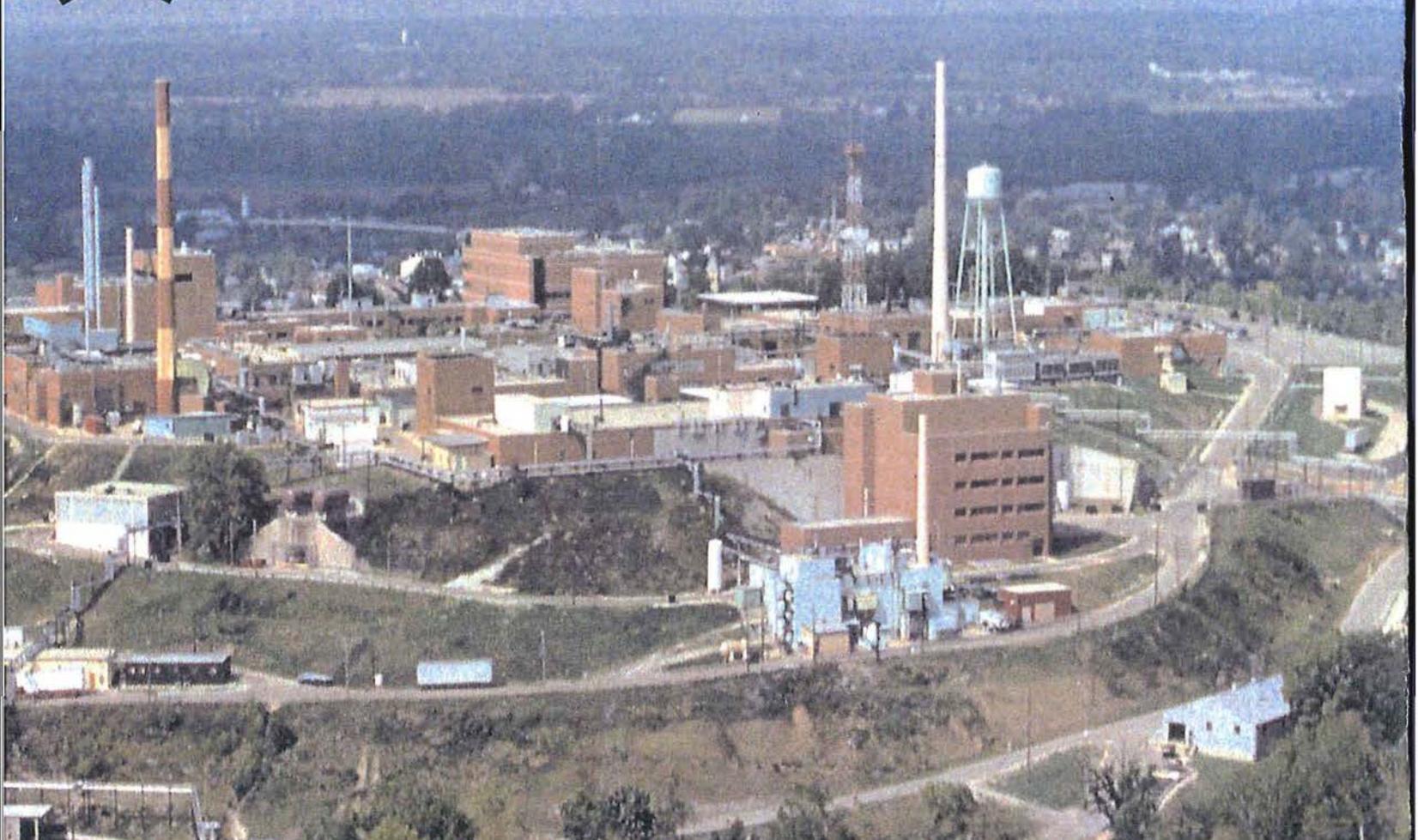




EG&G MOUND-04-01---9610220011



Volume 10
ENVIRONMENTAL
APPRAISAL REPORT
OF THE MOUND PLANT

March 29, 1996

MLM-ML-96-43-0001

**ENVIRONMENTAL APPRAISAL REPORT
OF THE MOUND PLANT
Volume 10**

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Environmental Appraisal of the Mound Plant

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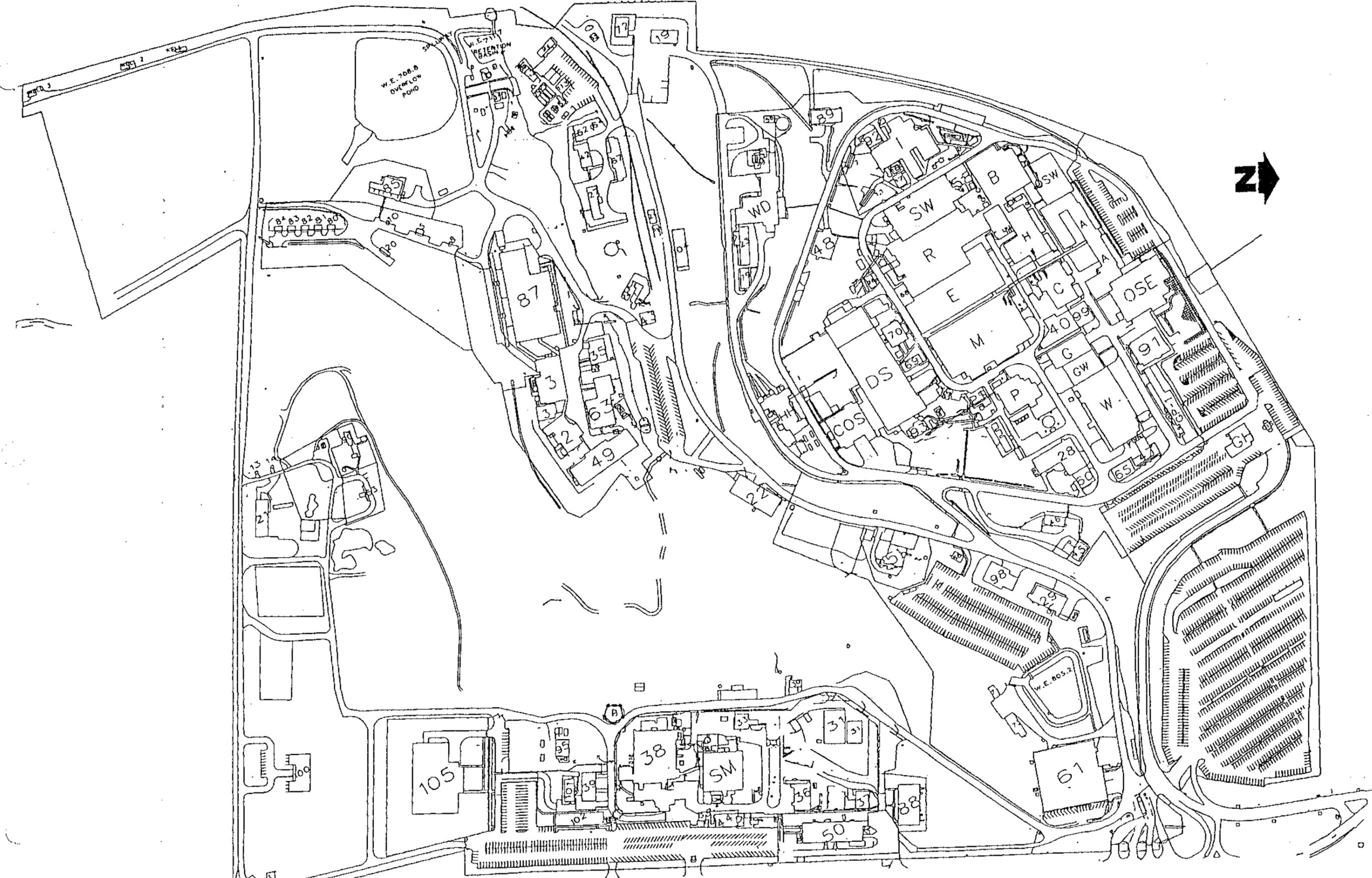
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Environmental Appraisal of the Mound Plant

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

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BUILDING LOCATION MAP

Environmental Appraisal of the Mound Plant

9.100 BUILDING 93

9.100.1 Scope of Building 93 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 93 on January 30, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.100.6.1). 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 9.100.6.2).

9.100.2 Description of Building 93

Building 93 is 2,936-square-foot, two-story wooden modular structure with a Hypalon roof. The location is shown in Attachment 3 (Section 9.100.6.3). Adjacent buildings are Building 25 to the north and Building DS to the west. Hillsides lie to the south and the east. Floor plans are presented as Attachment 4 (Section 9.100.6.4). The building is serviced by package heat and air conditioning. The building has a fire sprinkler system (*Mound Facility Physical Characterization*, 12-1-93).

Building 93 was constructed in 1984. The building was originally assembled as an office facility. The building was used for the same purpose since construction. The building is not contaminated with radiological or energetic materials (*Mound Facility Physical Characterization*, 12-1-93).

Building 93 is empty and scheduled to be dismantled in 1996.

9.100.3 Summary of Findings

The building is well-maintained, with no issues of environmental concern identified during the walk-through or during review of reference materials.

9.100.4 Observations

9.100.4.1 Air Emissions

There are no processes that create air emissions in the building. There are no fuel-burning units in the building. There is no evidence of fugitive dust.

Environmental Appraisal of the Mound Plant

9.100.4.2 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.

9.100.4.2.1 Sanitary Wastewater

The building does not have sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.100.6.5), the building is not serviced by a sanitary line.

9.100.4.2.2 Storm Wastewater

The building is serviced by storm drains according to Attachment 5 (Section 9.100.6.5). There are no interior floor drains. The building has fire service water only. In the event that sprinklers were activated the water would go to storm drains. Exterior grates and drains were not tested to confirm that they connect to the storm drainage system. Inspection showed no sign of odors, colored discharges, or scarring which would indicate that any materials other than storm water has entered the storm drainage system.

9.100.4.2.3 Chemicals

No chemicals are stored or used in Building 93. There have been no reported spills from Building 93.

9.100.4.3 Potable and Service Water

Potable water is not supplied to the building. The building has fire service water.

9.100.4.4 Chemical Storage and Hazardous Materials

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

Environmental Appraisal of the Mound Plant

The building is empty and scheduled to be demolished in 1996. With the exception of the fire sprinkler system, it is no longer equipped with emergency response equipment. There are no Emergency Evacuation Plans or signs were posted in the former work areas.

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

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

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

9.100.4.5 Solid, Hazardous, and Radioactive Wastes

There are no solid or hazardous wastes generated in the building. The building is empty and scheduled to be dismantled.

9.100.4.6 Waste Minimization and Pollution Prevention

There are no plans for waste minimization or pollution prevention. The building is scheduled to be demolished.

9.100.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.100.6.6). The environmental appraisal of Building 93 indicates that there are no action items required to be planned and scheduled for accomplishment.

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Environmental Appraisal of the Mound Plant

9.100.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 93

Appraisers:

Name _____ Discipline _____

W. J. Lett

Name _____ Discipline _____

Sony R. Glantz

Name _____ Discipline _____

Mark E. Jensen

Name _____ Discipline _____

Building Manager:

J. Boston *2/22/96*

Process Manager:

Date: 1/30/96

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

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Environmental Assessment Checklist

Building Name: 93

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

Date: 1/30/96

Clean Water Act (CWA) Screening Checklist

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

CWA Checklist

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

9.100-9

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

Clean Air Act (CAA) Screening Checklist

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

CAA Checklist

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

9.100-10

Environmental Assessment Checklist

Building Name: 93

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

Date: 1/30/96

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: _____

9.100-11

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

Hazardous Materials (HM) Screening Checklist

Question	Response	Comments
Are any chemicals used or stored in this building, now or in the past?	Y <input checked="" type="radio"/> 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	X
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 Assessment Checklist

Building Name: 93

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

Date: 1/30/96

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	X
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	

9.100-13

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

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 A₁ Isal Checklist

Building Name: 93

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

Date: 1/30/96

Safe Drinking Water Act (SDWA) Screening Checklist

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

SDWA Checklist

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

TABLE C—Water Fountain Survey			
Building	Location	Model #	Comments / Date of Analysis for Lead
X			

Source: _____

9.100-15

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

RCRA Screening Checklist

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

RCRA Checklist

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

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

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	X
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	

9.100-17

9.100-18

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

RCRA Checklist

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

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

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	

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Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

RCRA Checklist

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

General Comments:

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

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

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

TSCA Checklist

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

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

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	X
40 CFR 761.65 (b) (8)	Are all PCB articles and containers labeled with the date they were placed in storage?	Y / N	
	Are labeled PCB articles and containers stored so that the labels can be referenced?	Y / N	
40 CFR 761.65 (a)	Are all PCB's and PCB contaminated items at concentrations above 50 PPM, that are stored for disposal, stored no longer than one year from the date they were placed in storage?	Y / N	
40 CFR 761.62 (b) (1) (i)	Do all PCB storage areas have an adequate roof and walls to prevent rainwater from reaching the stored items?	Y / N	
40 CFR 761.62 (b) (1) (iv)	Are storage area floors curbed and constructed of continuous smooth and impervious materials?	Y / N	
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y / N	
40 CFR 761.62 (b) (1) (iii)	No drains are allowed in storage areas. Are there drains in the storage areas?	Y / N	

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Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

TSCA Checklist

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

GENERAL COMMENTS:

Environmental Assessment Checklist

Building Name: **93**

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

Date: **1/30/96**

Low-Level Waste and Transuranic Waste Screening Checklist

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

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

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Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

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	X
	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: 93

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

Date: 1/30/96

Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist

 Building Name: 93

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

 Date: 1/30/96

Low-Level Waste and Transuranic Waste Checklist

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

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y (N)	
	Are there solvent wastes?	Y / N	X
	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: 93

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

Date: 1/30/96

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	X
	Are baghouse filters used to collect pesticides and pesticide intermediates?	Y / N	
	Are solid wastes generated from the collection of baghouse dust?	Y / N	
	Wet instead of dry grinding used?	Y / N	
	The output spray dried?	Y / N	
	Has baghouse emptying and recycling of baghouse fines been scheduled?	Y / N	
	Have operations been evaluated to improve procedures such as handling, storage and spill prevention for increased efficiency?	Y / N	
METAL WASTES			
	Are any technologies for the recovering of metals from waste rinsewater used?	Y / N	X
	Evaporation of waste rinsewater?	Y / N	
	Reverse osmosis?	Y / N	
	Ion exchange?	Y / N	
	Electrolysis?	Y / N	
	Agglomeration?	Y / N	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y / N	

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Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

Waste Minimization/Pollution Prevention Activities Checklist

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

Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/96

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal Checklist

Building Name: 93

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

Date: 1/30/94

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments	
	Are these treatment techniques used to promote separation of oil/water wastes?		X	
	Reclaiming process to remove water and solvents by heat?	Y / N		
	Gravity setting?	Y / N		
	Screening?	Y / N		
	Centrifugation?	Y / N		
	Filtration?	Y / N		
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: 93

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

Date: 1/30/94

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal of the Mound Plant

9.100.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: 93 Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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 2,936-ft² two-story, wooden modular structure with a hypalon roof. It has package heat and 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?

Offices for Standards support.

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: 93 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: Offices

How Wastes Are Generated:

No hazardous wastes are generated in this building.

Contact:

Phone #:

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

Building Manager's Questionnaire

Building Name: 93 Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? No

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

Building Manager's Questionnaire

Building Name: 93 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?

23. Where do excess janitorial supplies go?

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 93 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.

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
7440-59-7	Helium	04C		Y/N	outside
7782-37-9	Nitrogen	04C		Y/N	outside
				Y/N	

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

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

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

Source: _____

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

Materials	Amount
Dinitro (2,4-) Phenyl Amine	0.1
Dinitro (2,4-) Phenyl Hydrazine	0.1
Dinitro (3,5-) Benzoic Acid	0.1
Dinitro Benzene	0.1
Diphenyl Amine	0.1
Petn	0.1
Picramide	0.1
Picric Acid	0.1

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

Building Manager's Questionnaire

Building Name: 93 Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: _____

Building Manager's Questionnaire

Building Name: 93 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.

Building Manager's Questionnaire

Building Name: 93 Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

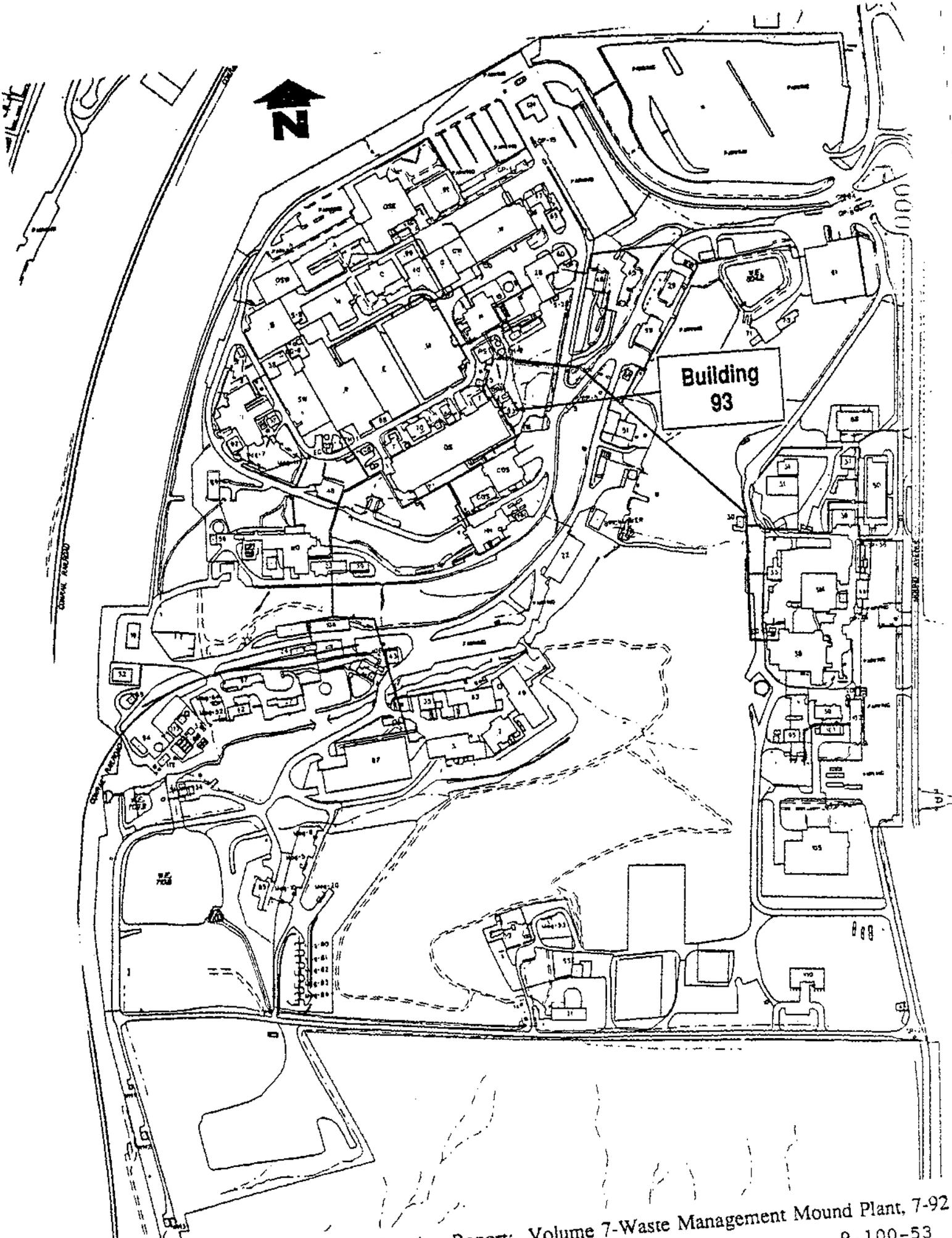
36. Is there a waste minimization program in the building? Yes No
Discuss your ideas about how to minimize waste.

