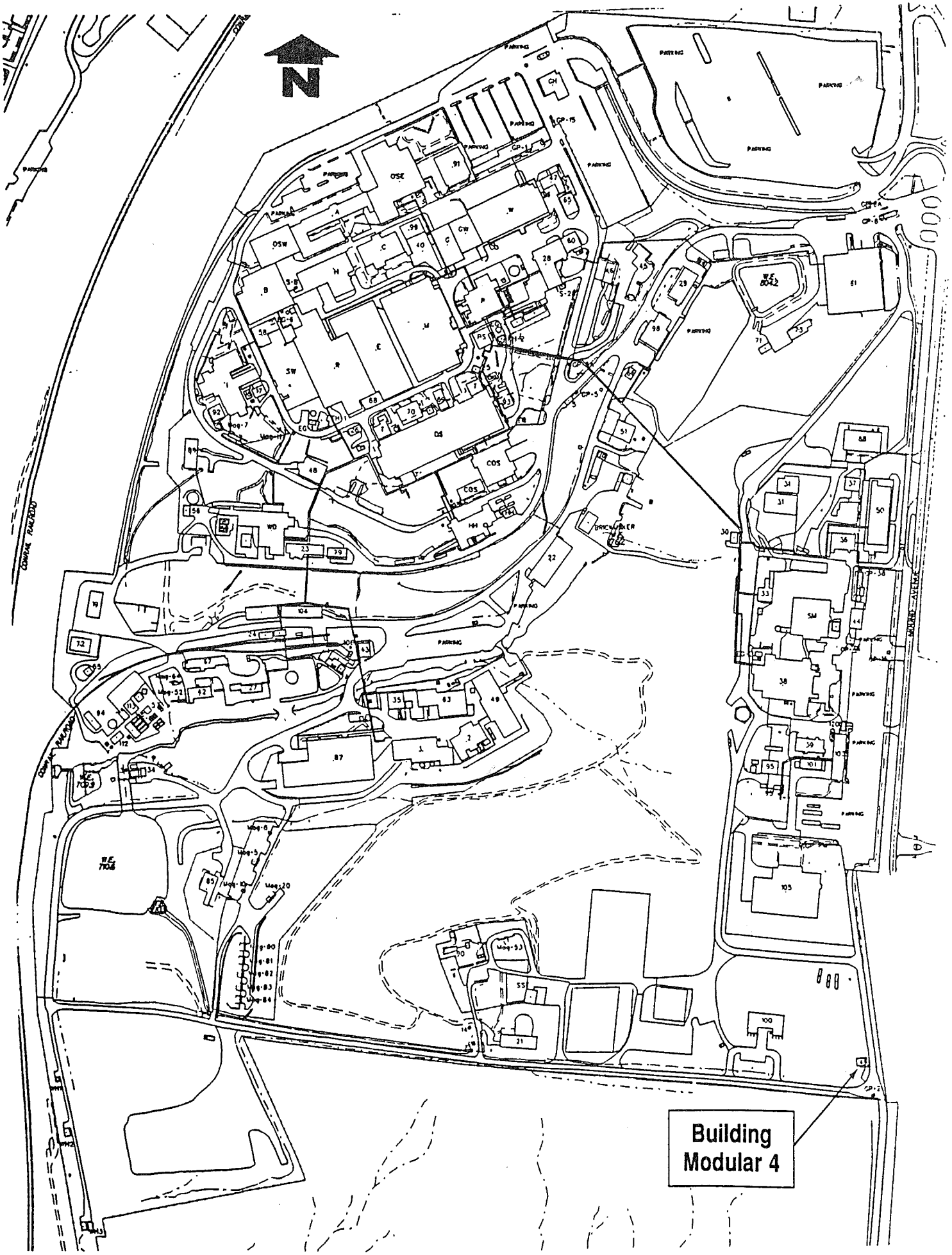
Process	Waste	Stored	Disposed	Logs
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N
		Y / N	Y / N	Y / N

Source: _____

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

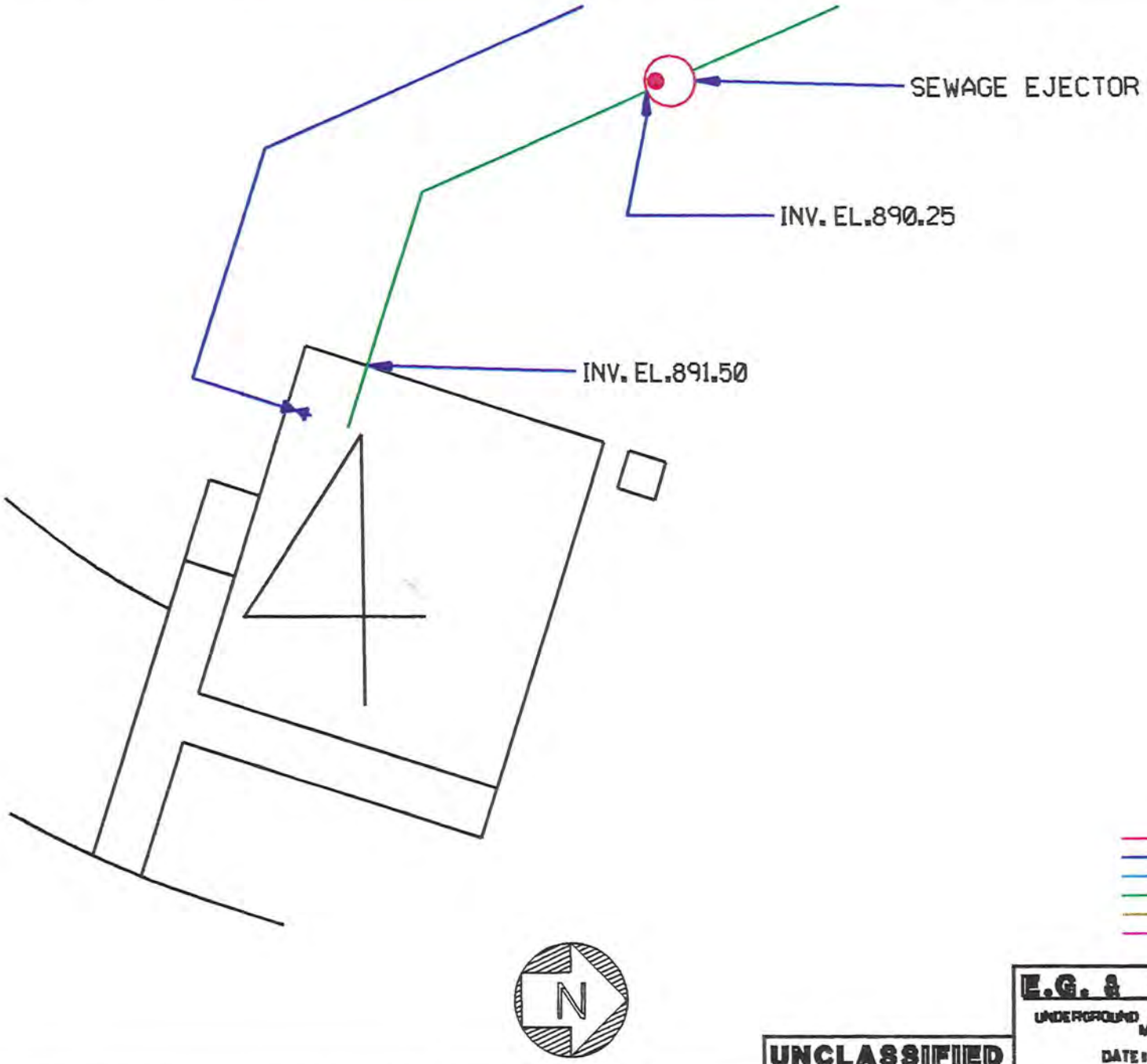
This page intentionally left blank.

9.19.6.3 Location of Building Modular 4



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

9.19.6.4 Underground Utility Lines



FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL

E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
MODULAR 4

DATE: 3-6-96

UNCLASSIFIED

9.19.6.5 Photographs

Mound Plant Building Modular 4

9.20 Building OSE

9.20 BUILDING OSE

9.20.1 Scope of Building OSE 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 OSE on the morning of February 29, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.20.6.1). The appraisers were accompanied by a Department of Energy (DOE) representative, a process manager from the photo lab, and the process supervisor in the cafeteria. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.20.6.2).

9.20.2 Description of Building OSE

Building OSE is a 90,072-square-foot structure with four stories and a penthouse. The building is steel frame with a brick face and a built-up membrane (coal tar) roof. Its location is shown in Attachment 3 (Section 9.20.6.3). Building OSE is located in the northern region of Mound, east of Building A. Heating and air conditioning services are central steam and chilled water. Electric service is 480V. Floor plans are included as Attachment 4 (Section 9.20.6.4).

Building OSE was constructed in 1987 to provide engineering offices, DOE offices, photographic services, a cafeteria, an auditorium, and computer facilities. The building has been used for the same purposes since construction.