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

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Environmental Appraisal of the Mound Plant

9.100.6.3 Location of Building 93



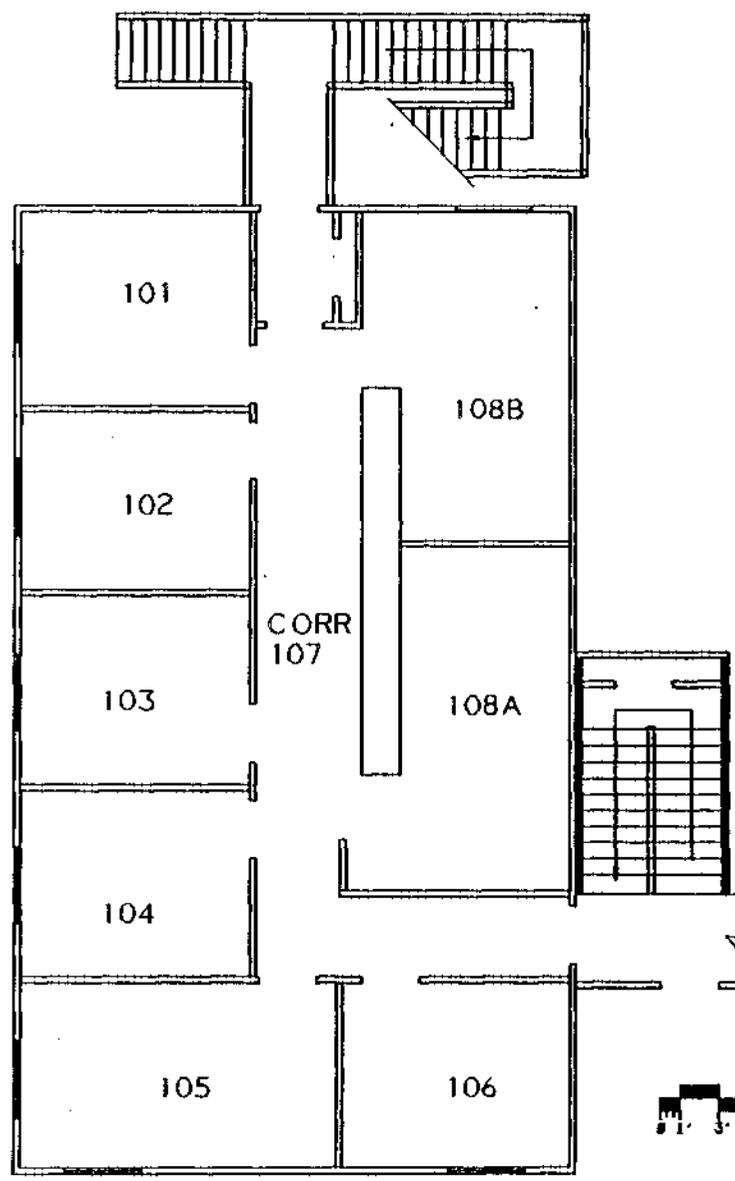
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92
9.100-53

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Environmental Appraisal of the Mound Plant

9.100.6.4 Floor Plans for Building 93

REV	DATE	REVISION	BY	CHKD	DATE	UNCL	APVD	BY
B	12/12/91	ASBUILT ISSUE						



**BLDG #93
FIRST FLOOR
BLDG CODE:3093**

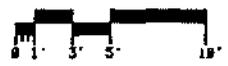
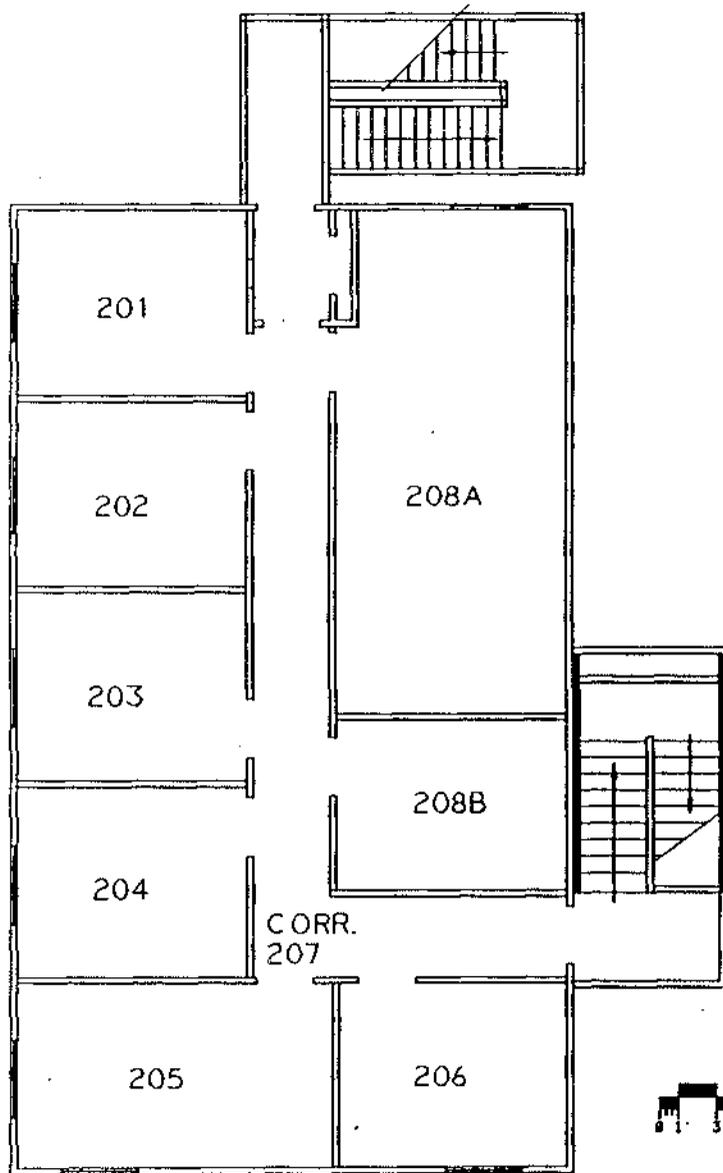


APPROVALS: _____ DATE: _____
 SAFETY COMMITTEE REVIEWED: _____
 _____ NONE _____ TRACKING _____ YES/NO _____ OTHER _____
 TECH. REV. _____
 MR. REV. _____
 TRACKING _____
 YES/NO _____
 OTHER _____

DESIGN EMP	ANLY EMP	INCL	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION	
		B							BLDG #93		
SPONS	CHKD	PART CLASSIFICATION								FLOOR PLANS	
UP & EE	PRK REV	DRAWING CLASSIFICATION								618 (Drawing Number)	JOB NUMBER
CONTR		UNCLASSIFIED								C FSC911285	12335
APPD	DATE	DWG TYPE SFP FROM BLDG #93 CASE 14865 SCALE AS NOTED SHEET 1 OF 2									
		STATUS HO-REL-12/12/91								ORIGIN HO-BR3-V3.3	

9.100-57

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**BLDG 093
SECOND FLOOR
BLDG CODE:3093**

DRAWING NUMBER		JOB NUMBER	
FSC911285		12335	
DRAWING CLASSIFICATION			
UNCLASSIFIED			
SIZE	CNDR 14865	SCALE AS NOTED	
C	FORM 8	SHEET 2	
REVISION MD-REL-12/12/91			

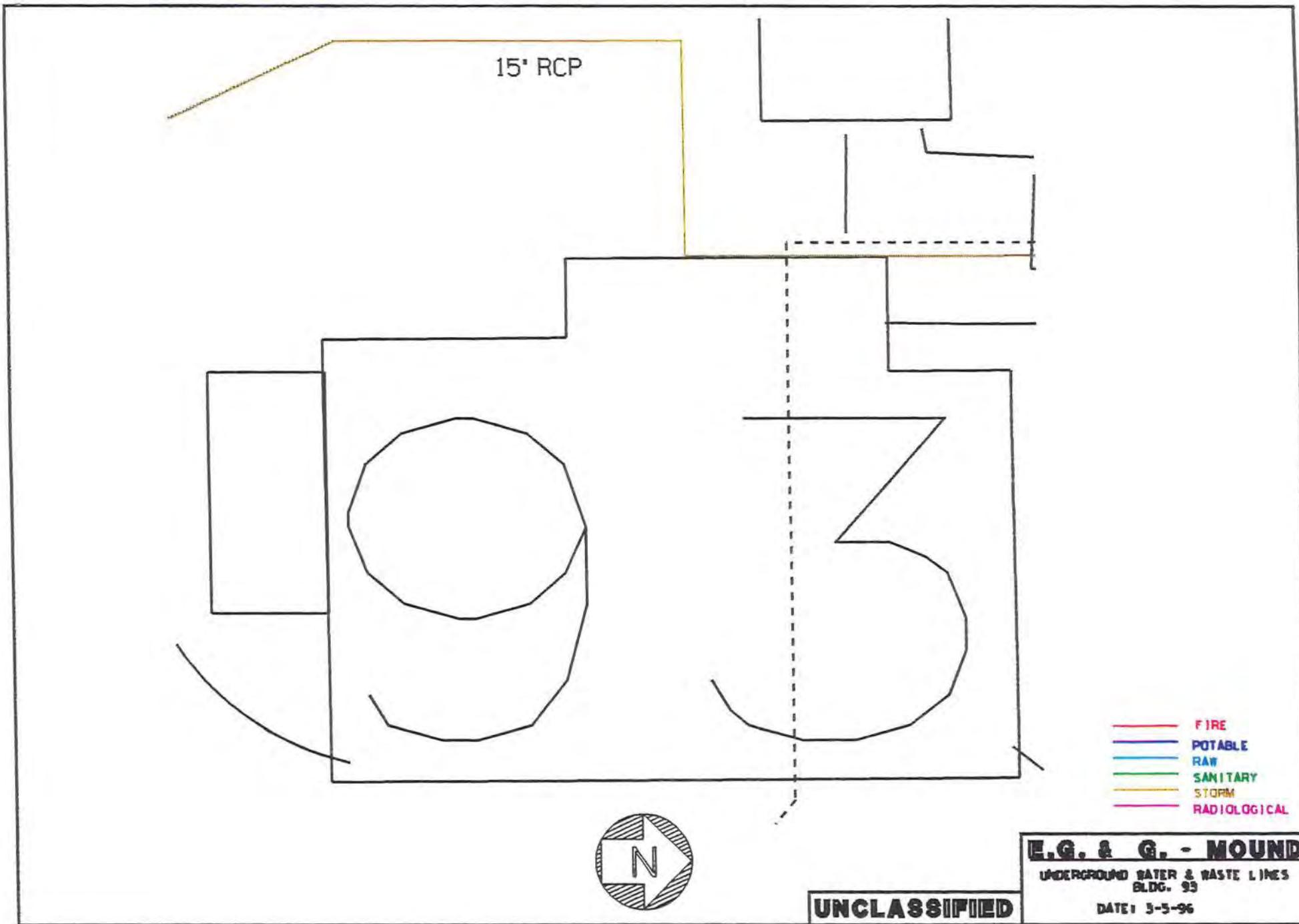
9.100-59

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Environmental Appraisal of the Mound Plant

9.100.6.5 Underground Utility Lines

9.100-63



15" RCP

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



UNCLASSIFIED

E.G. & G. - MOUND
UNDERGROUND WATER & WASTE LINES
BLDG. 93
DATE: 5-5-96

Environmental Appraisal of the Mound Plant

9.100.6.6 Photographs



Mound Plant Building 93

9.100-67

9.101 Building 03

Environmental Appraisal of the Mound Plant

9.101 BUILDING 94

9.101.1 Scope of Building 94 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 94 on the morning of February 5, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is presented as Attachment 1 (Section 9.101.6.1). 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 9.101.6.2).

9.101.2 Description of Building 94

Building 94 is used for Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) program contractor staging and for Environmental Restoration (ER) program soil and water sample storage. It is located northwest of the sewage treatment plant, Buildings 112 and 113, close to the west perimeter fence. The location is shown in Attachment 3 (Section 9.101.6.3).

The building is a 1,240-square-foot prefabricated metal building with a metal roof. It was constructed in 1985. There is electrical service of 240V. The building is supplied with potable water.

The inside of the building is divided into three bays. A floor plan is presented as Attachment 4 (Section 9.101.6.4). The building originally housed a laboratory in one bay, and environmental ovens in the other two bays. Investigations related to materials compatibility was conducted. The work was discontinued, and the equipment in the laboratory and the environmental ovens were removed.

At the time of the walk-through, one bay of the building was used for a field office and field laboratory for EG&G MAT contractors who performed work at mound related to the ER program. The other two bays were used by the EG&G MAT ER program personnel to store aqueous and solid samples. The samples were collected and analyzed under CERCLA guidelines.

The samples of water and soil from the Mound plant had been analyzed at an offsite laboratory to determine levels of contaminants, then returned to Mound for subsequent disposal. The samples had been returned in the summer of 1995 and stored in Building 94. At the time of

Environmental Appraisal of the Mound Plant

collection, some samples had been established by adding small quantities of acids and bases, in accordance with ASTM procedures. The samples were contained in plastic bottles of various sizes but none more than 500 milliliters (ml). There were several hundred bottles. Soil samples were not stabilized with acids and bases. They were stored in 30-gallon cardboard drums.

On the day of the walk-through the ambient temperature was 15°F. The building was not heated. Aqueous samples were not frozen.

9.101.3 Summary of Findings

Building 94 was used to store CERCLA program materials, including aqueous and soil samples collected at Mound, analyzed at offsite laboratories, and returned to Mound for deposit. When the building was appraised, returned samples were in storage indefinitely. Following discussions with the appraisal team, CERCLA program managers have devised a plan to neutralize samples and dispose of them. Resource Conservation and Recovery Act (RCRA) and Clean Water Act (CWA) issues related to storage and neutralization must be addressed.

9.101.4 Observations

9.101.4.1 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, and the building is not included in the Mound Air Emissions Database, 11-30-95. There is no fugitive dust. No applications for air emissions permits have been submitted for activities in this building.

9.101.4.2 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.

Environmental Appraisal of the Mound Plant

9.101.4.2.1 Sanitary Wastewater

According to a diagram of underground lines, presented as Attachment 5 (Section 9.101.6.5), the building is serviced by a sanitary wastewater collection line. There is a floor drain in each of the three bays. It appears that the floor drains are tied to the sanitary lines. It was outside the scope of this appraisal to confirm that floor drains are connected to the sanitary collection system.

A visual inspection of the floor drains in each of the three bays showed one to contain a liquid. This was in one of the bays that contained aqueous samples. An attempt was made to determine where the liquid came from, as it was expected that the drain would be dry in a building which has no janitorial service or personnel that visit the building frequently and pour water in the drain. The building manager did not have a key to the bay and had not entered the bay for several months. The process manager had a key but had not poured water into the floor drain. No other personnel other than the fire department had a key to the bay.

The samples were contained in plastic bottles which were inside of cardboard boxes stacked on the floor approximately six feet from the floor drain. The boxes were dry, and there was no evidence of leakage, such as a mark on the concrete floor. Neither the building manager nor the process manager could explain why the drain contained liquid.

9.101.4.2.2 Storm Wastewater

The building is not serviced by storm drains, according to drawings presented in Attachment 5 (Section 9.101.6.5). Roof drains discharge onto the ground and subsequently drain into the nearest storm drains. No exterior grates and drains were observed in the area around the building.

9.101.4.3 Potable and Service Water

Potable water is supplied to the building, according to the information presented in the site's underground utility lines drawing, and shown as Attachment 5 (Section 9.101.6.5). There is no water cooler, nor is service water supplied to the building.

9.101.4.4 Chemical Storage and Hazardous Materials

There are no janitorial supplies stored in the building. As described earlier in this report, there are aqueous and soil samples stored in two bays. The samples, returned following laboratory analysis, are related to the corrective action activities. Building 94 is not designated as a storage unit for regulated waste. Some of the samples are marked with U.S. Department of Transportation (USDOT) hazard classifications indicating that the sample material is corrosive. In one bay, aqueous samples are contained in plastic bottles of various sizes, in cardboard boxes. The soil is in plastic bags inside of 30-gallon cardboard drums. The boxes and drums are stacked on the floor, close to a floor drain. There is no secondary containment. There is no heat in the

Environmental Appraisal of the Mound Plant

building. In the second bay, there are aqueous samples. They are stored in plastic thermal chests, which serve as secondary containment, should a bottle break.

There are no requirements for Material Safety Data Sheets (MSDS's) in Building 94.

The building is equipped with appropriate emergency response equipment such as an eyewash, a safety shower, and a fire extinguisher. Inspection tags are current. There is an Emergency Evacuation Plan, and signs were posted in work areas.

There are no aboveground storage tanks in or around the building. According to the PCB Annual Document Log, the building does not contain polychlorinated biphenyls (PCB's).

It is assumed that the building contains asbestos, based on screening recorded in the MD-10391, *Asbestos Program Manual* (9-14-95). There was no visual evidence of friable asbestos.

9.101.4.5 Solid, Hazardous, and Radioactive Wastes

According to information provided by the BMQ, hazardous wastes are generated in Building 94. It should be noted that the materials listed are related to the former use of the building as a laboratory for materials testing, and are no longer generated in the building. At the time of the walk-through, there was no solid, hazardous, or radioactive wastes to pick up from Building 94.

Aqueous and soil samples which have been analyzed by an offsite laboratory and returned to the Mound for disposal are stored in Building 94. Some of the samples have been stabilized by acids and bases, and are corrosive (ph less than 2 and greater than 12), and may be regulated under the Resource Conservation and Recovery Act (RCRA). At the time of the walk-through, the samples were not considered a waste by the process manager. However, after discussion with environmental professionals, the materials are now considered a waste.

The process manager has developed a procedure to dispose of the liquid samples. Plans call for accumulating samples until they reach a quantity of 300 gallons. At that time samples will be batch-treated. Water samples not stabilized by acid or base will be placed in a drum. Acid-stabilized samples will be added, then base-stabilized samples will be added, to adjust the pH to neutral. Drum contents will be released gradually to the sanitary wastewater treatment plant. The procedure has been approved by the plant manager and by the EG&G MAT Safety Office.

Solid waste is not currently generated in Building 94. However, when samples are treated under the current plan, solid waste such as sample bottles and cardboard containers will be generated.

At Mound, solid waste is removed by janitorial personnel to a site collection point, then is shipped to a local landfill by a service 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 another service contractor.

Environmental Appraisal of the Mound Plant

9.101.4.6 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 a plan within the CERCLA program to minimize waste streams. If the plan for neutralizing samples is followed, waste will be significantly reduced. The alternative disposal option would be solidification and disposal as a hazardous waste.

9.101.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.101.6.6).

Findings related to the environmental appraisal of Building 94 indicates that the following action items, in priority order, should be planned and scheduled.

- 94-1 Storage, treatment and disposal of samples stored in Building 94 falls under guidelines for hazardous wastes established in RCRA, 40 CFR 261-265. The specific exemptions for CERCLA samples applies only until analysis is completed. On return of lab samples, the generator must make a hazardous waste determination, document it, and properly label samples in accordance with 40 CFR 261.4d.
- 94-2 A formal plan for neutralization of samples and subsequent release to the sanitary wastewater plant was discussed with the EG&G MAT environmental professionals. The NPDES permit was modified in December 1994 to allow discharge of "investigative derived aqueous waste." Waste Management professionals must be contacted to confirm that the activity would not conflict with requirements set forth in RCRA guidelines:
- the generator must make a waste determination;
 - waste cannot be stored for more than 90 days in a designated area; and,
 - the designated 90-day area and the neutralization activities must be identified in the RCRA contingency plan or facility permit.

Samples are corrosive, and may be a hazardous waste, as defined in 40 CFR 265. Building 94 is not a designated storage area.

- 94-3 There is no formal procedure at Mound under which processes such as the one planned by the ER personnel are reviewed by environmental compliance and waste management professions to establish that the process is appropriate under site regulatory constraints.
- 94-4 The sample storage in Building 94 may qualify as a 90-day waste storage area. It is not currently treated as such. A review of the EG&G MAT process and procedures related to RCRA requirements should be conducted.