9.20.3 Summary of Findings

In general, the facility appears to be in excellent condition. There were several issues of environmental concern identified during the walk-through. The cafeteria appeared to be very orderly and well-kept. All food products were stored properly in their appropriate coolers. Cafeteria employees exhibited a sanitary appearance with all position clean garments. All have attended a Food Service Sanitation training course.

9.20.4 Observations

9.20.4.1 Air Emissions

There are no fumehoods. No air emissions permit applications have been submitted to the Regional Air Pollution Control Agency (RAPCA) for activities in the building. There are no

fuel-burning units in the building. There is no evidence of fugitive dust, as none of the processes would be expected to generate it.

9.20.4.2 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.

9.20.4.2.1 Sanitary Wastewater

The building does have sanitary services, according to a diagram of underground utility lines, presented as Attachment 5 (Section 9.20.6.5). As discussed in Section 9.20.4.2.3. Chemicals, there is a potential for chemicals to enter the sanitary system. Of concern are chemicals used in the photo lab. It should be noted that they are non-toxic.

9.20.4.2.2 Storm Wastewater

The interior floor collection drains and the exterior of the building is serviced by storm drains. 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.

9.20.4.2.3 Chemicals

A list of chemicals found in Building OSE 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 in the BMQ were reviewed to assure conformance to regulations related to 40 CFR 122, 40 CFR 261-265,268, and 29 CFR 1910.

Developers, bleaches, and fixer solutions are utilized in the photography area, a 5 percent sodium hypochlorite solution is used in the cafeteria, and common janitorial supplies are used throughout the building. Material Safety Data Sheets (MSDS's) were available in all areas. Drains are clean

and appear to drain properly. It was observed that the Flexicolor photographic processing system in Room 252 includes an overflow waste line to the floor drain. If the system should malfunction and cease to operate for a significant amount of time, small amounts of the water-soluble, non-toxic bleach and non-toxic developer could drain to the sanitary drain. There have not been any reported spills or releases of any significant amounts of chemicals.

9.20.4.3 Potable and Service Water

Potable water and service water are supplied to the building. Backflow in the mechanical prevention devices are installed at all visible points of potential cross-connection. There are four drinking fountains, one on the first floor, one on the second, one on the third, and one on the fourth. Model and serial numbers are located on the EAC included as Attachment 1 (Section 9.20.6.1). Potable water is also available from dispensers, other than drinking fountains, in the cafeteria. Service water is supplied to the building and used for the fire sprinkler system.

9.20.4.4 Chemical Storage and Hazardous Materials

Storage and handling procedures have been developed to comply with applicable standards. Very few chemicals are stored in Building OSE. The photoprocessing machine is self-contained and has proper secondary containment. Chemicals were properly labeled, segregated, and stored. Developer and bleach are changed every six weeks.

The building is equipped with appropriate charged fire extinguishers. Each extinguisher is bar-coded. The inspection date database is maintained within the Fire Station. There is an Emergency Evacuation Plan, and signs were posted.

A review of the Mound Active Underground Storage Tank (UST) Plan and visual inspection indicated that there are no sumps in or around the building. A 500-gallon liquid nitrogen tank is located about 20 feet south of Building OSE. There are no underground storage tanks proximate to the building.

The building was tested for asbestos-containing building material (ACBM) and results were that ACBM was assumed to be present. (MD-10391, *Asbestos Program Manual*, 9-14-95).

There are no capacitors or transformers containing polychlorinated biphenyls (PCB's) located in the building. There is no record of past presence.

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

9.20.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes generated are primarily paper as cardboard boxes. 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. Spent cooking grease is

collected in drums on the pad south of the cafeteria. The drums are in an enclosed bin, and once the drums are full, Waste Management personnel are contacted. The drums are then sent to a vendor for recycling. The service contracts are maintained by the Waste Management Group. Hazardous waste (developer, fixer and bleach) generated by the Photographic Development Group is assigned to be picked up weekly by Hazardous Waste personnel. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

9.20.4.6 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 compactor has been placed to the south of the cafeteria for the recycling of cardboard. Electricity has yet to be connected to the compactor.

9.20.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.20.6.6).

The environmental appraisal of Building OSE 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.

OSE-1 The penthouse above Building OSE was extremely cluttered with various items. Owners of the miscellaneous objects should either store them properly or dispose of them.

OSE-2 An appreciable amount of cardboard is being discarded from the cafeteria, and should be recycled. Power should be connected to the compactor and training to operate the compactor should be provided to all cafeteria employees.

OSE-3 A spray glue is used as an adhesive in the photo laboratory. The process manager should investigate whether an exhaust fan or vent is required for such operations.

Environmental Appraisal of the Mound Plant

9.20.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name OSE

Appraisers:

Name	Discipline
J Hausfeld	CWA
M Merker	RCRA

Building Manager: William Whitelow

Process Manager: Jim England

Jean Blevins

Date: 2/29/96

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

'din

Environmental Ap[illegible]al Checklist

Building Name: OSE Appraisers: JA MM Date: 2/29

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 SANITARY	PHOTO LAB COLOR PRINT PROCESSOR
	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)	

9.20-9

9.20-10

Environmental Appraisal Checklist

Building Name: BSE Appraisers: JA MM Date: 2/29

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: N/A Appraisers: Date:

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:_____

9.20-11

9.20-12

Environmental Appraisal Checklist

Building Name: OSE Appraisers: JH MM Date: 2/29

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~~	~~Has~~ SMALL FLAMMABLE ~~CABINET~~ HAS ONE
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: OSE

Appraisers: JA MM

Date: 2/29

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	NA
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	NA
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	NA
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	
	Is there an emergency response plan available?	(Y) / N	

9.20-13

9.20-14

Environmental Appraisal Checklist

Building Name: BSE Appraisers: JA MM Date: 2/29

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	NITROGEN TANK
	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
BSE	500	LN_2	NA	(Y) / N	NA 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: OSE Appraisers: SH MM Date: 2/29

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	~~UNKNOWN~~,

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
OSE	1ST FLOOR	HALSEY TAYLOR	9- 11472-8-?
	2ND "	" "	9- 11472-5-83-0
	3RD "	" "	749 11472-5
	4TH "	" "	9- 11806-5-81

Source: _____

9.20-15

9.20-16

Environmental Appraisal Checklist

Building Name: OSE Appraisers: JH MM Date: 2/29

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 charactarization 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~~ N analysis / process Y / N Y / N	
OAC 3745 52-11	Are any of the materials noted RCRA hazardous waste? If no, note and stop here. If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.	Y / N	

Environmental Appraisal Checklist

Building Name: OSE Appraisers: JA MM Date: 2/29

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
I. HAZARDOUS WASTE STORED IN CONTAINERS			
	Is there an area in the building that could qualify as a Satellite Accumulation Area?	Y / N	
	Is it treated as such?	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	

9.20-17

9.20-18

Environmental Appraisal Checklist

Building Name: OSE Appraisers: SA MM Date: 2/29

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:		N/A
	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 / 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: OSE Appraisers: JA [illegible] Date: 2/29

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
II. HAZARDOUS WASTE STORED IN TANKS			
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	N/A
	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	

9.20-19

9.20-20

Environmental Appraisal Checklist

Building Name: OSE Appraisers: JA mm Date: 2/29

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	N/A
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:

Environmental Appraisal Checklist

Building Name: BSE Appraisers: JA MM Date: 2/99

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
ADAPTED FROM TSCA ACBM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos? If no for this building or area note this conclusion in the comment section.	Y / N	
	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.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACBM during the removal.	Y / N	N/A
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	

9.20-21

9.20-22

Environmental Appraisal Checklist

Building Name: OSE Appraisers: JA mm Date: 2/29

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	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)	
	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)	NO EQUIPMENT HAS PCB. LIGHT BALLAST MAY CONTAIN PCB.
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	N/A
	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	↓

Environmental Appraisal Checklist

Building Name: OSE Appraisers: JA MM Date: 2/29

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	N/A
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	

9.20-23

9.20-24

Environmental Appraisal Checklist

Building Name: OSL Appraisers: JH WM Date: 2/29

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitators 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: 8/E Appraisers: JH mm Date: 2/29

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
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW ? If the answer is no, note. If the answer is yes, proceed with next section.	Y / N	N/A
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	

9.20-25

Environmental Appraisal Checklist

Building Name: OSE Appraisers: [illegible] Date: 3/28

9.20-26

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	N/A
	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: OSE Appraisers: JA MM Date: 9/29

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
TRU WASTE			
	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? If no, note and stop. If yes, proceed with the next section.	Y / N	N/A
	Are any of the materials noted as being TRU waste during an inspection? If no, note and stop. If the answer is yes, note the location of the management unit, and the method of management and proceed with the appropriate section below.	Y / N	
DOE Order 5820.2A, Chapter II, 3.a	Was this material evaluated as soon as possible in the generating process, to determine if it is TRU (>100nCi/g), if it is recoverable, or if it is waste? (Note if the activity level is less than 100nCi/g, the waste is not TRU, and can be managed as LLW.)	Y / N	
	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.	Y / N	

9.20-27

Environmental Appraisal Checklist

Building Name: OSE Appraisers: [illegible] Date: 2/29

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	N/A
	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: OSE Appraisers: [illegible] Date: 2/29

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:

9.20-29

9.20-30

Environmenta. .ppraisal Checklist

Building Name: OSE Appraisers: JA am Date: 2/29

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimiaztion/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	CARDBOARD FROM CAFETERIA NOT BEING Recycled
	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	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: OSE Appraisers: [illegible] Date: 2/29

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
HALOGENATED ORGANIC (NONSOLVENT) WASTES			
	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	
METAL WASTES			
	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	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

9.20-31

Environmental Appraisal Checklist

Building Name: OSE Appraisers: JAMM Date: 2/29

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	
CYANIDE AND REACTIVE WASTES			
	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	
VEHICLE MAINTENANCE			
	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: OSE Appraisers: [illegible] Date: 7/29

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	
OILS			
	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	

9.20-33

9.20-34

Environmental Appraisal Checklist

Building Name: OSE Appraisers: [illegible] Date: 2/25

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	
SOLVENT WASTES			
	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: OSE Appraisers: JA Date: 1/29

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?	_____ _____	

9.20-35

This page intentionally left blank.

9.20.6.2 Building Manager's Questionnaire

Dave

Visitor Cont. Joy Eubanks Penthouse Send ADS Name + HP

Building Manager's Questionnaire

Building Name: OSE Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95

Alternate: Pleasing Phone: _____

1st 2nd DOE - Becker 2nd floor - Al Ford

3rd - Kevin Roth + 4th Field Office, + Computer Rm Gary Hemmitt

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

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

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

4. Provide a physical description of the building.

Building is a 90,072-ft^2 structure with four stories and a penthouse. It is constructed of concrete block with a brick face and aluminum windows and has a BUM roof (coal tar). HVAC services are central steam and chilled water. The building is not contaminated with any 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?

Houses engineering offices, DOE offices, cafeteria, auditorium, and computer facilities.

Source: Mound Buildings, 5-9-95

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

Previously used as office space for uncleared employees, part-time employees, and new employees. Planned for conversion to its present use in January of 1994.

Source: Mound Buildings, 5-9-95

Building Name: OSE Building Manager: W.H. Whitelow 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: Cafeteria, photographic development, offices, auditorium, computer facilities

How Wastes Are Generated:

Waste from the kitchen is simply grease from the fryers used to prepare food for the cafeteria.

There are four photographic processes in Building OSE. Each of the four is described below.

(1) Ilford Color Process—The three chemicals used are Cibachrome Developer, P-22 Bleach (which is primarily sulfuric acid and acetic acid), and P-22 Fixer. After use the developer is put in a waste can labeled "Developer" for pickup by Waste Management. Used P-22 Bleach is neutralized with a material provided by Ilford, and the resulting mixture is put in a waste can labeled "Bleach." Used P-22 Fixer, which contains a small amount of silver thiosulfate, is put in a waste can labeled "Fixer."

(2) Kodak Color Print Process—Kodak EP-2 Developer and Kodak Bleach are used in this process. The used chemicals are put in the waste cans labeled "Developer" and "Bleach," respectively.

(3) Kodak Black and White Print Process—Kodak Dektomatic Developer and Kodak Fixer are used. Used materials are placed in the appropriate waste cans.

Note that in processes 1, 2, and 3, water to wash the prints is put in the drain to the sewer.

(4) Kodak Film Development Process—Black and white film is developed using Kodak T-Max Developer and Kodak Fixer. Color negative film is processed with the Kodak C-41 Flexicolor system which includes developer, bleach, stabilizer, and fixer. Color positive film (slide film) is processed with the Kodak E-6 System which consists of developer, reversal bath, color developer, conditioner, bleach, fixer, and stabilizer. All of the chemicals used in these film development processes are biodegradable and are designed to be diluted and flushed down the drain to the sewer.

Contact:
Phone #:

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

Building Manager's Questionnaire

Building Name: OSE Building Manager: W.H. Whitelow 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: OSE Building Manager: W.H. Whitelow 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? RAIN DRAIN FROM ROOM

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

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

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

9.20-42

Building Manager's Questionnaire

Building Name: OSE Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? No

Source: PCB ANNUAL DOCUMENT REPORT

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

Source: PCB ANNUAL DOCUMENT REPORT

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)
P-22 BLEACH	L	8/GA
E-6 FIXER	M	1/GA
E-6 PRE BLEACH	M	1/GA
E-6 REVERSAL BATH	M	1/GA
FIXER "A"	M	1/GA
FIXER"B"	M	1/GA
FLEXICOLOR BLEACH	M	1/GA
FLEXICOLOR DEVELOPER	M	1/GA
FLEXICOLOR STABILIZER	M	1/QT
GLACIAL ACETIC ACID	P	1/GA
NITROGEN	P	150/CF
SODIUM HYDROXIDE	P	1/LB
SODIUM SULFITE	P	4/LB
T-MAX	M	2/GA
Z-PROPANOL	P	1/QT
P-22	M	4/GA
P-22 DEVELOPER	M	4/GA
RA BLEACH/FIX	M	3/GA
RA DEVELOPER	M	3/GA
RA DEVELOPER STARTER	M	4/L
FIXER POLYMER RT	M	4/GA
POLYMAX RT DEVELOPER	M	2/GA
TONER CLEAR-MIX	L	8/GA

Source: Chemical Inventory 1994

Building Manager's Questionnaire

Building Name: OSE Building Manager: W.H. Whitelow 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 MGT.

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

ATTACHED

23. Where do excess janitorial supplies go?

OSE 117, 227, 306, 457

Source: _____

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

Chemical	Amount	Chemical	Amount
ATTACHED			
ROUNDUP	AS NEEDED		

Source: IND. HYG.

ecord#	COMMON	CHEMICAL
1	BLUE MAX SPRAY BUFF	BLUE MAX SPRAY BUFF
2	CLEAN-N-DRY	CLEAN-N-DRY
3	CLR WINDOW	CLR WINDOW
4	CONQUEST	CONQUEST
5	DD/85 SPRAY	DD/85 SPRAY
6	DMQ	DMQ
7	DUO-POWDER	DUO-POWDER
8	FLOOR FINISH/ABOVE	FLOOR FINISH/ABOVE
9	FOUNTAIN HEAD	FOUNTAIN HEAD
10	GLOSS-EXTENDERA	GLOSS-EXTENDERA
11	GREASE-BE-GONE	GREASE-BE-GONE
12	HEAD START	HEAD START
13	INSECT SPRAY/CHERRY	INSECT SPRAY/CHERRY
14	INSECTICIDE/WAS	INSECTICIDE/WAS
15	KINDEST CARE	KINDEST CARE
16	LAVA HAND SOAP	LAVA HAND SOAP
17	LIL BROTHER SAM	LIL BROTHER SAM
18	NABC	NABC
19	NEUT. FLOOR CORP.	NEUT. FLOOR CORP.
20	ODOR BANE	ODOR BANE
21	ON-BASE SEALER	ON-BASE SEALER
22	ONE-STEP/SURE BET	ONE-STEP/SURE BET
23	POLISH/LEMON	POLISH/LEMON
24	PUMMEL HAND SOAP	PUMMEL HAND SOAP
25	RINSE FREE/STRIP	RINSE FREE/STRIP
26	SBS-61 LOTION SOAP	SBS-61 LOTION SOAP
27	SCRUB-ENDER	SCRUB-ENDER
28	SEAL, CON-SEAL	SEAL, CON-SEAL
29	SEALER/IRONSTONE	SEALER/IRONSTONE
30	SHINELINE BASE	SHINELINE BASE
31	SNAPOUT	SNAPOUT
32	SPIN-OUT	SPIN-OUT
33	SPOT, PILE DRIVER	SPOT, PILE DRIVER
34	SPOTTER, PULL OUT	SPOTTER, PULL OUT
35	STAINLESS CLEANER	STAINLESS CLEANER
36	STATCIDE, GP	STATCIDE, GP
37	STRIPPER, ZIP	STRIPPER, ZIP
38	SURFACE GLEEM	SURFACE GLEEM
39	TREATMENT/DUST	TREATMENT/DUST
40	TRIPLE SSS	TRIPLE SSS
41	VESTA POWER	VESTA POWER
42	WINDOW SHINE	WINDOW SHINE

Cus Todial Chemical list

9.20-45

1..1ad

☐ INITIAL SERVICE
☑ REGULAR SERVICE
☐ EXTRA SERVICE

TERMINIX.