Environmental Appraisal of the Mound Plant

- 94-5 The source of liquid in the floor drain in one bay of Building 94 should be determined. It must be confirmed that disposal of samples is not occurring.

Environmental Appraisal of the Mound Plant

9.101.6.1 Environmental Appraisal Checklist

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

Table of Contents

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Environmental Assessment Checklist

Building Name: **B94**

Appraisers: *Vya/Hausfeld/Merkes* Date: **2-5-96am**

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?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Are chemicals being used in the building?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Is there a process which discharges to the storm or sanitary system?	<input checked="" type="radio"/> Y <input type="radio"/> N	

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	<input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N	CHEMICALS ON LIST IN BMD Related to former use of bldg.
	Is the building in operation? What are the processes and where do they discharge to?	<input checked="" type="radio"/> Y <input type="radio"/> N	NOT A LAB - USED TO STORE CERCLA SAMPLES
	Do the floor drains, sinks & toilets appear to be draining properly?	<input checked="" type="radio"/> Y <input type="radio"/> N	water in floor drains - building NOT in use
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	<input checked="" type="radio"/> Sanitary <input type="radio"/> Storm	NOT KNOWN FROM DRAWING
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	<input checked="" type="radio"/> Y <input type="radio"/> N Y/N Y/N	appears to go to sanitary drain.
	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	

Building no longer used for laboratories as described in BMD. Used to store

returned CERCLA samples, + for contractor staging area

9.101-11

Environmental Appraisal Checklist

Building Name: **B94**

Appraisers: *Vyas/Hausfeld/Marker* Date: *2 5-96 am*

Clean Air Act (CAA) Screening Checklist

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

CAA Checklist

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

Environmental Assessment Checklist

Building Name: **B94**

Appraisers: *Vyas/Hausfeld/Marker* Date: *2-5-96am*
CAA Checklist

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

NOT completed

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: _____

Environmental Appraisal Checklist

Building Name: *Q4*

Appraisers: *Meeker/Vigo/Hausfeld* Date: *2-5-96am*

Hazardous Materials (HM) Screening Checklist

Question	Response	Comments
Are any chemicals used or stored in this building, now or in the past?	<input checked="" type="radio"/> Y <input type="radio"/> N	If the answer is yes, proceed with the following checklist.

chemicals - samples - stored in overpacked cardboard drums, plastic sample bottles
NO HEAT. SAMPLES NOT FROZEN 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.	<input checked="" type="radio"/> Y <input type="radio"/> N	
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	Y/N NA	<i>NOT CHEMICALS - SAMPLES</i>
29 CFR 1910.22, 1910.106, 1910.176	All places of employment, passageways, storerooms and service areas shall be kept clean and orderly and in a sanitary manner. Aisles shall be unobstructed. Drums and containers are not leaking and are tightly sealed.	<input checked="" type="radio"/> Y <input type="radio"/> 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 NA	
29 CFR 1910.106(d)(7)	Incompatible chemicals are not stored together.	Y/N NA	
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: 44

Appraisers: *Vyas/Hausfeld/Merker* Date: *2-5-96 am*

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	Y/N NA	
✓ 29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	(Y/N)	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	Y/N 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)	

0 104 1 2

Environmental Appraisal Checklist

Building Name: 94

Appraisers: *Vigo/Hausfeld/Merker*
HM Checklist

Date: 2-5-96 am

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	<i>sample storage - temporary process no production activity</i>
	Does it have proper containment?	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
	Is there a liquid bulk transfer area?	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
	Is there proper containment?	<input checked="" type="radio"/> Y <input checked="" type="radio"/> 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
	<i>NONE</i>			Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				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 Assessment Checklist

Building Name: 94

Appraisers: Vyas/Hausfeld/Merker Date: 2-5-96 am

Safe Drinking Water Act (SDWA) Screening Checklist

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

*per drawing "DOMESTIC WATER" provided provided to bldg.
SDWA Checklist*

Regulatory Guideline	Question	Response	Comments
OAC 3745 95-02 (A)	Do actual or potential cross-connections exist between potable (light green) and service water (dark green)?	Y <input checked="" type="radio"/> N	
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 <input checked="" type="radio"/> N	
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	Y <input checked="" type="radio"/> N	NO COOLERS OR FOUNTAINS

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead

Source: _____

9.101-17

9,101-18

Environmental Appraisal Checklist

Building Name: 94

Appraisers: Vyas/Hausfeld/Morbar Date: 2-5-96 am

RCRA Screening Checklist

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

NOT CHEMICALS LISTED ON BMQ - Those are from previous bldg use.

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	Has any material generated been characterized RCRA hazardous? Was characterization by analysis or by process knowledge? Are lab results or documentation of process knowledge readily available? Note any uncharacterized material in comment section. Is it waste? If yes, proceed with next section.	Y/N analysis / process <input checked="" type="radio"/> Y <input type="radio"/> N Y/N	Waste not characterized - - by lab lab analysis of CERCLA samples available
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	

Water Samples collected & stabilized: Include water; acid stabilized samples; base treated samples. Samples sent to contract labs, then returned to Mound following analysis. Samples returned to 8-95 to 1-96. Stored in B-94 for ultimate disposal. Samples stored in cardboard boxes - no secondary containment. Soil in plastic bags in cardboard drums - no secondary containment. ^{in plastic bottles}

Environmental Appraisal Checklist

Building Name: 94

Appraisers: Vyas/Hausfeld/Merker Date: 2-5-96 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?	<input checked="" type="radio"/> N <input type="radio"/> Y	If aqueous samples are RCRA hazardous due to acid or base stabilization, they should be accumulated in SAT ACC area.
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.	<input checked="" type="radio"/> N <input type="radio"/> Y	
	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	

Samples (wastes) accumulate. They will be batch treated. Water samples (not stabilized with acid or base) will be poured from plastic sample bottles into 55 gal drum; acid stabilized samples will be added; base stabilized samples will be added. pH will be adjusted to neutral. Contents will be released gradually to sanitary ww treatment plant; approved by Flaker, operator. Approved by Safety.

Batch treatment will occur when 300 gal of samples accumulate.

9.101-19

9.101-20

Environmental Appraisal Checklist

Building Name: *94*

Appraisers: *Vyas/Hausfeld/Mark* Date: *2-5-96 am*

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?	Y / N	
	Where is the log?		
	Is it properly completed, dated, and signed?	Y / N	
OAC 3745-52-34(B)	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	
	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: 94

Appraisers: *Vyas/Hausfeld/Marker* Date: *2-5-96 am*

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 <input checked="" type="radio"/> N	Samples stored since 8-95
	If the answer was no, then proceed with the following:		
	Has the tank or piece of equipment had an integrity assessment?	Y/N NA	
	Is there a sump?	Y/N	NA
	Is it dry?	NA 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	NA
	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	

9.101-21

Environmental Appraisal Checklist

Building Name: 94

Appraisers: Vignos/Merker/Hausfeld Date: 2-5-96 am

RCRA Checklist

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

General Comments:

Water samples are in plastic bottles in cardboard boxes + in plastic coolers chests. There is no sign of leakage from samples. However, floor drains have liquid in water trap. Building is not in use. How did water get into floor drains? Where did it come from? BM & PM have no knowledge.

BM's keys don't work! Lock changed 9 months ago.

Environmental Appraisal Checklist

Building Name: 94

Appraisers: Vyas/Merker/Hausfeld Date: 2-5-96am

Asbestos Screening Checklist

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

Asbestos Checklist

per Asbestos Program Manual
contamination assumed

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.	<input checked="" type="radio"/> Y <input type="radio"/> N	tested; contamination "assumed"
	Is there any evidence of friable asbestos?	<input type="radio"/> Y <input checked="" type="radio"/> 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	

Environmental Appraisal Checklist

Building Name: 94

Appraisers: Vyes/Hausfeld/Meeker Date: 2-5-96 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)	NOT IN PCB ANNUAL DOCUMENT LOG
	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: 44

Appraisers: *Vyas/Hausfeld/Merker* Date: *2-5-96 am*

TSCA Checklist

Not completed

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

9.101-25

Environmental Appraisal Checklist

Building Name: 94

Appraisers: Vyas/Hausfeld/Marker Date: 2-5-96am

TSCA Checklist

NOT completed

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

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 94

Appraisers: Vyas/Hausfeld/Merker Date: 2-5-96 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	

9.101-27

Environmental Appraisal Checklist

Building Name: *94*

Appraisers: *Vegas/Hausfeld/Morley* Date: *2-5-96 am*

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 .raisal Checklist

Building Name: 94

Appraisers: *Vyas/Hausfeld/Morley* Date: *2-5 96 am*

Low-Level Waste and Transuranic Waste Checklist

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

9.101-29

Environmental Appraisal Checklist

Building Name: 94

Appraisers: *Vyas/Hausfeld/Meier* Date: *2-5-96 am*

Low-Level Waste and Transuranic Waste Checklist

not completed

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

Environmental Appraisal Checklist

Building Name: *94*

Appraisers: *Vyas/Hausfeld/Marker* Date: *2-5-96 am*

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:

0 104 24

Environmental Appraisal Checklist

Building Name: 94

Appraisers: *Vigo/Merker/Hausfeld* Date: *2-5-96 am*

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimization/Pollution Prevention Activities Checklist

Waste storage

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	<input checked="" type="radio"/> Y <input type="radio"/> N	<i>samples can be consolidated, treated, + discharged to sanitary WW treatment plant.</i>
	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: 94

Appraisers: Vyas/Hausfeld/Merkur Date: 2-5-96 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	

9.101-33

Environmental Appraisal Checklist

Building Name: **94**

Appraisers: **Vydo/Hausfeld/Meeker** Date: **2-5-96 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 praisal Checklist

Building Name: *94*

Appraisers: *Viggo/Hausfeld/Merker* Date: *2-5-96 am*

Waste Minimization/Pollution Prevention Activities Checklist

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

Environmental Appraisal Checklist

Building Name: 94

Appraisers: Vegas/Hausfeld/Merker Date: 2-5-96am

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 settling?	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	
	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: Q14

Appraisers: Vyas/Hausfeldt/Murker Date: 2-5-96 am

Waste Minimization/Pollution Prevention Activities Checklist

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

0 101 37

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M o u n d

Electronic Message/AOS

From :Katherine Koehler
KOEHKG
Dept. :ENGINEERING
Tel. No :865-4886
Date :05-Feb-1996 04:55pm EST
Subject :MSR Request - Building 94 Environmental Audit

Margie,

Please place the following MSR's on the AMMO system as a result of the environmental audit conducted at building 94 on 2/5/96.

HP: 5277 Phone Extension: 4886

MSR Title: Turn on the Heat, Building 94

Description: Turn on the heat at building 94, bay 1, bay 2, and bay 3. Supply sufficient heat to ensure liquids stored within the building do not freeze. Check and replace thermostats as deemed appropriate to maintain temperatures of 35 degrees or higher. Thermostats should be "lockable" to prevent contractors who utilize the facility from adjusting the heat. Thermostats are to be adjusted by authorized personnel to allow for intermittent personnel occupancy. Provide Keys and or codes to thermostat to: Kathy Koehler, Bob Ward, Denny Gault, and Keith McMahan.

MSR Title: Floor Drain Plugs/Covers, Building 94

Description: Install floor drain plugs or covers to prevent spilled (potential) liquids in the field laboratory from entering the sanitary sewage system.

John Hausfeld,

I contacted Chuck Geloff today, 2/5/96, and he said he would have the fire extinguisher filled and verify that it was on the list to be maintained.

This takes care of my three corrective actions.

Kathy

Distribution:

TO: Margaret Sticklen (STICMA2)
CC: John Hausfeld (HAUSJR)
CC: Eunice Warmoth (WARMEM)
CC: ALLEN W. UPSHAW (UPSHAW)
CC: Dennis Gault (GAULDJ)
CC: Keith McMahan (MCMABK)
CC: Charles Geloff (GELOCG)
CC: David L. Heitz (HEITDL)
CC: Steve Etter (ETTESC)
CC: W. B. Clark (CLARWB)

Environmental Appraisal of the Mound Plant

9.101.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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.

This is a prefabricated metal building with a metal roof. Total area is 1,240 ft². One-third of Building 94 is used for laboratories; two-thirds is used for environmental ovens. 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?

The building is used for materials compatibility studies in support of defense programs.

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: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

Process(es) Housed: Materials aging

How Wastes Are Generated:

No hazardous wastes are generated in this building.

Contact:

Phone #:

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

Building Manager's Questionnaire

Building Name: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? No

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

Building Manager's Questionnaire

Building Name: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Chemical	Amount	Clean-up Measures

Source: _____

21. Where do waste chemicals go?

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

23. Where do excess janitorial supplies go?

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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
Ammonium Chloride	0.1
Ammonium Sulfate	1.1
Amyl Acetate	0.2
Benzil	0.2
Di-N-Butyl Succinate	0.1
Dibutyl Adipate	0.1
Diphenyl Silanediol	0.3
Ethyl Caproate	1.6
Ethyl Hexanoate	0.1
Humidity Salts	13.6
Iso Butyl Amine	1.4
Iso Butyric Acid	0.5
Iso Butyro Nitrile	1.0
Iso Butryl Chloride	0.9
Isobutyr Aldehyde	1.4
Methyl Enanthate	1.5
Methyl Hexanoate	0.1
Methyl Myristate	0.1
Methyl Nonanoate	0.1
Methyl Octanoate	0.1
Methyl Propanol (2-, -1-)	0.6
Methylene Iodide	1.5
Phenolic Resin	0.8
Poly Vinyl Pyrrolidone	0.1
Polyacrylonitrile	0.1
Potassium Acetate	0.7

Building Manager's Questionnaire

Building Name: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

Materials	Amount
Sodium Dichromate	0.8
Spectrum Magenta Premix	2.5
Succinic Acid	0.1
Tartaric Acid	0.1

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

Building Manager's Questionnaire

Building Name: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

28. Does the building have abandoned process equipment such as tanks, piping, containers, etc.? Yes No
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: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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: 94 Building Manager: K.G. Koehler Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

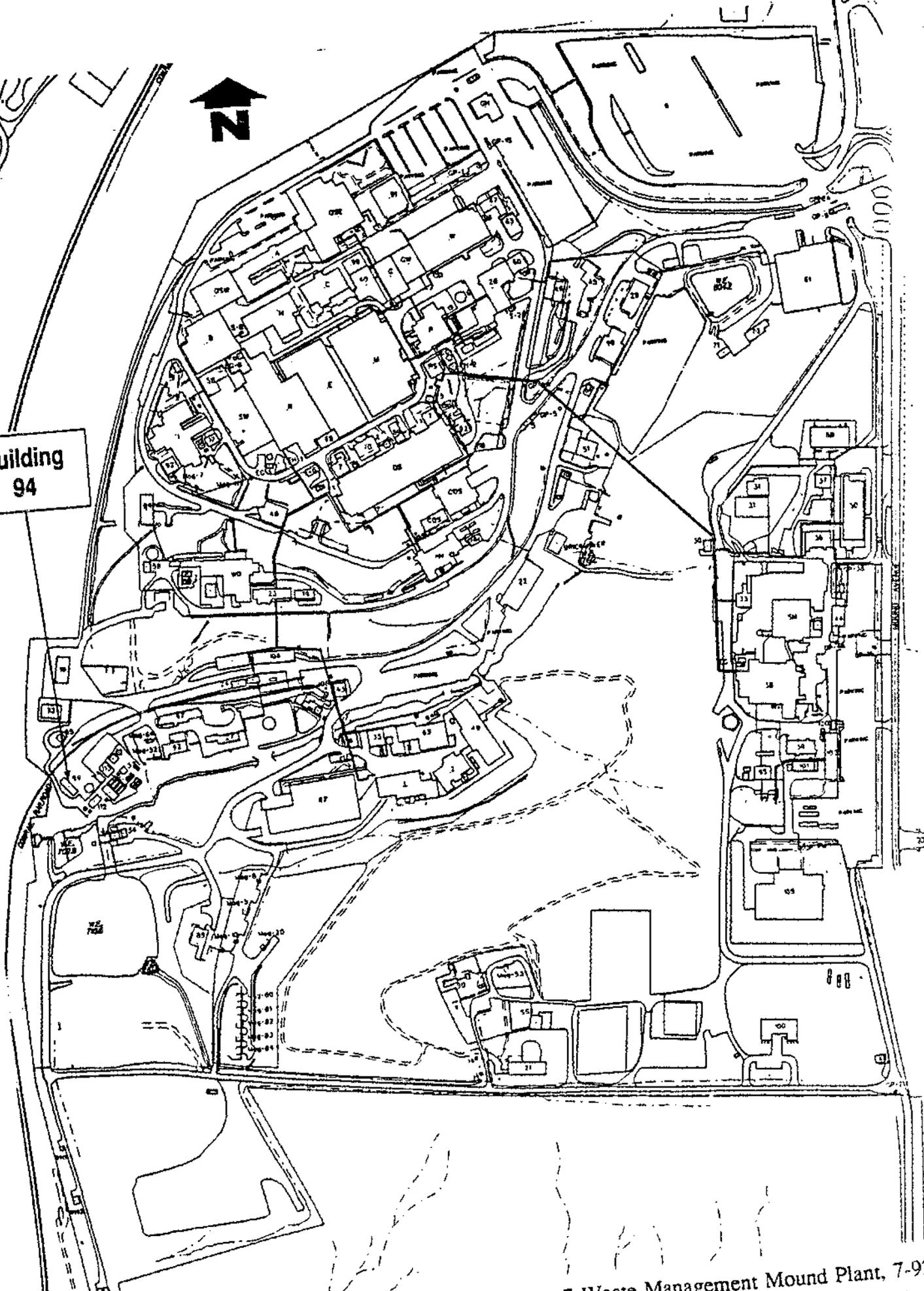
36. Is there a waste minimization program in the building? Yes No
Discuss your ideas about how to minimize waste.

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

Environmental Appraisal of the Mound Plant

9.101.6.3 Location of Building 94

Building
94



SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92
9.101-57

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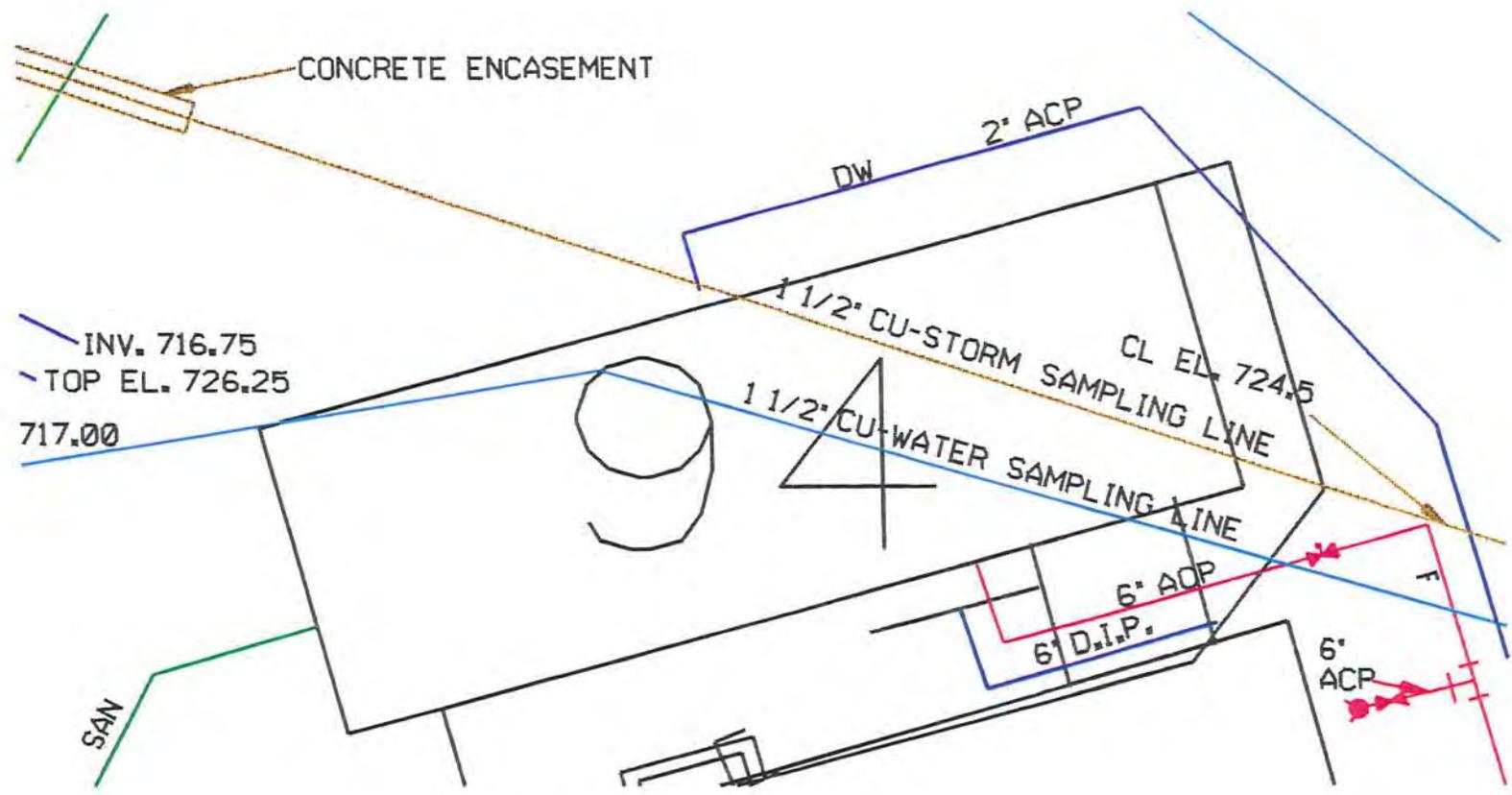
Environmental Appraisal of the Mound Plant

9.101.6.4 Floor Plans for Building 94

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Environmental Appraisal of the Mound Plant

9.101.6.5 Underground Utility Lines



INV. 716.75
 TOP EL. 726.25
 717.00

SAN



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

E.G. & G. - MOUND
 UNDERGROUND WATER & WASTE LINES
 BLDG. #
 DATE:

UNCLASSIFIED

9.101-65

Environmental Appraisal of the Mound Plant

9.101.6.6 Photographs



Mound Plant Building 94

9.101-69



Uncharacterized low specific activity (LSA) waste has been stored at Building 94 for over three years in a white LSA box container.



Firefighter training occurred behind Building 94, in the area beyond the spillway.

Environmental Appraisal of the Mound Plant

9.102 BUILDING 95

9.102.1 Scope of Building 95 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 95 on the morning of February 22, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.102.6.1). The appraisers were accompanied by 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 9.102.6.2).

9.102.2 Description of Building 95

The Building 95 unit, containing Utilities Operations, consists of the main structure and its two annex buildings, 95-A and 95-B. All are one-story, 2,000-square-foot, 430-square-foot, and 430-square-foot, respectively. All three are Butler metal prefabricated structures with metal roofs and built slab-on-grade. The location is shown in Attachment 3 (Section 9.102.6.3). The main building is bounded by gravel parking and grass. The associated Buildings 95-A and 95-B are to the west and the unit's evaporator tower is to the northwest. Buildings 39 and 101 are to the southeast. Floor plans are presented as Attachment 4 (Section 9.102.6.4). The building is serviced by heating and air conditioning systems and electric service of 480V (*Mound Facility Physical Characterization*, 12-1-93).

Building 95 was constructed in 1984 (MD-10391, *Asbestos Program Manual*, 9-14-95) and included a 500-ton Trane chiller. In 1985 an additional 800-ton chiller was installed, and in 1986, pump capacity and underground chilled water lines were extended to the test fire area. Secondary equipment was installed with each chiller, including cooling towers, chilled water pumps and condenser water pumps in Building 95-B), and chemical treatment in Building 95-A and glycol. The buildings have been used for the same purpose since construction.

9.102.3 Summary of Findings

Building 95 is the remote chilled water plant on SM/PP Hill. On the day of the walk-through, the maintenance service contractor was working on the system. The building is well-maintained. Three issues of environmental concern were identified during the walk-through and none in review of the reference materials. A vendor housekeeping issue was promptly corrected by the building manager and process manager.

Environmental Appraisal of the Mound Plant

9.102.4 Observations

9.102.4.1 Air Emissions

There are no fumehoods. 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. No air emissions permit applications have been submitted to the Ohio Environmental Protection Agency (OEPA) for activities in the building.

9.102.4.2 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.

9.102.4.2.1 Sanitary

The building does not have sanitary services, according to a diagram of underground utility lines, presented as Attachment 5 (Section 9.102.6.5).

9.102.4.2.2 Storm Wastewater

The interior floor collection drains and the exterior of the building are 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.

9.102.4.2.3 Chemicals

OEPA-approved chemicals are used to treat water circulated in and otherwise associated with the system. The list is included in the BMQ which is included as Attachment 2 (Section 9.102.6.2). Chemical drums were stored on the building's floor over the drainage collection system and do not have secondary containment in accordance with 29 CFR 1910. Dowtherm chemical stains were evident adjacent to its storage container and in the drainage system. The drain did not appear to contain a large amount of the chemicals; however, the stain would indicate that some

Environmental Appraisal of the Mound Plant

amounts had entered the storm water drainage system. Chemicals are not those listed as priority pollutants under the Clean Water Act (CWA).

Chemical handling procedures are in place for the proper use and disposal of chemicals. The quantity and type of chemicals, as well as their respective ages, was found to be compatible with daily and annual plant requirements.

9.102.4.3 Potable and Service Water

Potable water and service water are supplied to the building. Backflow prevention devices are installed at all visible points of potential cross connection. There are no drinking fountains. Service water is supplied to the building to be distributed in the fire sprinkler system and used in the plant processes.

9.102.4.4 Chemical Storage and Hazardous Materials

Chemicals for treating water are stored in the building and should have secondary containment in accordance with 29 CFR 1910. Material Safety Data Sheets (MSDS's) are available in the building. Mound personnel do not store or use flammable chemicals in the building. However, two small spray cans of lubricant were found in the vendor's storage cabinet. The cabinet did not meet standard National Fire Protection Association (NFPA) requirements. The maintenance vendor had brought with him seven inert gas cylinders which were not properly positioned or secured in accordance with GCA P-1, 3.5.8. The building manager and process managers promptly corrected the situation.

The building is equipped with appropriate charged fire extinguishers. Each extinguisher was bar-coded. The inspection date database is maintained in the Fire Station, Building 98. There is an emergency evacuation plan, and signs were posted.

A review of the Mound Active Underground Storage Tank Plan and visual inspection indicated that there are no underground storage tanks in or around the building. There are no separators, or catch basins, in or around the building. There are no aboveground storage tanks near the building. There is a large below-grade concrete sump which holds water received from the cooling tower. The water contains Environmental Protection Agency (EPA)-approved chemicals to retard the formation of algae.

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

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

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

Environmental Appraisal of the Mound Plant

9.102.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes generated are primarily paper and 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 service 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.

A small amount of oil is used by the vendor to lubricate the machinery within the building. According to the process manager, the vendor brings any new oil required and takes any used oil and rags back to his work center. The oil is added to similar oils gathered under other maintenance contracts and then properly disposed of through a licensed operator. There is no record which indicates that Mound has verified the removal and disposal process.

The cooling tower condenser and the sump pump have been inspected twice in the past five years. No sludge has been recovered. On one of the two inspections, sand was recovered from the cooling tower screens. According to the process manager, the sand was tested and determined to be free of chemicals and hazardous materials. It was assumed that dirt and dust from adjacent road construction was carried into the tower by the wind.

The occasional discharge of condensate and cooling water does not generate an imbalance to the plant operations nor does it result in a violation of federal or state regulations. Treated water is included as a contribution to the stormwater system in the NPDES permit.

9.102.4.6 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. When it is necessary to remove chilled water containing ethylene glycol during line or equipment maintenance or repair, the glycol is collected in a mobile tank trailer. It is then recharged into the system when repairs are complete. There does not appear to be additional opportunities for waste minimization activities within Building 95.

9.102.5 Findings and Recommendations

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.102.6.6).

The environmental appraisal of Building 95 indicates that the following action items, in recommended priority, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

Environmental Appraisal of the Mound Plant

- 95-1 Concentration of chemicals contained in treated water which may be discharged from Building 95 into the storm drainage system do not exceed RCRA limits. Should one of the drums of chemicals, including ethylene glycol, leak or be spilled, the liquid would enter the building drainage collection system which discharges into the storm drainage collection system. Limits could then be exceeded. It is recommended that secondary containment be installed within the building to preclude such an event from occurring. Up to now, no such event has been reported.

Drums of chemicals need to treat water are poured onto the floor over the drainage system, without containment. Chemical stains were evident in the drainage system. Proper storage of chemicals with secondary containment is required, in accordance with 29 CFR 1910.

- 95-2 Since Building 95 is not normally occupied by Mound employees but is occupied on a regular basis by the preventive maintenance vendor, it is recommended that periodic review of housekeeping practices, including the handling and storage of gas cylinders, be conducted.

Routine monitoring of practices of the subcontractor by EGG MAT is required to assure proper storage, handling, and disposal practices.

- 95-3 The removal of used oil and oil contaminated rags by the vendor should be manifested by the vendor, using the Mound generator I.D. number. The timing of the appraisal did not permit the verification of this procedure.

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Environmental Appraisal of the Mound Plant

9.102.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 95 UTILITIES OPERATIONS

Appraisers:

Team #4

MARK GILLIAT ENGINEER
Name Discipline

MARCIA VANNET CHEMIST
Name Discipline

MYRON SMITH, JR ENGINEER
Name Discipline

Name Discipline

Building Manager: ALLEN UPSHAW (X-4894)

Process Manager: FRANK BAKER (X-3438)

Date: 22 JANUARY 1996

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

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TSCA—PCB	14
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Revision 3.0 (1-5-96)

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

Date: 1-22-96

Clean Water Act (CWA) Screening Checklist

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

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	<input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N	
	Is the building in operation? What are the processes and where do they discharge to?	<input checked="" type="radio"/> Y <input type="radio"/> N	CHILLER- CLOSED LOOP. GYCOL RECOVERED DURING MAINTENANCE COOLING TOWER BACKWASH TO STORM
	Do the floor drains, sinks & toilets appear to be draining properly?	<input checked="" type="radio"/> Y <input type="radio"/> N	FLOOR DRAINS ONLY. NO SINKS OR TOILETS
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary <input checked="" type="radio"/> Storm	
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> Y <input type="radio"/> N <input type="radio"/> Y <input type="radio"/> N	
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	<input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> Y <input type="radio"/> N	DOWNWELL STAIN IN 214, DRAIN COLLECTION SYSTEM ADJACENT TO STORAGE TANK

9.102-11

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

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 3745-36	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: 95

Appraisers: Team #4

Date: 1-22-96

CAA Checklist

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

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

Blank

Source: _____

9.102-13

9.102-14

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

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	
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	Y/N	IDENTITY FORMER'S OFFICE AREA Bldg F BUT NOT IN 95.
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	POTENTIAL FLAMMABLE MATERIALS STORED IN IMPROPER CABINET BY VENDOR WHO MAINTAINS CHILLERS
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: 95

Appraisers: Team #4

Date: 1-22-96

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	Y/N	Fire Extinguishers present & charged - NO flammable/combustible storage location
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	ONLY VENDOR GAS CYLINDERS VENDOR OWNED
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	Brought & Removed AFTER USE BY VENDOR. NO LONG TERM STORAGE INSIDE BUILDING
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	CONTRACTOR VENDOR REMINDED ABOUT REQUIREMENT (BY PROCESS MANAGER) X
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	

* RECOMMENDATION

102.15

9.102-16

Environmental Appraisal Checklist

Building Name: *95*

Appraisers: *Team #4*

Date: *1-22-96*

HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	<i>ENTIRE THREE BUILDING COMPLEX</i>
	Does it have proper containment?	Y <input checked="" type="radio"/> N	<i>CHEMICAL WILL FLOW INTO DRAINS, IF SPILL</i>
	Is there a liquid bulk transfer area?	Y <input checked="" type="radio"/> N	<i>DOWNSTREAM FROM TANK TO EQUIPMENT</i>
	Is there proper containment?	Y/N	
	Is there an above ground storage tank? If so, complete Table B.	Y <input checked="" type="radio"/> 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: 95

Appraisers: Team # 4

Date: 1-22-96

Safe Drinking Water Act (SDWA) Screening Checklist

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

SDWA Checklist

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

TABLE C—Water Fountain Survey			
Building	Location	Model #	Comments / Date of Analysis for Lead
			<i>Blank</i>

Source: _____

9.102-17

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

Date: 1-22-96

RCRA Screening Checklist

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

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	<p>Has any material generated been characterized RCRA hazardous? Was characterization by analysis or by process knowledge? Are lab results or documentation of process knowledge readily available? Note any uncharacterized material in comment section. Is it waste? If yes, proceed with next section.</p>	<p>Y / <input checked="" type="radio"/> N analysis / process Y / N Y / <input checked="" type="radio"/> N</p>	<p>WASTE IS NOT GENERATED GLYCOL IS RECOVERED AND RECYCLED</p>
OAC 3745 52-11	<p>Are any of the materials noted RCRA hazardous waste? If no, note and stop here. If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.</p>	<p>Y / <input checked="" type="radio"/> N</p>	

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team # 4

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 <i>Blank</i>	
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y / N	
	Are the containers in good condition?	Y / N	
	Are the waste compatible with the containers?	Y / N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the plant site boundary?	Y / N	
	Are containers kept closed and locked except during filling?	Y / N	
	Are containers moved within 3 days of being filled?	Y / N	

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

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:		<i>Blk</i>
	Are the containers in good condition?	Y/N	
	Are the waste compatible with the containers?	Y/N	
	Are the containers kept closed except during filling?	Y/N	
	Are the containers managed in such a way, that they are not ruptured, or leaks caused?	Y/N	
	Is the area inspected at least once weekly?	Y/N	
	Is the inspection recorded? Where is the log?	Y/N	
	Is it properly completed, dated, and signed?	Y/N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the facility boundary?	Y/N	
	Are incompatible wastes managed in such a way that they will not react with another incompatible waste?	Y/N	
OAC 3745-52-34(B)	Has any of the waste (except in Building 23, Building 72 and the Burn Area) been managed in excess of 90-days?	Y/N	
	If no go to next section.		
	If yes, note. For Building 23, Building 72 & Burn Area use special checklist.		

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

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

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Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team # 4

Date: 1-22-94

RCRA Checklist

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

General Comments:

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

Date: 1-22-96

Asbestos Screening Checklist

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

* ACBM Inspection did not identify asbestos but indicated suspected areas not labeled. Missing Page 13 of 27 should be checked. Because of construction time of building, missing with ACBM is doubtful.

Environmental Appraisal Checklist

Building Name: **95**

Appraisers: **Team #4**

Date: **1-22-95**

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

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

TSCA Checklist

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

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

Date: 1-22-96

TSCA Checklist

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

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

Date: 1-22-96

TSCA Checklist

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

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

Date: 1-22-96

Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	Y <input checked="" type="radio"/> N	If yes, conduct the following survey.
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Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

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	<i>Blank</i>
	Based on field data does the characterization as documented at the time of generation of the waste ensure that the actual physical and chemical characteristics, and major radionuclide content of this material are recorded and known at all stages of the waste management process?	Y / N	
	Do characterization data include the following:		
	Physical and chemical characteristics of the waste?	Y / N	
	Volume of the waste (including solidification and absorbent material)?	Y / N	
	Weight of the waste (including solidification and absorbent material)?	Y / N	
	Major radionuclides and their concentrations?	Y / N	
	Packaging date, package weight, external volume?	Y / N	
	How were the concentration of radionuclides determined? Direct methods?	_____	
How were the concentrations of radionuclides determined? indirect methods?	_____		
DOE Order 5820.2A Chapter III, 3.11	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: 95

Appraisers: Team #4

Date: 1-22-96

Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

Date: 1-22-95

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: 95

Appraisers: Team #4

Date: 1-22-96

Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

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Environmental Appraisal Checklist

Building Name: 95

Appraisers: Team #4

Date: 1-22-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y/ <input checked="" type="radio"/> N	GLYCOL (DOWTHERM) RECOVERED DURING SYSTEM MAINTENANCE TEMPORARILY STORED IN APPROVED PORTABLE TANK TRUCK AND TRUCK REJECTED. ALL OTHER CHEMICALS USED OPENLY DIRECTLY ON SYSTEM
	Are there solvent wastes?	Y/ <input checked="" type="radio"/> N	
	Is vehicle maintenance performed?	Y/ <input checked="" type="radio"/> N	
	Are oils used?	<input checked="" type="radio"/> Y/ <input type="radio"/> N	In Pump Room 95A
	Are these corrosive wastes?	Y/ <input checked="" type="radio"/> N	
	Are there sludges?	Y/ <input checked="" type="radio"/> N	
	Are there halogenated organic (non-solvent) wastes?	Y/ <input checked="" type="radio"/> N	
	Are metals recovered from wastewater?	Y/ <input checked="" type="radio"/> N	
	Is waste sludge generated?	Y/ <input checked="" type="radio"/> N	
	Are any waste minimization practices used that reduce the generation of sludge?	Y/N	N/A
	Ion exchange process?	Y/N	
	Lead in gasoline lowered to reduce tank sludge toxicity?	Y/N	Is blank
	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: 95

Appraisers: Team #4

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	<i>Blank</i>
	Are baghouse filters used to collect pesticides and pesticide intermediates?	Y/N	
	Are solid wastes generated from the collection of baghouse dust?	Y/N	
	Wet instead of dry grinding used?	Y/N	
	The output spray dried?	Y/N	
	Has baghouse emptying and recycling of baghouse fines been scheduled?	Y/N	
	Have operations been evaluated to improve procedures such as handling, storage and spill prevention for increased efficiency?	Y/N	
METAL WASTES			
	Are any technologies for the recovering of metals from waste rinsewater used?	Y/N	<i>Blank</i>
	Evaporation of waste rinsewater?	Y/N	
	Reverse osmosis?	Y/N	
	Ion exchange?	Y/N	
	Electrolysis?	Y/N	
	Agglomeration?	Y/N	
CORROSIVE WASTES			
	Are acidic or basic cleaning solutions used as treatment for pH adjustment chemicals?	Y/N	<i>N/A</i>

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Environmental Appraisal Checklist

Building Name: *95*

Appraisers: *Team #4*

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	<i>Blank</i>
	Is crystallization used to remove corrosives from solution by cooling?	Y/N	
	Is the process of evaporation of liquid wastes by heating used to leave behind a more concentrated solution?	Y/N	
CYANIDE AND REACTIVE WASTES			
	Has non-cyanide or low concentration of cyanide process replaced zinc cyanide bath ?	Y/N	<i>Blank</i>
	Are any of these processes used to recycle cyanide wastes?	Y/N	
	Refrigeration/crystallization?	Y/N	
	Evaporation?	Y/N	
	Ion exchange?	Y/N	
	Membrane separation which includes reverse osmosis or electrodialysis?	Y/N	
VEHICLE MAINTENANCE			
	How are auto parts cleaned?	Y/N	<i>None performed</i>
	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: 95

Appraisers: Team #4

Date: 1-22-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are cleaned parts drained on the sink to minimize solvent spills?	Y/N	Blank
	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?		Pumps have lubricating oils
	Hydraulic oil?	Y/N	
	Transformer oil?	Y/N	
	Metal working fluids?	Y/N	
	Spent lubricating oils?	Y/N	REMOVED BY OTHERS GAVE TO WPA
	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	BY OTHERS
	Rags and absorbants used to their limit?	Y/N	NONE IN BUILDING REMOVED WHEN WORK COMPLETE

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Environmental Appraisal Checklist

Building Name: **95**

Appraisers: **Team #4**

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

Environmental Appraisal Checklist

Building Name: *95*

Appraisers: *Team #4*

Date: *1-22-96*

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal of the Mound Plant

9.102.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: 865-4894 Date: 12-07-95
Alternate: F. RAKER Phone: 865-3439

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

NONE

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

SAFETY GLASSES & SHOES

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

4. Provide a physical description of the building.

Building 95 is a 2,000-ft², metal prefabricated structure with a metal roof. The building contains two large glycol chiller systems. 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?