TERMITE and PEST CONTROL

COPY

COMMERCIAL SERVICE AND INSPECTION REPORT

BRANCH	ACCOUNT	RT	TELEPHONE	GRID	S DAY	F	T	PRODUCTION	TIME IN	TIME OU
2419	006093-	07	000/000-0000 513/865-4585	E30 -	2FR	S	P	00005000 05	7:00 AM	8:25 AM

SERVICE PROPERTY AT

E G & G MOUND
EARNIE HAYES 865-4310
MOUND AVENUE
MIAMISBURG OH 45342-0000

BRANCH

TERMINIX INTERNATIONAL
4712 PAYNE AVENUE
DAYTON OH 45414-0000
513/274-5800

OPERATOR NAME & CERTIFICATION NUMBER: [illegible] 1407

SUPERVISOR NAME & CERTIFICATION NUMBER: DANIEL J. STECK #1207

TARGET PEST(S): ☑ T2 Cockroaches ☑ T18 Rats ☐ Other: ____
☑ T3 Ants ☑ T19 Mice ☐ Other: ____

SERVICE AREAS:	INSPECTED	TREATED	PESTICIDE(S) TO BE APPLIED		EPA'S	T/C	AMOUNT	EQ
☐ C1 FOOD AREAS:	☐	☐	☐ P24	PT279 Engage (Chlorpyrifos) 0.5%	499-292			
			☑ P10	PT565 + XLO (Pyrethrin) 0.5%	499-310			M
			☐ P04	Dursban L.O. (Chlorpyrifos) 0.5%	62719-55			
☐ C2 OFFICES:	☐	☐	☑ P11	Conquer (Esfenvalerate) 0.05%	1021-1565-57076	C	[illegible]	M
			☐ P23	Tempo 20 WP (Cyfluthrin) 0.05%	3125-380			
			☐ P06	Ficam W (Bendiocarb) 0.5%	45639-1			
			☐ P21	Knox-Out 2FM (Diazinon) 1%	4581-335-AA-499			
☐ C3 STORAGE/UTILITY:	☐	☐	☐ P07	Gentrol (Hydroprene) 0.125%	2724-304-50809			
			☐ P12	Precor (Methoprene) 0.008%	2724-352-50809			
			☑ P02	Drione Dust (Silica/Pyrethrin) 1%	4816-353AA	C	[illegible]	M
☐ C4 PUBLIC AREAS:	☐	☐	☐ P05	Ficam D (Bendiocarb) 1%	45639-3			
			☐ P03	Dursban G (Chlorpyrifos) 0.5%	10370-36-432			
			☐ P08	Maxforce Bait (Hydramethylnon) 1.65%	64248-1			
			☐ P27	Avert Roach Bait (Avermectin) 0.05%	499-294			
☐ C5 REST ROOMS:	☐	☐	☐ P09	PT270 Dursban (Chlorpyrifos) 0.5%	499-147			
			☐ P25	PT280 Orthene (Acephate) 1%	499-230			
			☐ P26	Maxforce Gel (Hydramethylnon) 2.15%	64248-5			
☐ C6 EXTERIOR AREAS:	☐	☐	☐ P14	Ditrac All Weather Cake (Diphacinone) 0.005%	12455-5			
			☐ P20	Talon G (Brodifacoum) 0.005%	10182-38			
			☐ P47	Contrac Blox (Bromadiolone) 0.005%	12455-79			
			☐ P34	Ditrac Bait Pack (Diphacinone) 0.005%	12455-19			
☐	☐	☐	☐ P16	Glue Boards				
			☐ P17	Ketch-All/Tin Cat				
			☐ P19	Snap Traps				
☐	☐	☐						

TREATMENT CODE:
C = Crack & Crevice
S = Spot
G = General
T = Space Treatment
B = 3' Band

Supervisor's Comments: ☐ Treat for Infestation/Prevention or Inspect areas indicated.

EQUIP. CODE
F = Fogger B = [illegible]
HD = Hand Dust A = [illegible]
B&G = Comp. Air T = [illegible]

SPECIAL SERVICE INSTRUCTIONS

GENERAL PC , C-BLDG. A-BLDG, MEDICAL, GH BLDG
SM CAFETERIA.(MONTHLY) -- OS-EAST CAFETERIA,
NEW CAFETERIA ONLY , P.O. #38224

BALANCE AS OF
NOVEMBER 29
DEC CHARGE
SALES TAX
TOTAL DUE

CUSTOMER'S SIGNATURE: [illegible]

SERVICE TECHNICIAN'S SIGNATURE: [illegible] DATE: 12/15/95

AMOUNT PAID: 0 CASH ☐ CHECK ☐

9.20-46

12-95

☐ INITIAL SERVICE
☑ REGULAR SERVICE
☐ EXTRA SERVICE

TERMINIX.

TERMITE and PEST CONTROL

COPY

COMMERCIAL SERVICE AND INSPECTION REPORT

BRANCH	ACCOUNT	RT.	TELEPHONE	GRID	S DAY	F	T	PRODUCTION	TIME IN	TIME OUT
2418	006092-7	07	000/000-0000 513/865-3921	E30 -	2FR	S	P	00004577 09	7:00 AM	7:25 AM

SERVICE PROPERTY AT

E O & O MOUND
P. O. #38224
MOUND AVE
MIAMISBURG OH 45342-0000

BRANCH

TERMINIX INTERNATIONAL
4712 PAYNE AVENUE
DAYTON OH 45414-0000
513/274-5800

OPERATOR NAME & CERTIFICATION NUMBER: [illegible] 1UC7

SUPERVISOR NAME & CERTIFICATION NUMBER: DANIEL J. STECK #1207

TARGET PEST(S): ☐ T2 Cockroaches ☑ T18 Rats ☐ Other: ____ ☐ T3 Ants ☐ T19 Mice ☐ Other: ____

SERVICE AREAS:	INSPECTED	TREATED
☑ C1 FOOD AREAS:	☐	☐
☐ C2 OFFICES:	☐	☐
☐ C3 STORAGE/UTILITY:	☐	☐
☐ C4 PUBLIC AREAS:	☐	☐
☐ C5 REST ROOMS:	☐	☑
☐ C6 EXTERIOR AREAS:	☐	☐
☐	☐	☐
☐	☐	☐

PESTICIDE(S) TO BE APPLIED	EPA'S	T/C	AMOUNT	EQU
☐ P24 PT279 Engage (Chlorpyrifos) 0.5%	499-292			
☑ ~~P10~~ PT565 + XLO (Pyrethrin) 0.5%	499-310	C	3	
☐ P04 Dursban L.O. (Chlorpyrifos) 0.5%	62719-55			
☑ ~~P11~~ Conquer (Esfenvalerate) 0.05%	1021-1565-57076	C	[illegible]	
☐ P23 Tempo 20 WP (Cyfluthrin) 0.05%	3125-380			
☐ P06 Ficam W (Bendiocarb) 0.5%	45639-1			
☐ P21 Knox-Out 2FM (Diazinon) 1%	4581-335-AA-499			
☐ P07 Gentrol (Hydroprene) 0.125%	2724-304-50809			
☐ P12 Precor (Methoprene) 0.008%	2724-352-50809			
☑ P02 Drione Dust (Silica/Pyrethrin) 1%	4816-353AA		[illegible]	
☐ P05 Ficam D (Bendiocarb) 1%	45639-3			
☐ P03 Dursban G (Chlorpyrifos) 0.5%	10370-36-432			
☐ P08 Maxforce Bait (Hydramethylnon) 1.65%	64248-1			
☐ P27 Avert Roach Bait (Avermectin) 0.05%	499-294			
☐ P09 PT270 Dursban (Chlorpyrifos) 0.5%	499-147			
☐ P25 PT280 Orthene (Acephate) 1%	499-230			
☐ P26 Maxforce Gel (Hydramethylnon) 2.15%	64248-5			
☐ P14 Ditrac All Weather Cake (Diphacinone) 0.005%	12455-5			
☐ P20 Talon G (Brodifacoum) 0.005%	10182-38			
☐ P47 Contrac Blox (Bromadiolone) 0.005%	12455-79			
☐ P34 Ditrac Bait Pack (Diphacinone) 0.005%	12455-19			
☐ P16 Glue Boards				
☐ P17 Ketch-All/Tin Cat				
☐ P19 Snap Traps				

TREATMENT CODE:
C = Crack & Crevice
S = Spot
G = General
T = Space Treatment
B = 3' Band

Supervisor's Comments: ☐ Treat for Infestation/Prevention or Inspect areas indicated.