Building is used as a chilled water plant for the SM-PP hill and Test Fire areas of the facility.

Source: Mound Buildings, 5-9-95

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

NONE

Source: Mound Buildings, 5-9-95

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

Process(es) Housed: Water chilling for SM-PP and Test Fire areas

How Wastes Are Generated:

A small amount of oil used to lubricate the machinery may be discarded. The chillers were purchased from ~~Carrier~~ and we have a maintenance contract with ~~Carrier~~ for them. When ~~Carrier~~ ^{TRANE} representatives service the chillers, they bring new oil with them and take the used oil back. Any waste oil generated during operations conducted by Mound employees is put in waste oil drums ~~in Building P.~~ ^{TRANE}

Contact: A. UPSHAW / F. LAKER
Phone #: 4894 / 3438

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

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

10. Does the building have air emission sources? No

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

Source: Mound Air Emissions Database 11/30/95

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: Air Permits 2/4/95

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

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

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? No

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE ETHYLENE GLYCOL	LIQUID	
ANGLIDE 4020 (Glutaraldehyde)	LIQUID	
ANGLIDE 4070 (5-chloro-2-methyl-4-isothiazolin-3-one 2-methyl-4-isothiazolin-3-one)	LIQUID	
ANGLIDE 3310 (Organophosphate, Triazole, Synthetic polymers, Sodium Molybdate)	LIQUID	

Source: Chemical Inventory 1994

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Chemical	Amount	Clean-up Measures

Source: _____

21. Where do waste chemicals go?

N/A

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

N/A

23. Where do excess janitorial supplies go?

N/A

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

NONE

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

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

Source: _____

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

Materials	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Process	Waste	Stored	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: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Yes No

Where are logs found?

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

Source: _____

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: _____

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

Building Manager's Questionnaire

Building Name: 95 Building Manager: A.W. Upshaw 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.

GLYCOL IS CAPTURED DURING SYSTEM
REPAIR & RETURNED TO THE SYSTEM.

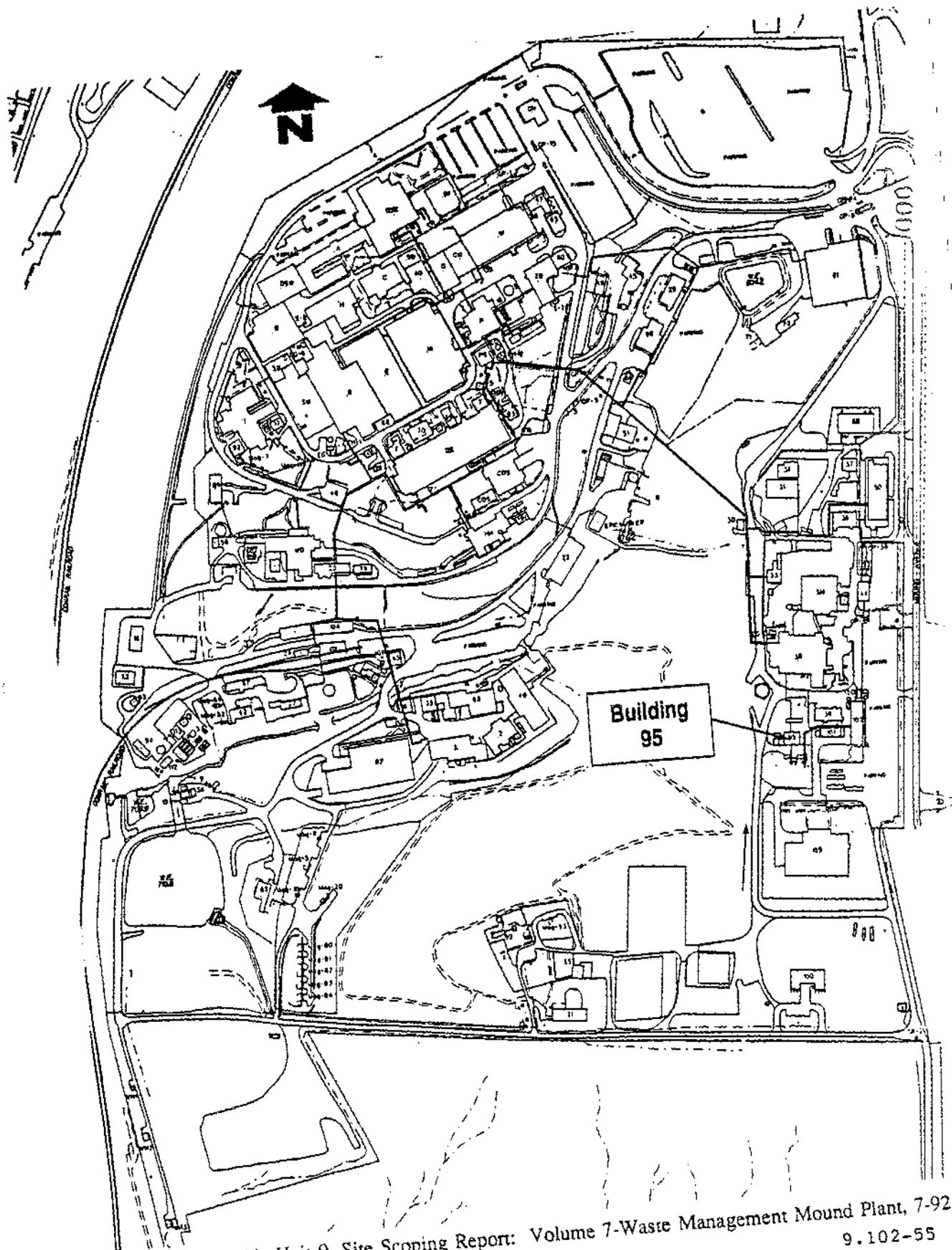
37. Has a pollution prevention program been developed for the building? Yes No

LFC RECOVERY

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Environmental Appraisal of the Mound Plant

9.102.6.3 Location of Building 95



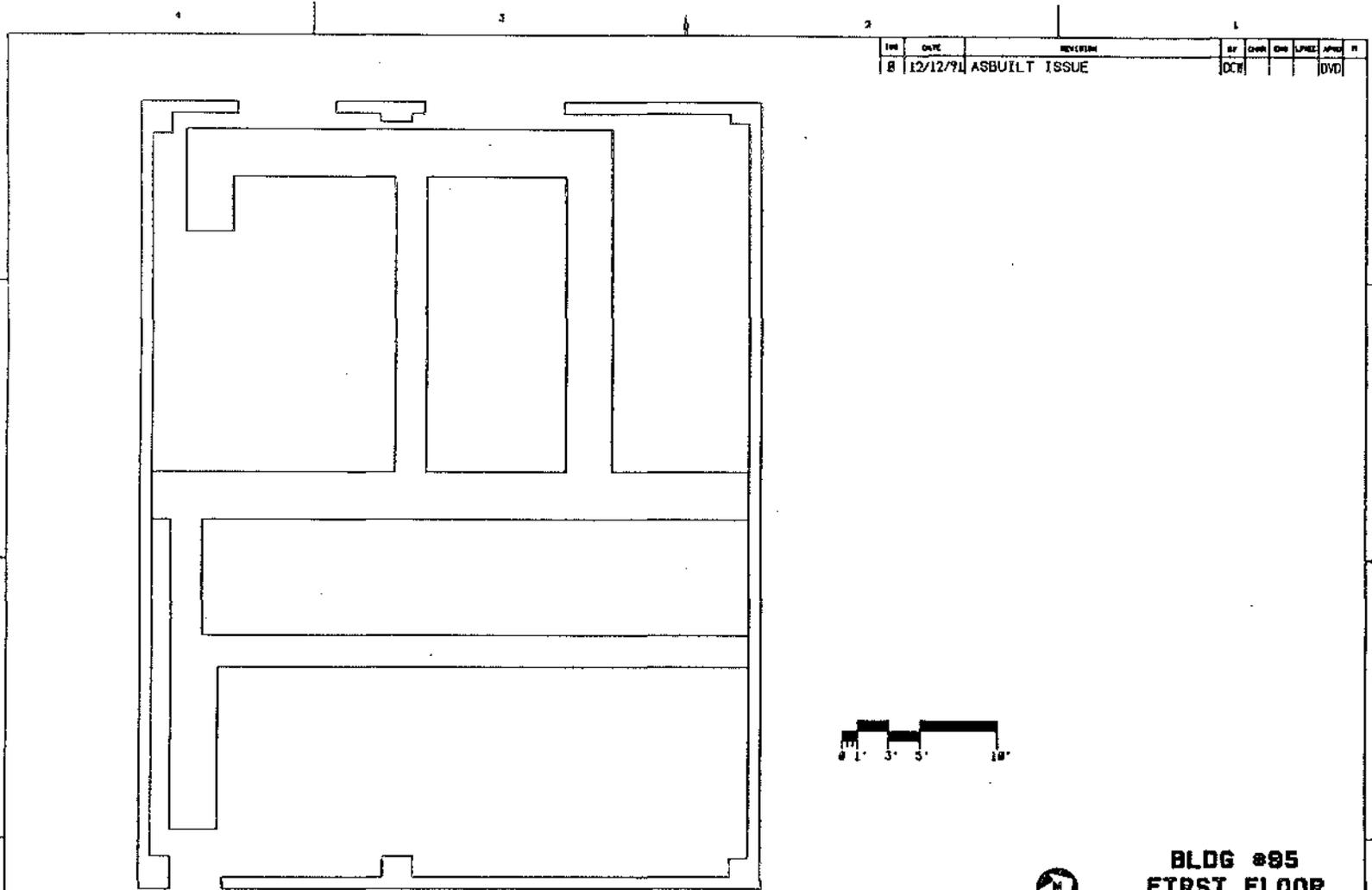
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92
9.102-55

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Environmental Appraisal of the Mound Plant

9.102.6.4 Floor Plans for Building 95

9.102-59



REV	DATE	REVISION	BY	CHKD	ENR	LP/EC	APPD	PR
8	12/12/91	ASBUILT ISSUE						

**BLDG #95
FIRST FLOOR
BLDG CODE:3095**



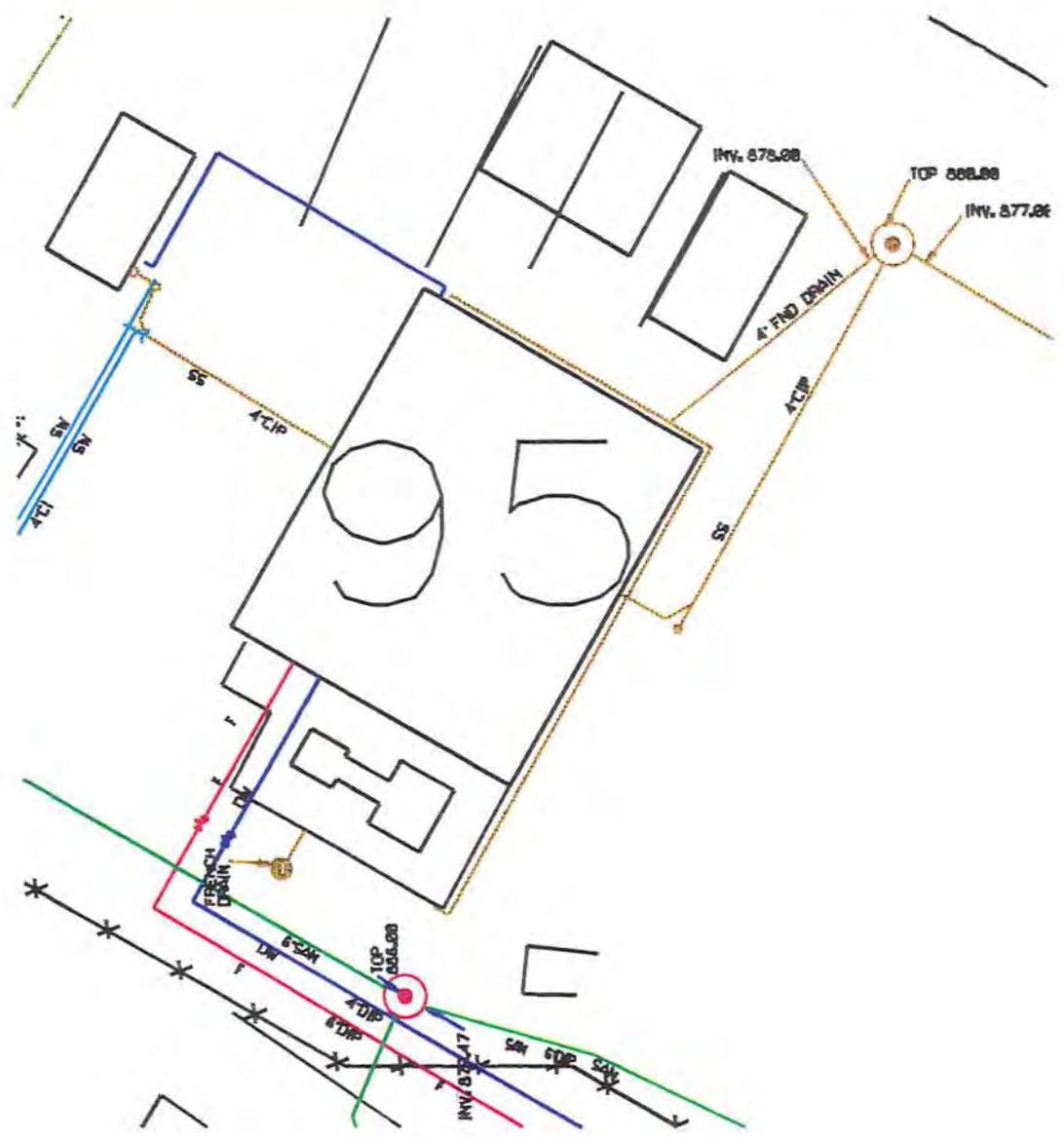
APPROVED BY: _____ DATE: _____
 SAFETY OFFICER (MAY/PROJ): _____
 _____ NMC _____ TLE/EC _____ E/DOC _____
 TECH. REV: _____
 PR. NO.: _____
 TLE/EC: _____
 E/DOC: _____
 CHKD: _____

DESIGN ORG	PROJECT OR	ISSUE	1	2	3	4	5	6	TITLE	LU 1 TITLE CLASSIFICATION	
		8							BLDG #95 FLOOR PLANS		
			PART CLASSIFICATION								
			CLASSIFICATION						DATE (ISSUE NUMBER)	JOB NUMBER	
			UNCLASSIFIED C						FSC911287	12335	
			CNS DPK SFP						FROM BLDG #95 CASE 14865	SCALE (IF ANY)	SHEET 1 OF 1
			DATE						ISSUE	NO-BR3-V3.0	

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Environmental Appraisal of the Mound Plant

9.102.6.5 Underground Utility Lines



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



E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
BLDG. 95

DATE: 3-4-96

UNCLASSIFIED

Environmental Appraisal of the Mound Plant

9.102.6.6 Photographs



Mound Plant Building 95

9.102-67



In Building 95 chemicals are improperly stored over grates which drain to storm collection system.

Environmental Appraisal of the Mound Plant

9.103 BUILDING 96

9.103.1 Scope of Building 96 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.

There was no environmental appraisal performed on Building 96 because it has been sold.

9.103.2 Description of Building 96

Building 96 was a 432-square-foot, prefabricated metal building. The facility was assembled in 1984. It was bordered by Building W on the west, Building 47 to the east, Buildings 60 and 28 to the south, and Building GP-1 to the north. Its former location is shown in Attachment 1 (Section 9.103.4.1). The facility was sold to a private party, disassembled, and moved offsite.

The building was not known to be contaminated with radiological or energetic materials (*Mound Facility Physical Characterization*, 12-1-93).

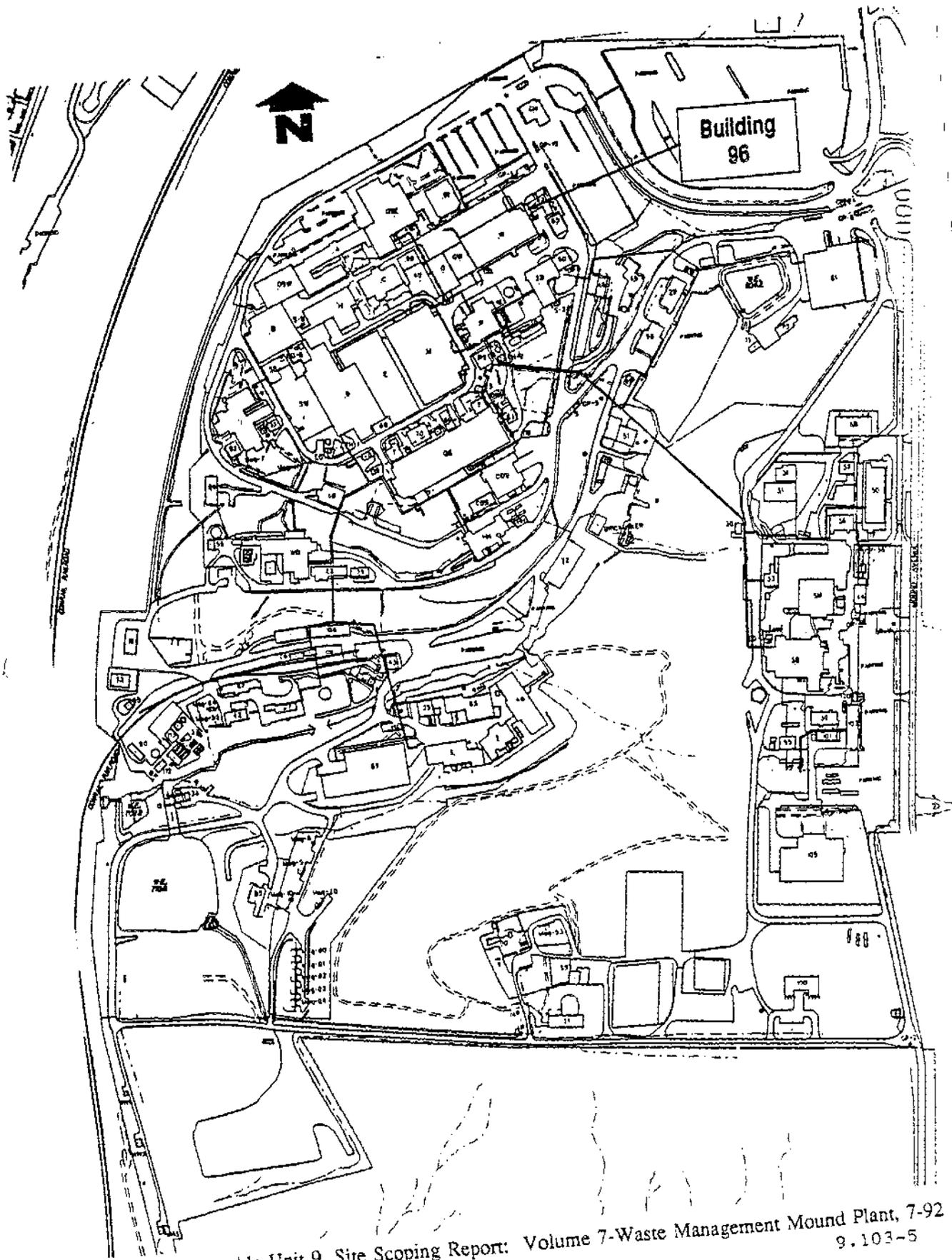
9.103.3 Summary of Findings

Building 96 has undergone Safe Shutdown which includes removal of wastes, materials, and equipment. A Health Physics safety determination and a liabilities assessment were made. An ESA (ASTM E 1527-94 or ASTM E 1528-93) was not conducted. The building has been sold and removed from Mound. Since the building has been sold, an Environmental Appraisal Checklist (EAC) was not prepared and no further action was taken concerning this building.

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Environmental Appraisal of the Mound Plant

9.103.6.1 Location of Building 96



SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92
9.103-5

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Environmental Appraisal of the Mound Plant

9.104 BUILDING 98

9.104.1 Scope of Building 98 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 98 on the afternoon of February 19, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.104.6.1). The appraisers were accompanied by 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 9.104.6.2).

9.104.2 Description of Building 98

Building 98 is a two-story, 8,517-square-foot, concrete and concrete block, slab-below-grade structure with masonry rock facing. The roof is metal. The location is shown in Attachment 3 (Section 9.104.6.3). The building is bordered by scrub grass on two sides, concrete access apron and fire house doors on the front and a graveled parking lot on the fourth side. The structure is cut into the hillside such that the front street access is level with the second floor of the building. Adjacent structures are Building 29 to the west, Building 51 to the east and Building 45 to the north across the street and up the hillside.

Floor plans are shown in Attachment 4 (Section 9.104.6.4). All offices, personnel support and training facilities, the operations center, and vehicles are located on the second floor. Vehicles housed here include those for structural fires, an ambulance and a hazardous materials (HAZMAT) mobile unit with response materials. Storage lockers, the mechanical room, a breathing air compressor, extra HAZMAT supplies and chemicals, the site fire alarm console, and a physical training room are located on the first floor.

Building 98 was constructed in 1987 (MD-10391, *Asbestos Program Manual*, 9-14-95). The building has been used for the same purpose since construction.

9.104.3 Summary of Findings

Building 98 is the Mound fire station, housing the operational and support equipment, materials, and support facilities for sitewide fire prevention and response, emergency medical services (EMS) and HAZMAT and other waste containment and cleanup operations. The building is well-maintained, with one issue of environmental concern identified during the walk-through. This concerned a oil/grease/water separator sump located in Room 115. During a review of the Mound sitewide fire extinguisher inspection status database, it appeared to be current and

Environmental Appraisal of the Mound Plant

complete. One issue of environmental concern was identified during the review of reference materials. The oil separator had not been cleaned since the building was occupied, and as a result, was not functioning as designed.

9.104.4 Observations

9.104.4.1 Air Emissions

There are no fumehoods. 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. No air emissions permit applications have been submitted to the Ohio Environmental Protection Agency (OEPA) for activities in the building.

9.104.4.2 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.

9.104.4.2.1 Sanitary Wastewater

The building has sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.104.6.5), 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 smoke tests were conducted.

It was noted that, according to drawings and partial visible inspection, the drain from the food preparation sink in Room 108 and the garage floor drains in Rooms 115 and 116, discharge into an oil/grease/water separator in Room 115. The outfall from the separator flows into the sump pit in Room 002, the Mechanical Room, which also collects discharge from the heating and air conditioning systems. This sump has an automatic float pump which discharges the effluent into the sanitary waste service line.

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

Environmental Appraisal of the Mound Plant

effluent. Based upon discussions with the process manager, effluent from the building may be deviating from that expected by the sanitary treatment plant manager. This is because engine and transmission oils which may drip from structural fire and ambulance equipment could pass from drains in Rooms 115 and 116 through the separator and sump pit into the sanitary line. According to the process manager, he had inspected it about three years ago. Mound maintenance personnel have neither inspected nor cleaned the separator since building occupancy. Visible stains and liquid oils were noted on the concrete under the equipment.

9.104.4.2.2 Storm Wastewater

The visual inspection indicated that the exterior of the building is also serviced by storm drains. Exterior grates and drains were not tested to confirm that they connect to the storm drainage system. Inspection showed no sign of odors, colored discharges, or scarring which would indicate that any materials other than storm water has entered the storm drainage system.

9.104.4.2.3 Chemicals

Most chemicals stored in the building are contingency items for use in response to a HAZMAT call. Those used in the building are primarily those associated with recharging sitewide fire extinguishers. The list is included in Attachment 2 (Section 9.104.6.2), the BMQ. The list appeared to be current; however, the information was gathered as part of the chemical inventory which is conducted annually. The inventory information dates to 1994, as 1995 data were not yet available when the appraisal was conducted. Confirmation of the 1994 inventory by the appraisal team was not attempted. The 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 & 268, and 20 CFR 1910.

There is evidence that chemicals, such as transmission fluid, engine oil and antifreeze from the emergency vehicles have entered the sanitary drain, because floor drains in the vehicle parking areas discharge into the sanitary collection system. There is no evidence that chemicals have entered the storm drains.

9.104.4.3 Potable and Service Water

Potable water is supplied to the building. Backflow prevention devices are installed at all visible points of potential cross connection in the mechanical room. The fountain which supplies drinking water has not been tested for lead. According to Environmental Protection Agency (EPA) protocol, annual sampling criteria do not require testing of the fountain. There is service water supplied to the building; it is distributed to Rooms 002, 115 and 116 of the building and within the fire sprinkler system.

9.104.4.4 Chemical Storage and Hazardous Materials

Chemicals are stored in the building in accordance with 29 CFR 1910. Material Safety Data Sheets (MSDS's) are available in the building.

Environmental Appraisal of the Mound Plant

The building is equipped with appropriate charged fire extinguishers. Each extinguisher is bar-coded. The inspection date database is maintained within this building for the entire Mound site. A review of the database showed it appeared to be current and complete. There is an Emergency Evacuation Plan, and signs were posted within the administrative office spaces.

There are no aboveground storage tanks in or around the building. There are no sumps, or catch basins, in or around the building. The one oil/water separator is located in the floor of Room 115 and the mechanical room sump is located in Room 002. Neither require secondary containment. A review of the Mound Active Underground Storage Tank Plan indicates that there are no underground storage tanks associated with this building.

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

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

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

9.104.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes generated are primarily paper. There is paper and aluminum can recycling to minimize solid waste. Solid wastes are removed by janitorial personnel to a local collection point, then shipped offsite to a local landfill by a service 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.

According to the process manager, materials which are contaminated during a HAZMAT response action are contained at the location of the spill, characterized, and turned over to Waste Management for disposition. Hazardous wastes are not returned to Building 98.

9.104.4.6 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. HAZMAT emergency response plans for the Mound fire department include elements addressing proper containment procedures which will minimize additional pollution and/or the creation of additional wastes while performing cleanup actions.

Environmental Appraisal of the Mound Plant

9.104.5 Findings and Recommendations

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.104.6.6).

The environmental appraisal of Building 98 indicates that the following action item should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

- 98-1 To preclude the discharge of grease, oil, transmission fluids, and/or antifreeze into the sanitary sewer collection system, inspection and maintenance is required for the separator in Room 115 and the lift sump in Room 002.

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Environmental Appraisal of the Mound Plant

9.104.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 98 FIRE STATION

Appraisers:

Team #4

Mark Gilliat Engineer
Name Discipline

Marcia Vanvet Chemist
Name Discipline

Mycron Smith, Jr Engineer
Name Discipline

Name Discipline

Building Manager:

Bob Ward (x-3821), ALT. KATHY KOEHLER (x-4886)

Process Manager:

David Hertz Fire Chief (x-3125)

Date:

19 February 1996

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

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

Revision 3.0 (1-5-96)

Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

Clean Water Act (CWA) Screening Checklist

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

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list?	Y/N	
	Are they properly contained?	Y/N	
	Is the building in operation? What are the processes and where do they discharge to?	Y/N	RECHARGE of FIRE EXTINGUISHERS
	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	OIL-GREASE/WATER SEPARATOR FROM KITCHEN EFFLUENT & FLOOR DRAINS IN VEHICLE PARKING GARAGES DISCHARGES INTO SANITARY SEWER FLOOR SUMP IN MECHANICAL ROOM AUTOMATIC PUMP INTO SANITARY SEWER
	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	

* ACCORDING TO PROCESS MANAGER THE OIL-GREASE/WATER SEPARATOR HAS NOT BEEN INSPECTED NOR CLEANED OUT IN SEVEN YEARS.

9.104-11

9.104-12

Environmental Appraisal Checklist

Building Name: 38

Appraisers: Team #1

Date: 2-19-96

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	
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: 98

Appraisers:

Date: 2-19-96

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					

B. Banks

Source: _____

9.104-13

9.104-14

Environmental Appraisal Checklist

Building Name: *gg*

Appraisers: *Team #4*

Date: *2-19-96*

Hazardous Materials (HM) Screening Checklist

Question	Response	Comments
Are any chemicals used or stored in this building, now or in the past?	<input checked="" type="radio"/> Y <input type="radio"/> 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.	<input checked="" type="radio"/> Y <input type="radio"/> N	
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	<input checked="" type="radio"/> Y <input type="radio"/> 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.	<input checked="" type="radio"/> Y <input type="radio"/> 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	Room labeled NO FLAMMABLE MATERIALS EXCEPT RECHARGE FACILITY FOR EXTINGUISHERS
29 CFR 1910.106(d)(7)	Incompatible chemicals are not stored together.	<input checked="" type="radio"/> Y <input type="radio"/> 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.	<input checked="" type="radio"/> Y <input type="radio"/> N	Recharge room has no secondary Recovery

Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

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	SEE
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	Bulk storage plus compression for charging extinguishers
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	Charge containers stored upright
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y/N	NONE
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y/N	NONE
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y/N	NONE
	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	

9.104-15

9.104-16

Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

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: 38

Appraisers: TEAM #4

Date: 2-19-96

Safe Drinking Water Act (SDWA) Screening Checklist

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

SDWA Checklist

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

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
38	outside kitchen in hallway.	OASIS No. 11/1/96	

Source: VISUAL / EPA PROTOCOL

9.104-17

Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

RCRA Screening Checklist

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

RCRA Checklist

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

Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
<u>I. HAZARDOUS WASTE STORED IN CONTAINERS</u>			
	Is there an area in the building that could qualify as a Satellite Accumulation Area? Is it treated as such?	Y/N Y/N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y/N <i>P3 done</i>	
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y/N	
	Are the containers in good condition?	Y/N	
	Are the waste compatible with the containers?	Y/N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the plant site boundary?	Y/N	
	Are containers kept closed and locked except during filling?	Y/N	
	Are containers moved within 3 days of being filled?	Y/N	

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Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

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?	Y/N	
	Is it properly completed, dated, and signed?	Y/N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the facility boundary?	Y/N	
	Are incompatible wastes managed in such a way that they will not react with another incompatible waste?	Y/N	
OAC 3745-52-34(B)	Has any of the waste (except in Building 23, Building 72 and the Burn Area) been managed in excess of 90-days? If no go to next section. If yes, note.	Y/N	
	For Building 23, Building 72 & Burn Area use special checklist.		

Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

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:			Y / N
	Has the tank or piece of equipment had an integrity assessment?	Y / N		
	Does the tank or equipment have secondary containment?	Y / N		
	Does the tank or equipment have leak detection device(s)?	Y / N		
	Has spill control prevention been enacted?	Y / N		
	Is there a closure plan?	Y / N		
If yes, then note.				
OAC 3745-67	Has any of the waste been managed in a surface impoundment? If yes, then note. Go to the next section.	Y / N		

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Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745-68	Has any of the waste been managed in a Landfill? If yes, then note. Go to the next section.	Y/N	
OAC 3745-68	Has any of the waste been managed in an incinerator (other than Burn area units)? If yes, then note. Go to the next section.	Y/N <i>Blank</i>	
OAC 3745-68	Has any of the waste been managed in a Thermal treatment Unit (other than Burn area units)? If yes, then note. Go to the next section.	Y/N	
OAC 3745-69	Has any of the waste been managed in a Miscellaneous Treatment Unit (other than Burn area units)? If yes, then note. Go to the next section.	Y/N	
OAC 3745-66	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: 98

Appraisers: Team #4

Date: 2-19-96

Asbestos Screening Checklist

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

Asbestos Checklist

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

Regulatory Guideline	Question	Response	Comments
ADAPTED FROM TSCA ACM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos? If no for this building or area note this conclusion in the comment section.	Y/N	Conclusion on BMQ indicates Probable; however, lagging on piping and insulation in span 844 Equipment areas does not contain asbestos (visible type) and if they should not include ACM.
	Is there any evidence of friable asbestos?	Y/N	
	Is the asbestos removal properly managed? (See questions listed below)	Y/N	
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACM during the removal.	Y/N	<i>Blank</i>
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)?	Y/N	
40 CFR 61.154	Is friable asbestos adequately wetted during stripping? Or, has an adequate ventilation and collection system been installed?	Y/N	
40 CFR 61.152	Is wetting continued until the waste friable asbestos is collected for disposal?	Y/N	

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Environmental Appraisal Checklist

Building Name: . 98

Appraisers: Team #4

Date: 2-19-96

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

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

TSCA Checklist

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

Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

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 area floors curbed and constructed of continuous smooth and impervious materials?	Y/N	
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y/N	
40 CFR 761.62 (b) (1) (iii)	No drains are allowed in storage areas. Are there drains in the storage areas?	Y/N	

Environmental Appraisal Checklist

Building Name:

Appraisers: *Team #4*Date: *2-19-96*TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitors and PCB-containing electrical equipment are allowed to be stored outside of PCB storage areas, on pallets if stored outside, with containment for 10 percent of the volume of the equipment. Do all PCB's stored in this configuration conform with this requirement?	Y/N	
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: 98

Appraisers: Team #4

Date: 2-19-96

Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	Y <input checked="" type="radio"/> N	If yes, conduct the following survey.
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Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

Low-Level Waste and Transuranic Waste Checklist

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

Environmental Assessment Checklist

Building Name: **98**

Appraisers: **Team #4**

Date: **2-19-96**

Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

Low-Level Waste and Transuranic Waste Checklist

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

Environmental Appraisal Checklist

Building Name: 98

Appraisers: TEAM #4

Date: 2-19-96

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:

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Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals?	(Y) N	If yes, conduct the following survey.
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Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y (N)	
	Are there solvent wastes?	Y/N	<i>Blank</i>
	Is vehicle maintenance performed?	Y/N	
	Are oils used ?	Y/N	
	Are these corrosive wastes?	Y/N	
	Are there sludges?	Y/N	
	Are there halogenated organic (non solvent) 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 Assessment Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

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	<i>[Handwritten Signature]</i>
	Are baghouse filters used to collect pesticides and pesticide intermediates?	Y / N	
	Are solid wastes generated from the collection of baghouse dust?	Y / N	
	Wet instead of dry grinding used?	Y / N	
	The output spray dried?	Y / N	
	Has baghouse emptying and recycling of baghouse fines been scheduled?	Y / N	
	Have operations been evaluated to improve procedures such as handling, storage and spill prevention for increased efficiency?	Y / N	
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	

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Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

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: 98

Appraisers: Team #7

Date: 2-19-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are cleaned parts drained on the sink to minimize solvent spills?	Y/N	Blank
	Are drip tanks used to capture losses?	Y/N	
	Is a solvent sink used for mineral solvents rather than a dunk bucket or dip tank?	Y/N	
	Does a waste hauler collect solvent waste for recycling or treatment?	Y/N	
<u>OILS</u>			
	What kind of oils are used?		None used within 1500.
	Hydraulic oil?	Y/N	} N/A
	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	See note below
	Oil spills prevented?	Y/N	N/A
	Drip pans installed?	Y/N	
	Oil soaked rags laundered?	Y/N	N/A
	Rags and absorbants used to their limit?	Y/N	N/A

oil, transmission fluid & prestone (or equivalent) noticed on concrete floor of fire equipment (structural) and ambulance garages. Process manager indicated area is matted down with service drains which collect into the oil-grease separator which offfalls into the sanitary sewer collection system - last cleaned out 7 years ago.

Environmental Appraisal Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

Waste Minimization/Pollution Prevention Activities Checklist

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

Environmental Assessment Checklist

Building Name: 98

Appraisers: Team #4

Date: 2-19-96

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal of the Mound Plant

9.104.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: 98 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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.

This is a two-story, building containing 8,517 ft². Exterior walls are masonry, and the roof is metal. HVAC systems are central steam and chilled water. 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?

Building is the fire house for the site. Emergency vehicles and other emergency equipment are housed here. Building also has offices and living quarters.

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

1107

By 12/21/95

Building Manager's Questionnaire

Building Name: 98 Building Manager: R.A. Ward Phone: X3821 Date: 12-07-95
 Alternate: KATHY KOEHLER Phone: X4886

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: Central fire station

How Wastes Are Generated:

No hazardous wastes are generated in this building.

Contact: David H. Huff
 Phone #: 865-3125

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

Building Manager's Questionnaire

Building Name: 98 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 *Do diesel powered vehicles meet this.*

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: 98 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?

*Roof Drains
 Discharge into
 Storm Sewer*

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

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

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

Building Manager's Questionnaire

Building Name: 98 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)
FOG PRUF	L	24 OZ
TURTLE WAX	L	3 GA
WD-40	L	12 OZ
KINDEST KARE	L	120 OZ
LIGHT WATER FOAM	L	340 GA
COLD CLEAN FOAM	L	340 GA
LOW SUDS LAUNDRY SOAP	S	20 LB
MET-L-EX	S	300 LB
NABC CLEANER	L	16 OZ
PRO-SHINE	L	6 GA
SODIUM BICARBONATE	S	350 LB
PH NINE	S	300 LB
ALL PURPOSE CLEANER	L	30 GA
ETHYLENE GLYCOL	L	55 GA
PROPYLENE GLYCOL	L	50 GA
SAFE STEP	S	2000 LB
UNLEADED GAS	L	20 GA

Source: Chemical Inventory 1994

Building Manager's Questionnaire

Building Name: 98 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: David H. Heit

21. Where do waste chemicals go?
To Building 12, Waste Management, for disposal

22. What janitorial supplies are stored inside or outside of the building?
See section 19.

23. Where do excess janitorial supplies go?
There are no excess janitorial supplies

Source: David H. Heit

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

Chemical	Amount	Chemical	Amount

Source: David H. Heit

Building Manager's Questionnaire

Building Name: 98 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.

Yes if a 55 gallon drum qualifies as a tank, we have a tank, if not we do not have a tank & all info should be deleted.

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
107-21-1	ethylene glycol	02C		Y/N	bay
				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 2 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?

#1 Concrete walled, sump inflow - Drainage water - in continuous use - no overflow tank - has never overflowed.

Double-Walled	Contents	Days/Year In Use	Overflow Tank	Previous Overflow
<i>As cast into concrete floor</i> Y/N	<i>to kitchen + oil caper rm. Treats sump</i>	365	Y/N	Y/N

Source: David J. Heif

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

Materials	Amount
Attached	

Source: David J. Heif

FIRE DEPARTMENT	AMMONIUM SULFATE, AMMONIUM PHOSPHATE	NONE	4.3
FIRE DEPT	MERCURY CONTAMINATED VACUUM CLEANER 0000		41.3
FIRE HOUSE	OIL WASTE	0001	416.7
FIRE HOUSE	WISE-CHEM ALKALINE POWDER	NONE	155.9
FIRE HOUSE	WISE-CHEM ALKALINE POWDER	NONE	257.9
FIRE HOUSE	WISE-CHEM ALKALINE POWDER	NONE	189.8
FIRE HOUSE	WISE-CHEM ALKALINE POWDER	NONE	186.7
FIRE HOUSE	WISE-CHEM ALKALINE POWDER	NONE	229.2
FIREHOUSE	ETHYLENE GLYCOL, WATER WASTE	NONE	465.6
FIREHOUSE	PLUG N DIKE	NONE	13.0

Building Manager's Questionnaire

Building Name: 98 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: David H. Steif

Building Manager's Questionnaire

Building Name: 98 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: David P. Heif

Building Manager's Questionnaire

Building Name: 98 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: David H. Heif

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

There are none.