EQUIP. CODE
F = Fogger
HD = Hand Dust
B&G = Comp. Air
B. /
____ = ____

SPECIAL SERVICE INSTRUCTIONS

SER. OLD CAFE, SMPP, GUARDS REST ROMS AND BASINS IN MEDICAL AREA
P. O. # 38224

BALANCE AS OF NOVEMBER 29
DEC CHARGE
SALES TAX
TOTAL DUE 9.20-47

CUSTOMER'S SIGNATURE: [illegible]

SERVICE TECHNICIAN'S SIGNATURE: [illegible] DATE 12-15-95

AMOUNT PAID: ☐ CASH ☐ CHECK

Building Manager's Questionnaire

Building Name: OSE Building Manager: W.H. Whitelow Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
	NITROGEN	500 GAL		Y/N	
7782-37-9	01C			Y/N	249
7782-37-9	02C			Y/N	OUTSIDE
				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
ATTACHED	

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

OSE-245	PHOTO FIXER	D003 D011	1.3
OSE-245	PHOTO FIXER	D003 D011	41.1
[illegible]245	PHOTO FIXER	D003 D011	5.0
OSE-245	PHOTO FIXER	D003 D004 D010 D011	1.4
OSE-245	PHOTO FIXER	D003 D011	41.3
[illegible]45	PHOTO FIXER SAMPLE, LP94-877	D003 D011	1.4
[illegible]5	PHOTO WASTE	NONE	227.8
OSE-245	PHOTO WASTE	NONE	239.0
OSE-245	PHOTO WASTE	D003 D004 D010	48.0
OSE-245	PHOTO WASTE	D002	65.1
OSE-245	PHOTO WASTE	D002 D003	39.7
OSE-245	PHOTO WASTE SAMPLE, LP94-878	D002	1.3
OSE-245	PHOTO WASTE, SAMPLE 93-548	D003 D004 D010	0.8
OSE-245	PHOTO WASTE- NO METALS	D002	302.6
OSE-245	POLAROID FILM	D011	11.7
OSE-245	SODIUM BISULFITE	NONE	4.2
OSE-245	UNIVERSAL CLEANER KIT PART A	D001 D007	7.6
OSE-245	UNIVERSAL CLEANER KIT PART B	D002	7.1
OSE-245	UNIVERSAL CLEANER KIT PART C	D002	7.2
OSE-245	Z DEVELOPER	D002	37.6
OSE-245	Z FIXER	NONE	76.5
OSE-250	PHOTO BLEACH	D011	195.0
OSE-250	PHOTO BLEACH	D011	194.5
OSE-250	PHOTO BLEACH	NONE	338.4
OSE-250	PHOTO WASTE	D011	221.2
OSE-250	PHOTO WASTE	D008 D011	256.4
OSE-250	PHOTO WASTE	D008 D011	300.7
[illegible]-450	CLEANER 50	NONE	1.5
[illegible]-450	TONER MIX TCM-58 BLACK	D001	4.7
OSE-450	TONER MIX TCM-58 BLUE	D001	4.1
[illegible]450	TONER MIX TCM-58 RED	D001	3.9
[illegible]450	TONER MIX TCM-58 YELLOW	D001	4.0
OSE-450	TONER REPLENISHER RP-585C	D001	0.4
OSE-450	TONER REPLENISHER RP-585M	D001	0.7
OSE-450	TONER REPLENISHER RP-585Y	D001	0.6
OSE-450	TONER REPLENISHER RP-58B	D001	0.5
OSE-453	TONER REPLENISHER	D001	4.4
OSE-453	TONER REPLENISHER	D001	0.4
OSE-453	TONER REPLENISHER	D001	0.4
OSE-453	TONER REPLENISHER	D001	2.4
OSE-453	TONER REPLENISHER	D001	0.8
OSE-453	TONER REPLENISHER	D001	0.3
OSE-453	TONER REPLENISHER	D001	3.5
OSE-453	TONER REPLENISHER	D001	0.4
OSE-453	TONER REPLENISHER	D001	17.3
OSE-453	TONER REPLENISHER, BLACK	D001	1.0
OSE-453	TRICHLOROETHANE (1,1,1-)	F002	1.4
OSE-218	HYSOL PART A	NONE	3.0
OSE-218	HYSOL PART B	NONE	1.0
OSE-245	PHOTO BLEACH	NONE	175.5
OSE-245	PHOTO BLEACH	D011	289.8
OSE-245	PHOTO BLEACH	D011	292.1
OSE-245	PHOTO BLEACH	NONE	43.2
OSE-245	PHOTO BLEACH	NONE	1.4
OSE-245	PHOTO BLEACH	NONE	40.6
[illegible]45	PHOTO BLEACH	D002	41.9
OSE-245	PHOTO BLEACH	NONE	5.0
OSE-245	PHOTO BLEACH	NONE	35.9
OSE-245	PHOTO BLEACH	D002	40.2
OSE-245	PHOTO BLEACH SAMPLE, LP94-876	NONE	1.2
OSE-245	PHOTO DEVELOPER	NONE	1.4
OSE-245	PHOTO DEVELOPER	NONE	3.0
OSE-245	PHOTO DEVELOPER	NONE	2.0

D7a

OSE

Building Manager's Questionnaire

Building Name: OSE Building Manager: W.H. Whitelow 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: OSE Building Manager: W.H. Whitelow 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: OSE Building Manager: W.H. Whitelow 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 KNOWN OF

9.20-52

Building Manager's Questionnaire

Building Name: OSE Building Manager: W.H. Whitelow 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.

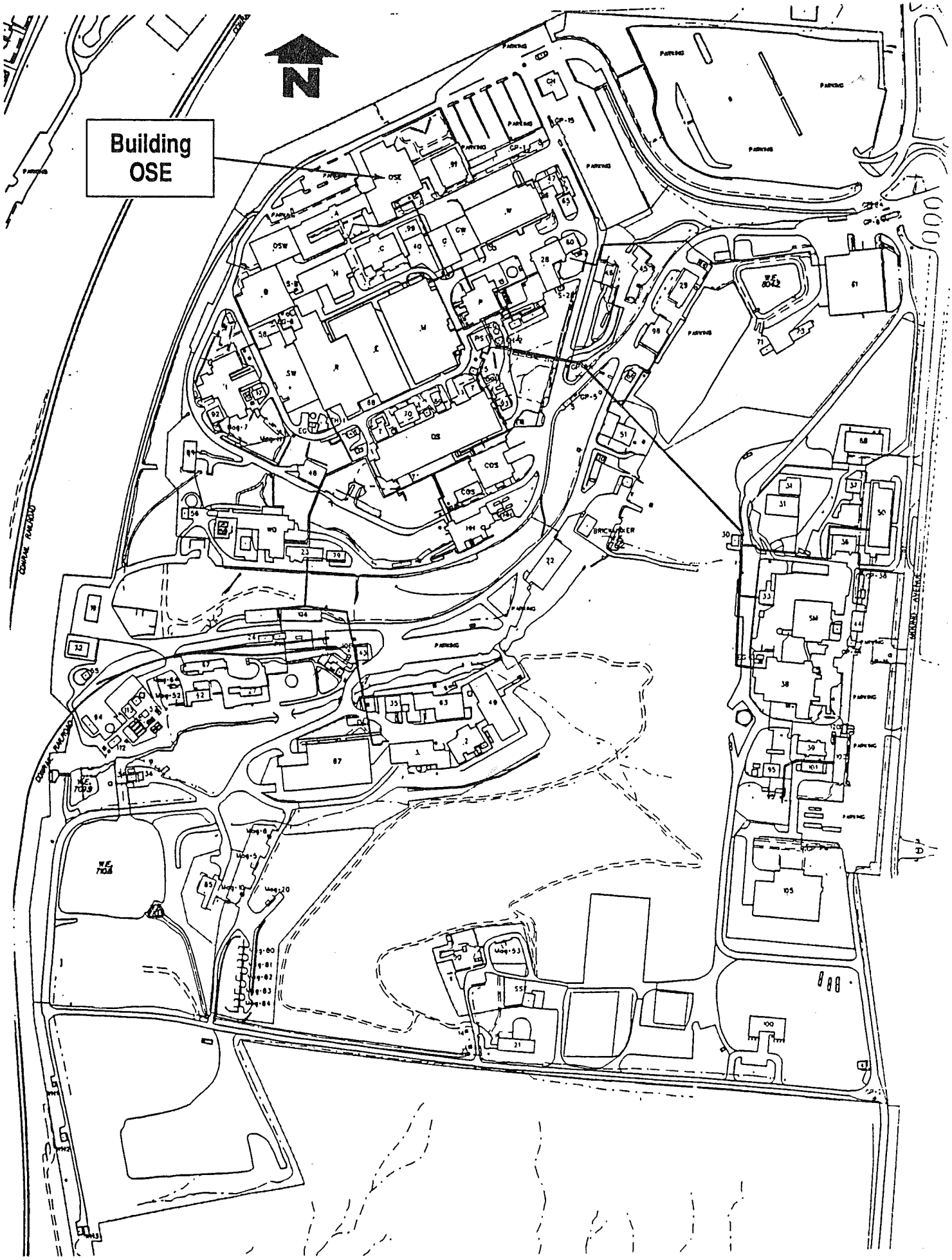
MOUND WASTE MGT PROGRAM

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

9.20-53

This page intentionally left blank.