Building Manager's Questionnaire

Building Name: 98 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

36. Is there a waste minimization program in the building? Yes No

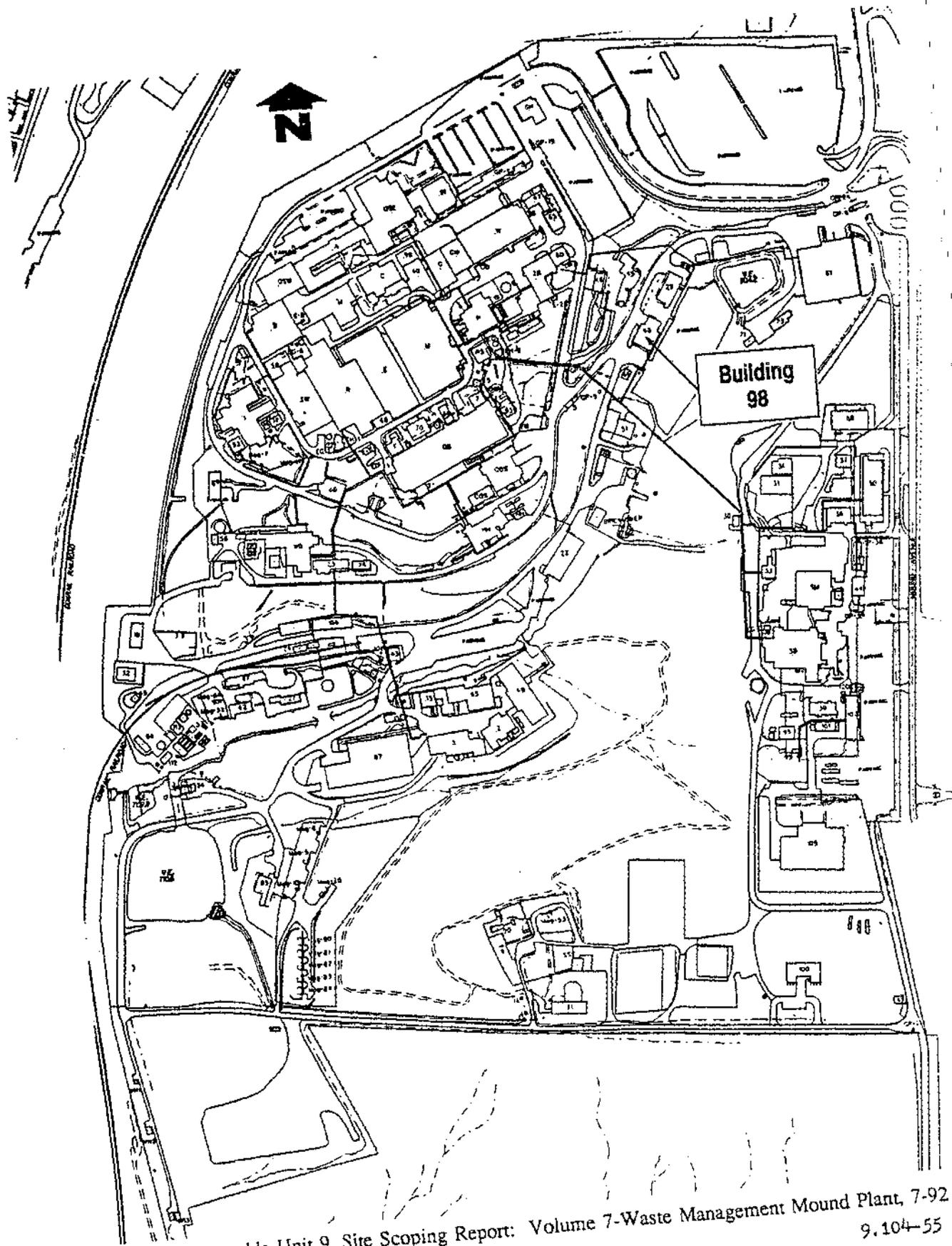
Discuss your ideas about how to minimize waste.

There is limited solid waste that goes out of Building 98.

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

Environmental Appraisal of the Mound Plant

9.104.6.3 Location of Building 98

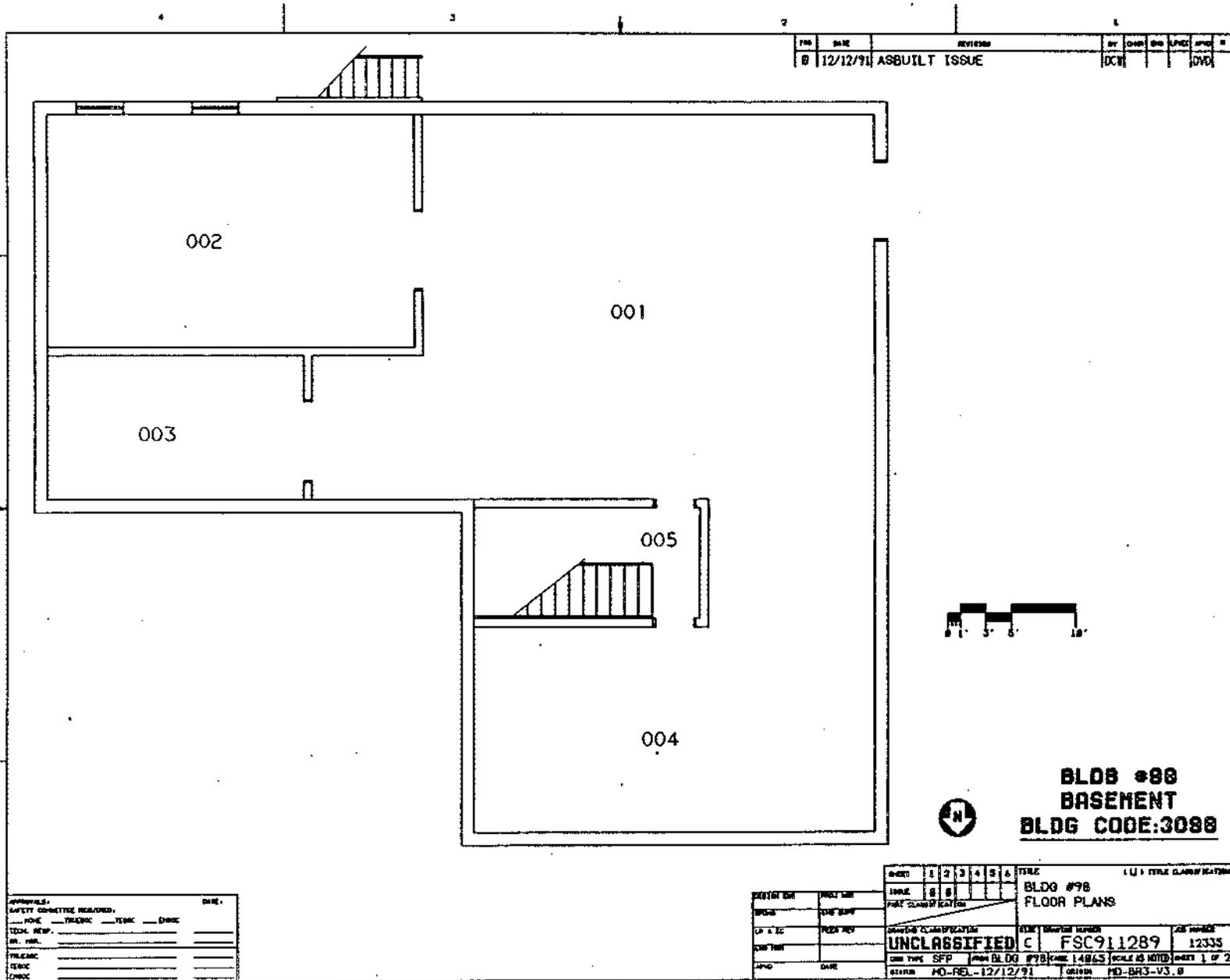


SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92
9.104-55

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Environmental Appraisal of the Mound Plant

9.104.6.4 Floor Plans for Building 98



REV	DATE	REVISION	BY	CHKD	APP	DATE
0	12/12/91	ASBUILT ISSUE				

APPROVALS:	DATE:
SAFETY COMMITTEE REQUIRED:	
_____ NONE _____ TRACIC _____ TERC _____ ENOC	
TECH. REV. _____	
DR. REV. _____	
FILED _____	
ENOC _____	

REVISION	DATE	BY	CHKD	APP	DATE
0					

INDEX	1	2	3	4	5	6	TITLE
INDEX	0	0	0	0	0	0	BLDG #98 FLOOR PLANS

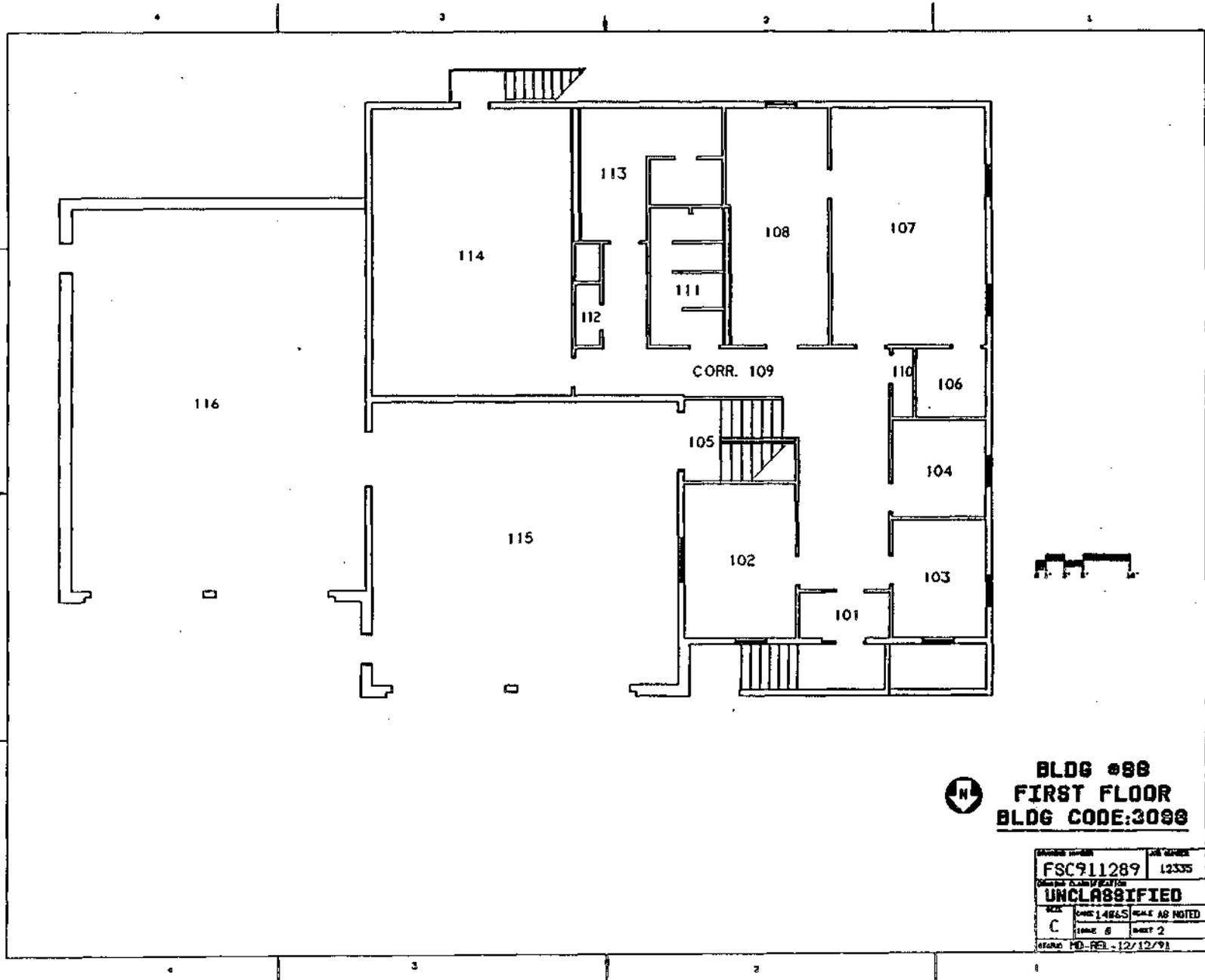
CLASSIFICATION	FORM NUMBER	JOB NUMBER
UNCLASSIFIED C	FSC911289	12335

DATE	TYPE	FROM	TO	SCALE	DATE	SCALE
12/12/91	SFP	BLDG #98	BLDG #98	1/4" = 1'-0"	12/12/91	1/4" = 1'-0"

9.104-59

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9.104-61



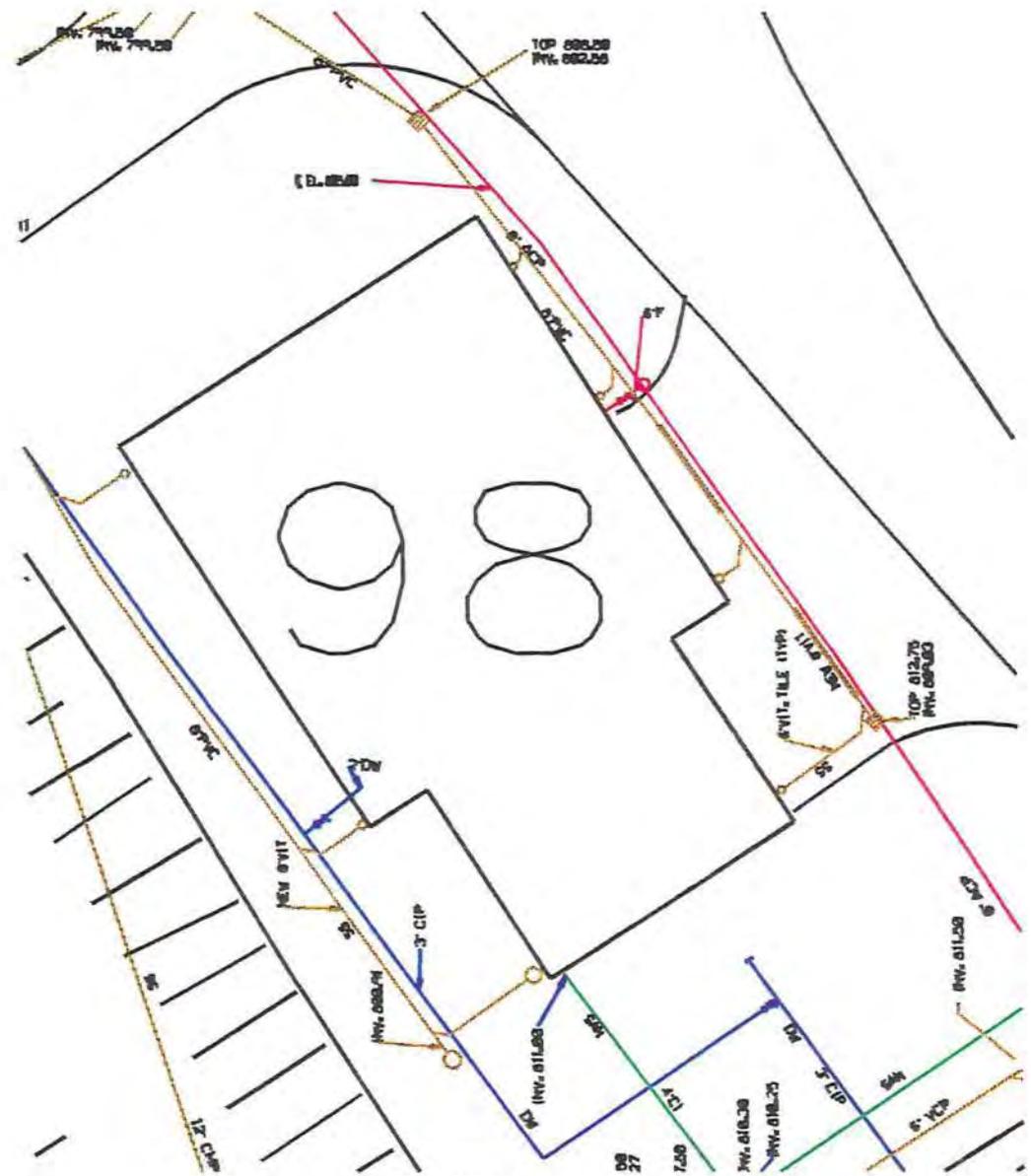
BLDG #88
FIRST FLOOR
BLDG CODE:3088

PROJECT NUMBER	FSC911289	JOB NUMBER	12335
DATE	C	DATE	14865
TIME	6	DATE	12/12/91
UNCLASSIFIED			
SCALE AS NOTED			
SHEET 2			

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Environmental Appraisal of the Mound Plant

9.104.6.5 Underground Utility Lines



E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
BLDG. 98

DATE: 3-4-96

UNCLASSIFIED

9.104-65

Environmental Appraisal of the Mound Plant

9.104.6.6 Photographs



Mound Plant Building 98

9.104-69

Environmental Appraisal of the Mound Plant

9.105 BUILDING 99

9.105.1 Scope of Building 99 Report

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

The appraisal team performed a walk-through of Building 99 on February 29, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is presented as Attachment 1 (Section 9.105.6.1). Escorting the appraisers were knowledgeable personnel such as process owners. Other information was supplied by the building manager and recorded on the Building Manager's Questionnaire (BMQ), included as Attachment 2 (Section 9.105.6.2).

9.105.2 Description of Building 99

Building 99 is a four-story, 11,412 square-foot, reinforced concrete building with a built-up membrane roof. The location is shown in Attachment 3 (Section 9.105.6.3). The building is bordered by Building OSE to the north, Building 40 to the south, Building G to the east, and Building C to the west. The first and second floors are administrative areas for security personnel. The first floor also contains a locksmith shop. The third floor houses the Emergency Operation Center. The fourth floor is a penthouse used as a mechanical room. Floor plans are presented as Attachment 4 (Section 9.105.6.4). The building is serviced by central steam for heat, chilled water, and electrical service (*Mound Facility Physical Characterization*, 12-1-93).

Building 99 was constructed in 1989. The building has been used for the same purposes since construction. The building is not known to be contaminated with radiological or energetic materials (*Mound Facility Physical Characterization*, 12-1-93).

9.105.3 Summary of Findings

Building 99 contains office areas, a locksmith shop, an emergency operation center, and a mechanical room. These areas are still in use. The building is well-maintained, but one issue of environmental concern was identified during the walk-through and review of reference materials.

Environmental Appraisal of the Mound Plant

9.105.4 Observations

9.105.4.1 Air Emissions

There are no processes that create air emissions. There are no fuel-burning units in the building. There is no evidence of fugitive dust. No air emission permit applications have been submitted to the Regional Air Pollution Control Agency (RAPCA) for activities in the building.

9.105.4.2 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.

9.105.4.2.1 Sanitary Wastewater

The building does have sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.105.6.5), 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 smoke tests were 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 99 does not deviate from that expected by the sanitary treatment plant manager.

9.105.4.2.2 Storm Wastewater

The building is serviced by storm drains as shown in Attachment 5 (Section 9.105.6.5). 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.

Environmental Appraisal of the Mound Plant

9.105.4.2.3 Chemicals

A list of chemicals residing in Building 99 is included in the BMQ, Attachment 2 (Section 9.105.6.2). 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 listed in the BMQ, included as Attachment 2 (Section 9.105.6.2), 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 99. There are floor drains in the building.

9.105.4.3 Potable and Service Water

Potable water is supplied to the building. Backflow prevention devices are installed at all visible points of potential cross connection. The fountains which supply drinking water have not been tested for lead. According to EPA protocol, annual sampling criteria do not require testing of each fountain. Water is also supplied to a fire sprinkler system in the building.

9.105.4.4 Chemical Storage and Hazardous Materials

There are janitorial, locksmith and office supplies used and stored in Building 99, such as Cherry Insecticide and Loctite. These materials were not identified as chemicals on the BMQ, included as Attachment 2 (Section 9.105.6.2) or on the annual chemical inventory. Material Safety Data Sheets (MSDS's) were not readily available for these materials.

The building is equipped with appropriate emergency response equipment such as a fire sprinkler system and fire extinguishers. There is an Emergency Evacuation Plan, and signs were posted in work areas.

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

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

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

Environmental Appraisal of the Mound Plant

9.105.4.5 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. 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. All service contracts are maintained by Waste Management. Classified paper is collected and taken to the Montgomery County South Incinerator by Security. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

9.105.4.6 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.

9.105.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.105.6.6). The environmental appraisal of Building 99 indicates that the following action item should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place.

- 99-1 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.