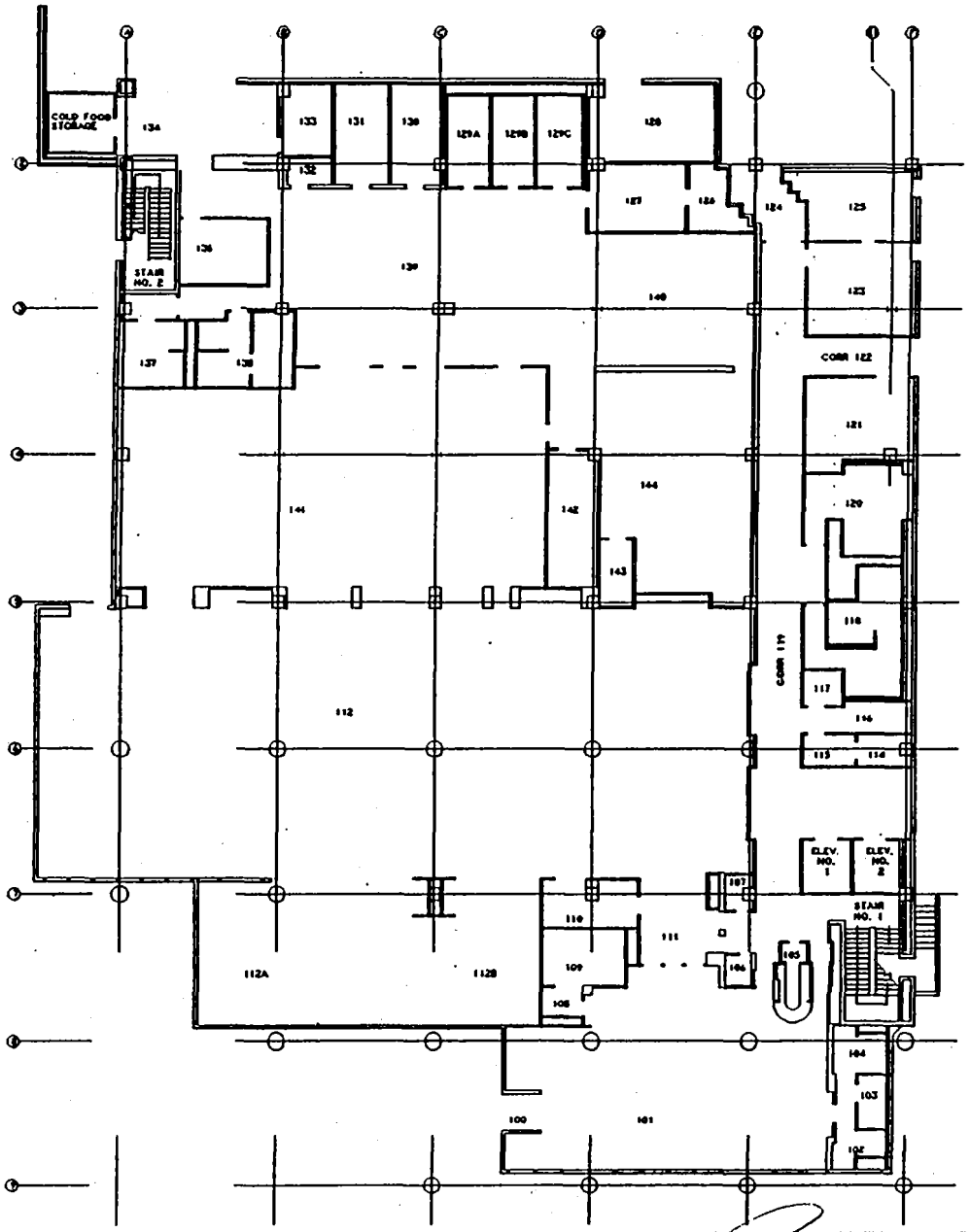
9.20.6.3 Location of Building OSE



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

9.20.6.4 Floor Plans for Building OSE

ISS	DATE	REVISION	BY	CHKR	DHB	LPHD	APVD	M
0	12/12/91	ASBUILT ISSUE	DCW				DVD	

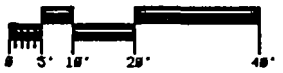


DERIVATIVE CLASSIFIER

Name:

Sr Class Anal 2/20/96

(Title) (Date)



OSE BLDG
FIRST FLOOR
BLDG CODE:3543

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: ___NONE ___TRLE80C ___TE80C ___EH80C
TECH. REP. ___
BR. MGR. ___
TRLE80C ___
TE80C ___
EH80C ___

DESIGN ENG | PROJ MGR
SPONS | ENG SUPV
LP & EC | PROJ REV
ENG MGR
APVD | DATE

SHEET	1	2	3	4	5	6
ISSUE	0	0	0	0	0	

PART CLASSIFICATION

DRAWING CLASSIFICATION: UCNI

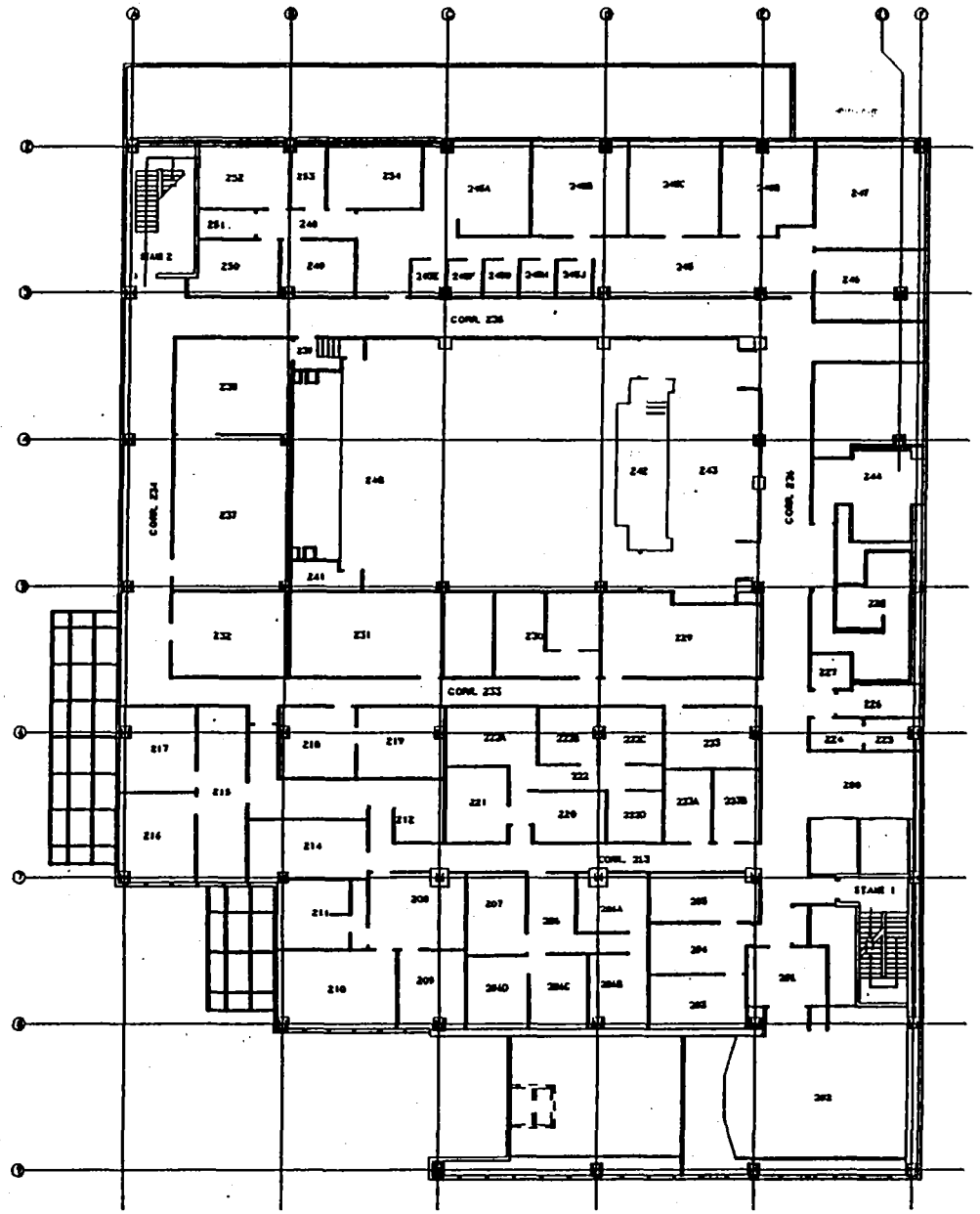
TITLE (U) TITLE CLASSIFICATION
OSE BLDG
FLOOR PLANS

SIZE C | DRAWING NUMBER FSC911315 | JOB NUMBER 12335

DWG TYPE SFP | PROJ OSE BLDG | CHRG 14865 | SCALE AS NOTED | SHEET 1 OF 5

STATUS MD-REL-12/12/91 | ORIGIN MD-BRJ-V3.0

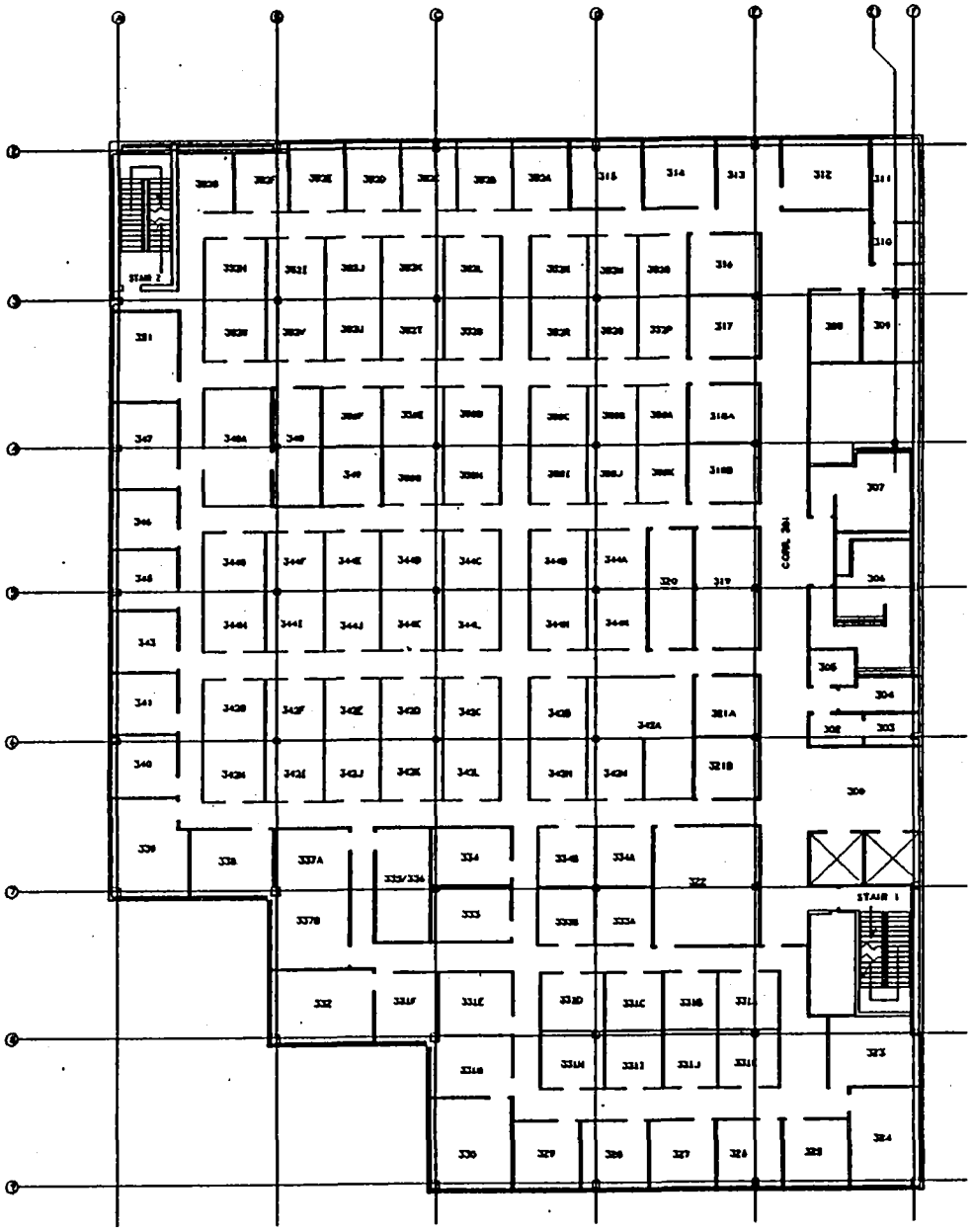
9.20-61

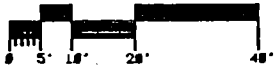


OSE BLDG
SECOND FLOOR
BLDG CODE:3543

DRAWING NUMBER FSC911315	JOB NUMBER 12335
DRAWING CLASSIFICATION UNCLASSIFIED	
SIZE C / CHECK 14965	SCALE AS NOTED
ISSUE 0	SHEET 2
STATUS MD-REL-12/12/91	

9.20-63

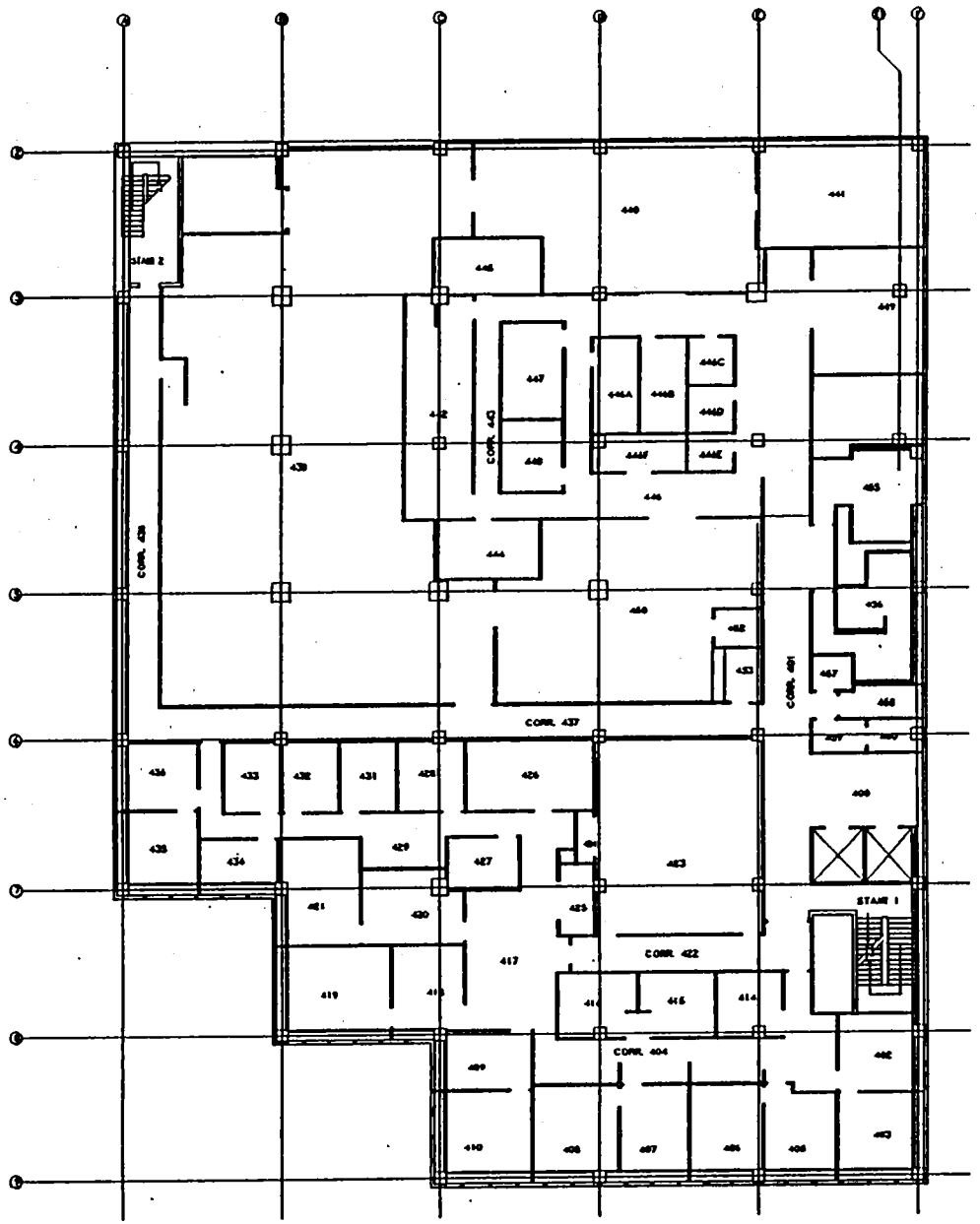




OSE BLDG
THIRD FLOOR
BLDG CODE:3543

DRAWING NUMBER FSC911315	JOB NUMBER 12335
DRAWING CLASSIFICATION UNCLASSIFIED	
SIZE C	CODE 14065 / SCALE AS NOTED
	ISSUE 0 / SHEET 3
STATUS MO-REL-12/12/91	

9.20-65



DERIVATIVE CLASSIFIER

[signature] am

[signature] 2/20/96

Title (Date)

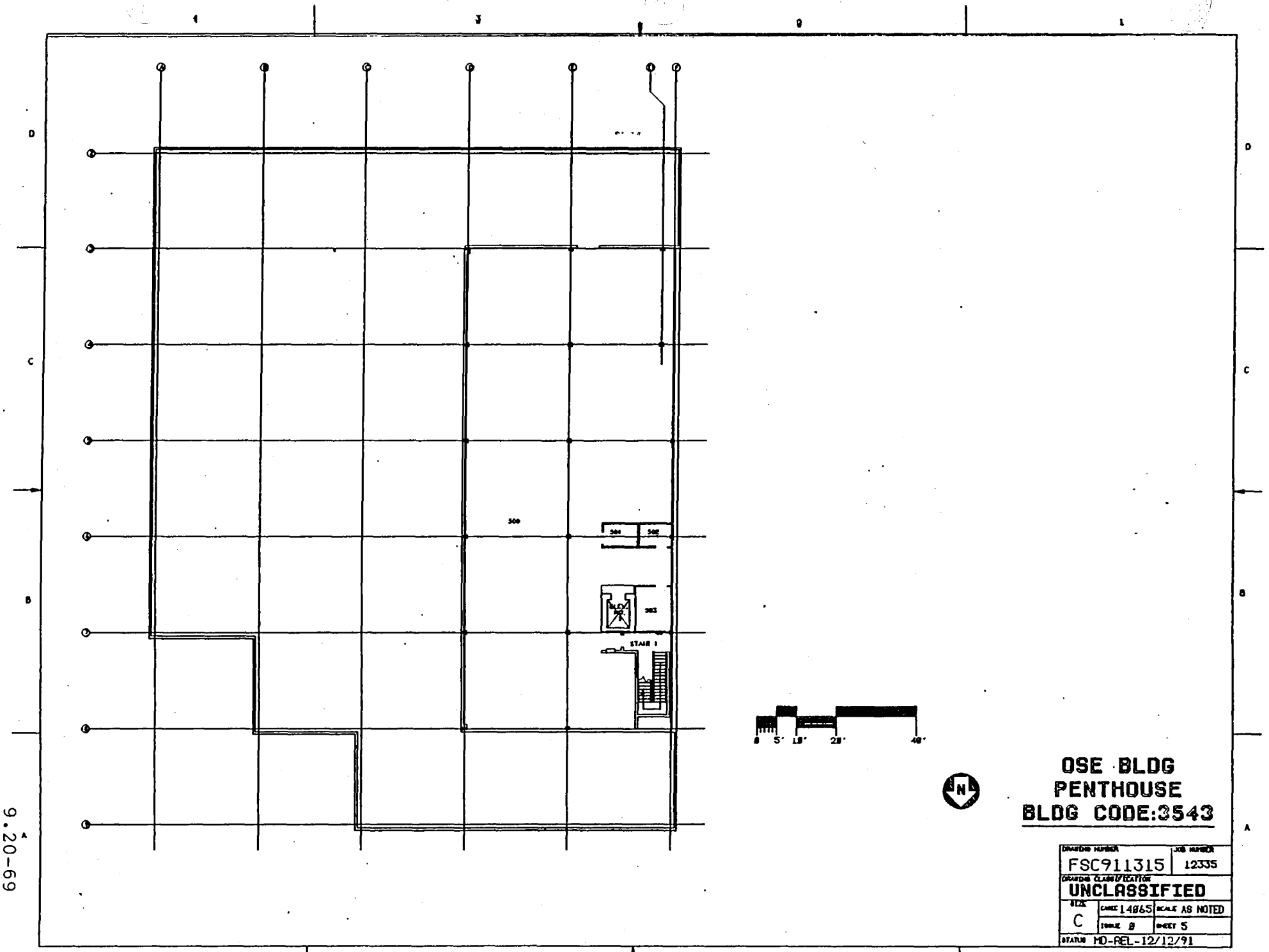
OSE BLDG
FOURTH FLOOR
BLDG CODE:3543

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.

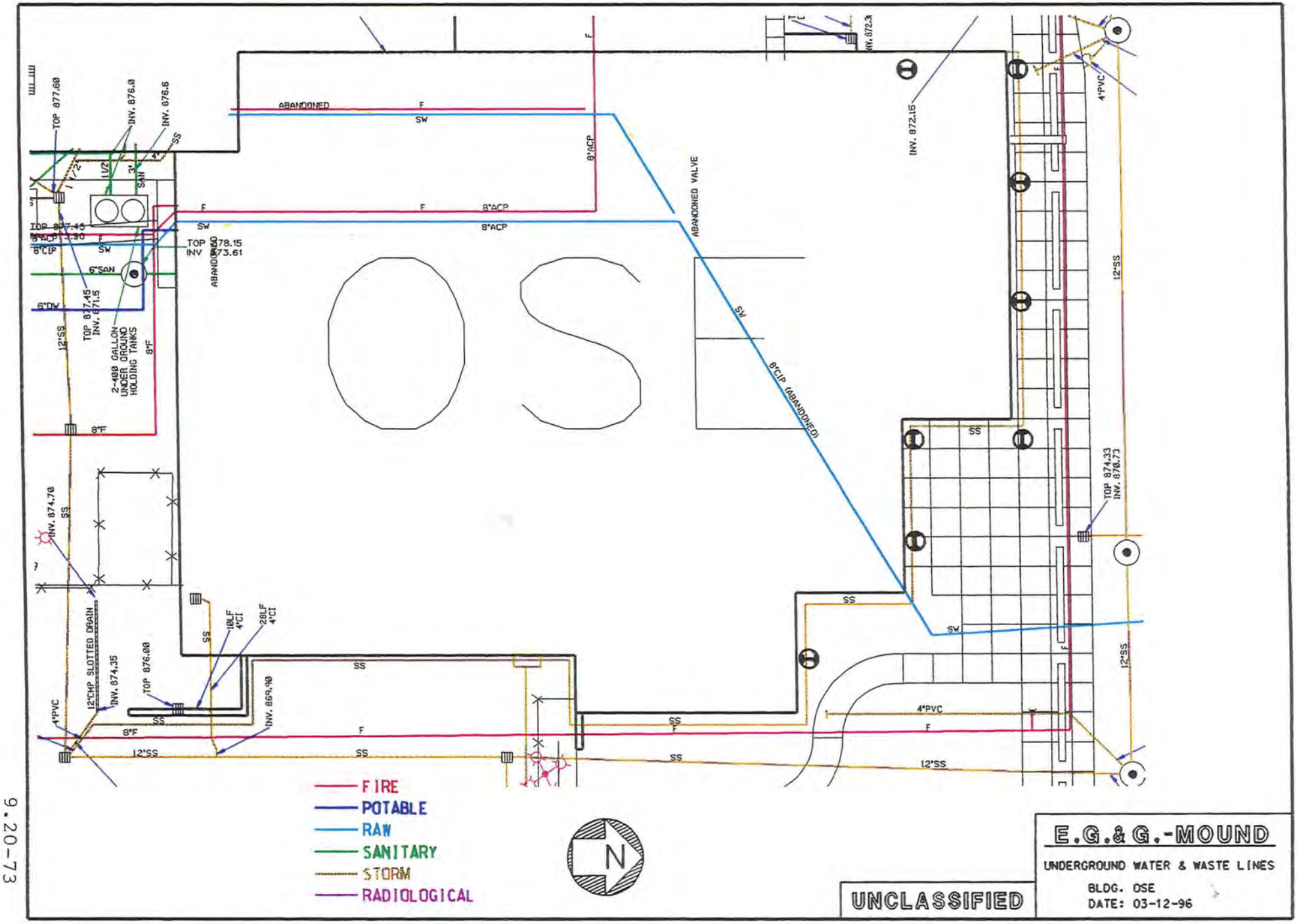
DRAWING NUMBER FSC911315		JOB NUMBER 12335
DRAWING CLASSIFICATION UCNI		
SIZE C	CHECK 14065	SCALE AS NOTED
	ISSUE B	SHEET 4
STATUS MD-REL-12/12/91		

9.20-67


500
504
502
503
STAIR 1
0 5' 10' 20' 40'
N
OSE BLDG
PENTHOUSE
BLDG CODE:3543
DRAWING NUMBER
FSC911315
JOB NUMBER
12335
DRAWING CLASSIFICATION
UNCLASSIFIED
SIZE
C
CHKD 14865
SCALE AS NOTED
TOMLE 8
SHEET 5
STATUS MD-REL-12/12/91

9.20-69

9.20.6.5 Underground Utility Lines


OSE
ABANDONED
F
SW
8"ACP
ABANDONED VALVE
8"CIP (ABANDONED)
TOP 877.60
INV. 876.0
INV. 876.6
SS
SAN
TOP 878.15
INV 873.61
2-400 GALLON UNDER GROUND HOLDING TANKS
TOP 877.45
INV. 871.5
6"SAN
6"DW
12"SS
8"F
INV. 874.70
12"CMP SLOTTED DRAIN
INV. 874.35
TOP 876.00
10LF 4"CI
28LF 4"CI
INV. 869.90
4"PVC
INV. 872.15
TOP 874.33
INV. 870.73
FIRE
POTABLE
RAW
SANITARY
STORM
RADIOLOGICAL
N
UNCLASSIFIED
E.G.&G.-MOUND
UNDERGROUND WATER & WASTE LINES
BLDG. OSE
DATE: 03-12-96

9.20.6.6 Photographs

Mound Plant Building OSE

9.20-77