Environmental Appraisal of the Mound Plant

9.105.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 99

Appraisers:

[Signature]
Name _____ Discipline _____

[Signature]
Name _____ Discipline _____

Name _____ Discipline _____

Name _____ Discipline _____

Building Manager: JEFFREY L. BOSTON

Process Manager: VINCENT C. HANSON

Date: 2/29/96

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

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Checklist	Page
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Hazardous Materials	4
Safe Drinking Water Act	7
RCRA Hazardous Waste	8
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TSCA--PCB	14
Low-level and Transuranic Waste	17
Waste Minimization/Pollution Prevention Activities	22

Environmental Assessment Checklist

Building Name: 99

Appraisers: John Rickett
Mary Louise Hoaglund
Mary Sizemore

Date: 2-29-96

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	JANITORIAL SUPPLIES WD-40, LOCKSMITH SUPPLIES BRASS
	Is the building in operation? What are the processes and where do they discharge to?	(Y) N _____ _____	SECURITY COMMUNICATIONS CENTER; OFFICES
	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	SANITARY AND 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	RUST STAINED JANITOR'S SINK JUST JANITORIAL

9.105-9

Environmental Appraisal Checklist

Building Name: 99

Appraisers: John Puckett
Mary Louise Hoagland
Mary Sizemore

Date: 2/29/96

Clean Air Act (CAA) Screening Checklist

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

CAA Checklist

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

Environmental Appraisal Checklist

Building Name: 99

Appraisers: John Puckett
 Mary Louise Hogland
 Mary Sizemore
 CAA Checklist

Date: 2-29-96

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

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

Source: _____

9.105-11

Environmental Appraisal Checklist

Building Name: 99

Appraisers: John Puckett
Mary Louise Hoglund
Mary Sizemore

Date: 2-29-96

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/OFFICE SUPPLIES
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	Y/N	NO MSDS AVAILABLE FOR OFFICE AND JANITORIAL SUPPLIES
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	NO DRUMS IN OR AROUND BUILDING; CONTAINERS OF JANITORIAL AND OFFICE SUPPLIES SEALED
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 NO FLAMMABLE STORAGE CABINETS OR CONTAINERS IN BUILDING
29 CFR 1910.106(d)(7)	Incompatible chemicals are not stored together.	Y/N	
29 CFR 1910.106(d)(4)	Inside Flammable/combustible storage rooms must meet the following: 4 in. raised sill or trench that drains to a safe area, liquid tight wall/floor joints, self-closing doors, gravity or mechanical exhaust providing 6 room changes/hr., exhaust switch located outside room, at least one 3 ft. aisle; no cracks in secondary containment.	Y/N	N/A

9.105-12

Environmental Appraisal Checklist

Building Name: 99

Appraisers: John Puckett
Mary Louise Hogland
Mary Sizemore
HM Checklist

Date: 2-29-96

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	Y/N	X
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	SITE EMERGENCY Response Plan

9.105-13

Environmental Appraisal Checklist

John Packett
 Appraisers: Mary Louise Hoagland
 Mary Sizemore
HM Checklist

Building Name: 99

Date: 2-29-96

9.105.14

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	Y (N)	X
	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
X				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				Y/N	Y/N	Y/N	Y/N
				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: 99

Appraisers: John Puckett
Mary Louise Hoagland
Mary Sizemore

Date: 2-29-96

Safe Drinking Water Act (SDWA) Screening Checklist

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

SDWA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 95-02 (A)	Do actual or potential cross-connections exist between potable (light green) and service water (dark green)?	<input checked="" type="radio"/> Y / <input type="radio"/> N	ROOM 211, SERVICE TO BUILDING
OAC 3745 95-04 (B)(C)	Are backflow prevention devices installed where cross connections (hoses connected to faucets, hot water tank vented directly to a drain) exist?	<input checked="" type="radio"/> Y / <input type="radio"/> N	ROOM 211 - JANITOR'S SINK ROOM 111 - JANITOR'S SINK ROOM 312 - JANITOR'S SINK DRINKING WATER → SERVICE WATER
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	Y / N	N/A
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	Y / N	SEE BELOW

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
99	2ND FLOOR-EAST	DP7WH-1-PE	OASIS
99	1ST FLOOR-COM. CTR	DP7WH-1-PE	OASIS
99	EOC	DP7WH-1-PE	OASIS

Source: _____

9.105-15

Environmental Appraisal Checklist

Building Name: 99

Appraisers: John Pickett
Mary Louise Hoagland
Mary Sizemore
RCRA Screening Checklist

Date: 2-29-96

9.105-16

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

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	<p>Has any material generated been characterized RCRA hazardous? Was characterization by analysis or by process knowledge? Are lab results or documentation of process knowledge readily available? Note any uncharacterized material in comment section. Is it waste?</p> <p>If yes, proceed with next section.</p>	<p>Y <input checked="" type="radio"/> N analysis / process Y <input checked="" type="radio"/> N Y / N</p>	<p>WD-40 LUBRICATING OIL, BRASS PROCESS KNOWLEDGE</p>
OAC 3745 52-11	<p>Are any of the materials noted RCRA hazardous waste?</p> <p>If no, note and stop here.</p> <p>If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.</p>	<p>Y <input checked="" type="radio"/> N</p>	

Environmental Appraisal Checklist

Building Name: 99

Appraisers: John Puckett
Mary Louise Hoagland
Mary Sidmore
RCRA Checklist

Date: 2-27-96

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	N/A
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y/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	

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Environmental Appraisal Checklist

Building Name: 99

Appraisers: John Puckett
Mary Louise Hoagland
Mary Sizemore
RCRA Checklist

Date: 2/29/96

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

Building Name: 99

Environmental Appraisal Checklist
 Appraisers: Mary Louise Hoagland
 John Puckett
 Mary Sizemore
RCRA Checklist

Date: 2/29/96

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	X	
	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

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Environmental Appraisal Checklist

Building Name:

99

Appraisers:

Mary Louise Hoagland
John Puckett
Mary Sizemore
RCRA Checklist

Date:

2/29/96

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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	SOLID WASTE GOES TO LANDFILL
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	X
OAC 3745-68	Has any of the waste been managed in a Thermal treatment Unit (other than Burn area units)? If yes, then note. Go to the next section.	Y/N	
OAC 3745-69	Has any of the waste been managed in a Miscellaneous Treatment Unit (other than Burn area units)? If yes, then note. Go to the next section.	Y/N	
OAC 3745-56	Has any of the waste been managed in a Waste Pile? If yes, then note. Go to the next section.	Y/N	

General Comments:

Environmental Appraisal Checklist

Building Name: 99

Appraisers: Mary Louise Hoagland
John Puckett
Mary Sizemore

Date: 2/29/96

Asbestos Screening Checklist

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

ALTHOUGH BUILDING BUILT AFTER 1985, ACCORDING TO ASBESTOS PROGRAM MANUAL 9/6/95, THE BUILDING IS NOTED TO CONTAIN SUSPECT BUILDING MATERIAL. NONE WERE OBSERVED.

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

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

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Environmental Appraisal Checklist

Building Name: . 99

Appraisers: *Mary Louise Hoagland*
John Puckett
Mary Sizemore

Date: *2/29/96*

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.
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TSCA Checklist

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

Environmental Appraisal Checklist

Building Name: 99

Appraisers: Mary Louise Hoagland
John Puckett
Mary Sizemore
TSCA Checklist

Date: 2/29/96

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

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Environmental Appraisal Checklist

Mary Louise Hoagland

Building Name:

99

Appraisers:

John Puckett
MARY Sizemore

Date:

2/29/96

TSCA Checklist

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

GENERAL COMMENTS:

Environmental Assessment Checklist

Building Name: 99

Appraisers: John Puckett
Mary Louise Hoagland
Mary Sizemore

Date: 2/29/96

Low-Level Waste and Transuranic Waste Screening Checklist

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

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

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Environmental Appraisal Checklist

Mary Louise Hoagland

Building Name: **99**

Appraisers: *John Pickett*

Mary Sizemore

Date: **2/29/96**

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	X
	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

Mary Louise Hoagland

Building Name: **99**

Appraisers: *John Puckett*

Date: *2/29/96*

Mary Sizemore

Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist
 Appraisers: *Mary Louise Hoagland*
John Puckett
Mary Sizemore
Low-Level Waste and Transuranic Waste Checklist

Building Name: *99*

Date: *2/29/96*

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

Environmental Appraisal Checklist

Building Name: 99

Appraisers: Mary Louise Hoagland
John Puckett
Mary Sizemore

Date: 2/29/96

Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

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Environmental Appraisal Checklist

Building Name: 99

Appraisers: Mary Louise Hoagland
John Puckett
MARY Sizemore

Date: 2/29/96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y <input checked="" type="radio"/> N	White paper & ALUMINUM CANS ARE RECYCLED JANITORIAL SUPPLIES NABC NON-ACID DISINFECTANT CLEANER
	Are there solvent wastes?	Y <input checked="" type="radio"/> N	
	Is vehicle maintenance performed?	Y <input checked="" type="radio"/> N	
	Are oils used ?	Y <input checked="" type="radio"/> N	
	Are these corrosive wastes?	Y <input checked="" type="radio"/> N	
	Are there sludges?	Y <input checked="" type="radio"/> N	
	Are there halogenated organic (nonsolvent) wastes?	Y <input checked="" type="radio"/> N	
	Are metals recovered from wastewater?	Y <input checked="" type="radio"/> N	
	Is waste sludge generated?	Y <input checked="" type="radio"/> N	
	Are any waste minimization practices used that reduce the generation of sludge?	Y / N	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	

Building Name:

99

Environmental ~~Assessment~~ Final Checklist
Mary Louise + Logland
Appraisers: John Puckett
Mary Sizemore

Date: 2/29/96

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		

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Environmental Appraisal Checklist

Building Name: **99**

Appraisers: **Mary Louise Hoagland
John Puckett
Mary Sizemore**

Date: **2/29/96**

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are ion exchange resins used to remove heavy metals and cyanides from acid and base solutions?	Y/N	X
	Is crystallization used to remove corrosives from solution by cooling?	Y/N	
	Is the process of evaporation of liquid wastes by heating used to leave behind a more concentrated solution?	Y/N	
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	

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Environmental Appraisal Checklist

Building Name: 99

Appraisers: Mary Louise Hoagland
John Puckett
Mary Sizemore

Date: 2/27/96

Waste Minimization/Pollution Prevention Activities Checklist

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

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9.105-34

Environmental Appraisal Checklist
Mary Louise Hoagland
 Appraisers: *John Puckett*
Mary Sizemore

Building Name: **99**

Date: **2/29/96**

Waste Minimization/Pollution Prevention Activities Checklist

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

Environmental Assessment Checklist

Building Name: 99

Appraisers: Mary Louise Hoaglund
John Puckett
Mary Sizemore

Date: 2/29/96

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal of the Mound Plant

9.105.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: 99 Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

L or Q clearance is required to access the 1st Floor Security operations area (Limited Area) as well as badge reader access. Room 103 requires a Q clearance when processing SRD. The 3rd Floor requires an L or Q clearance during non-exercise or non-incident hours. During EDC exercises or ~~training~~ incidents or when SRD is being processed, a Q clearance is required for access.

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

None

3. Are there any restricted areas? Yes No

Where are they? *1st Floor - Security operations area (Limited Area)
Room 103 - restricted access Rm 104 and 108 restricted access.
3rd Floor - Emergency operations area (Limited Area).*

4. Provide a physical description of the building.

Building is a four-story, 11,412-ft² building constructed with a BUM roof (coal tar). HVAC services are central steam and chilled water. The building is not contaminated with any radiological or energetic materials.

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

5. Provide a drawing of the building.

Attached.

6. What is the current building use?

Central location for security.
First floor—alarm system, radio console, badge reader, lock shop;
second floor—security management; third floor—emergency operations center.

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: 99 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: Security operations offices

How Wastes Are Generated:

No hazardous wastes are generated in this building.

Contact:

Phone #:

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

Building Manager's Questionnaire

Building Name: 99 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

2nd floor exterior mods

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: 99 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? ?

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

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

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

Building Manager's Questionnaire

Building Name: 99 Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? No

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		

Source: Chemical Inventory 1994

Building Manager's Questionnaire

Building Name: 99 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?

N/A

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

Standard janitorial supplies, i.e., disinfectant carpet cleaner, disinfectant bathroom cleaner, glass cleaner, etc.

23. Where do excess janitorial supplies go?

N/A

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 99 Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

NONE

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

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

Source: _____

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

Materials	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 99 Building Manager: J.L. Boston Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: _____

Building Manager's Questionnaire

Building Name: 99 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: 99 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 KNOWN

Building Manager's Questionnaire

Building Name: 99 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.

white paper

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

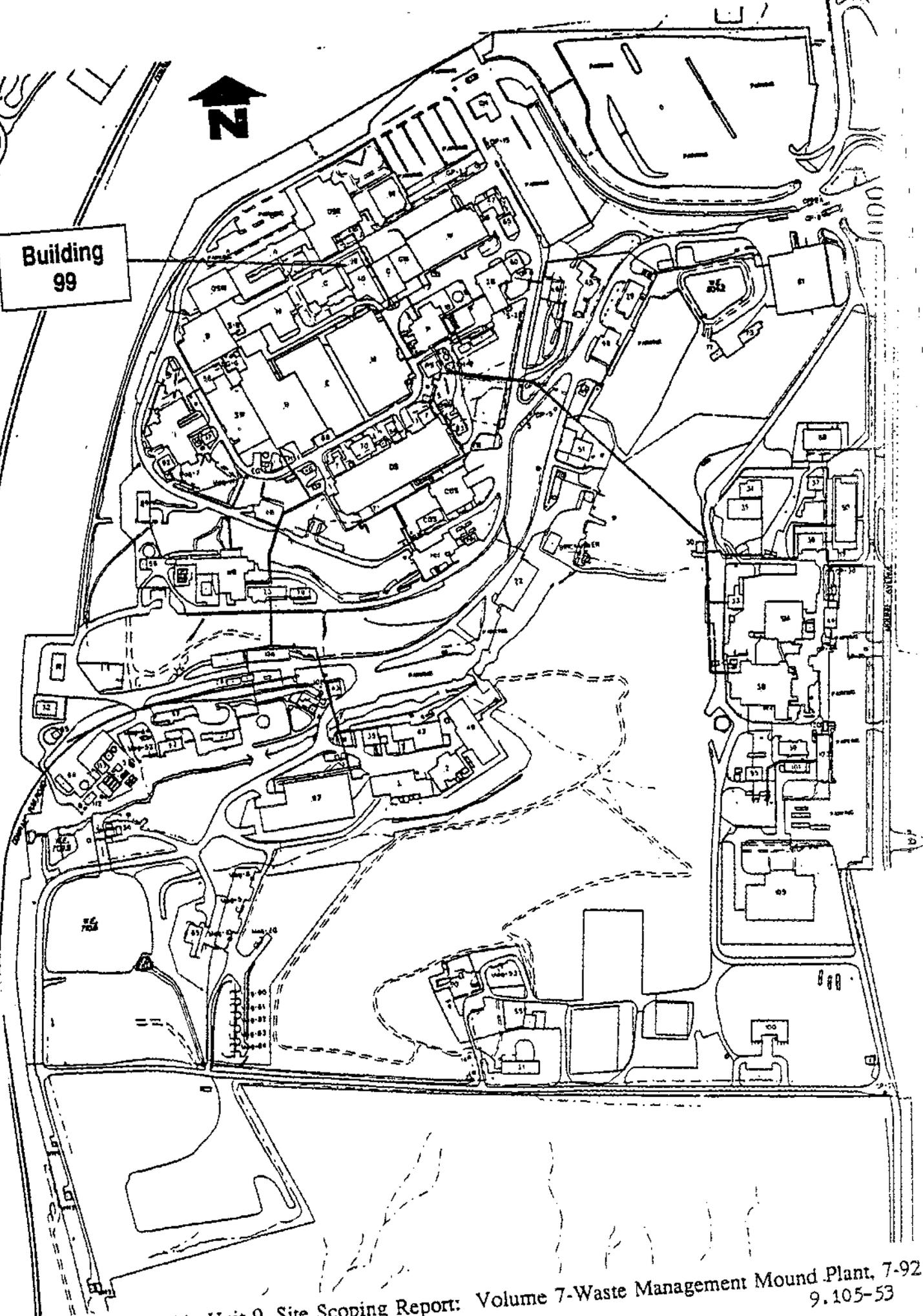
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Environmental Appraisal of the Mound Plant

9.105.6.3 Location of Building 99



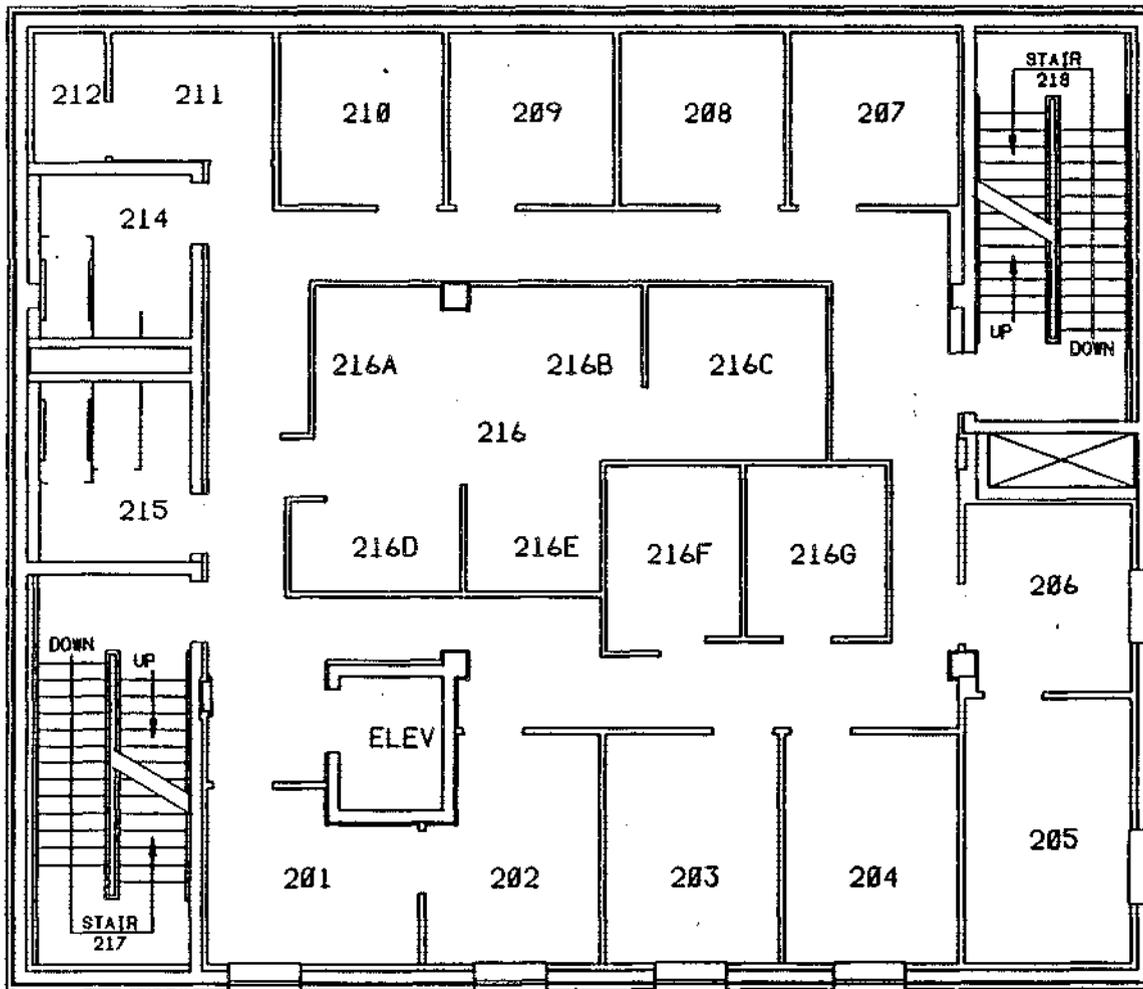
Building
99



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Environmental Appraisal of the Mound Plant

9.105.6.4 Floor Plans for Building 99



UNCLASSIFIED

DERIVATIVE CLASSIFIER

R. D. Meyer
S. H. W. Ouellet (Title) *2/20/96* (Date)

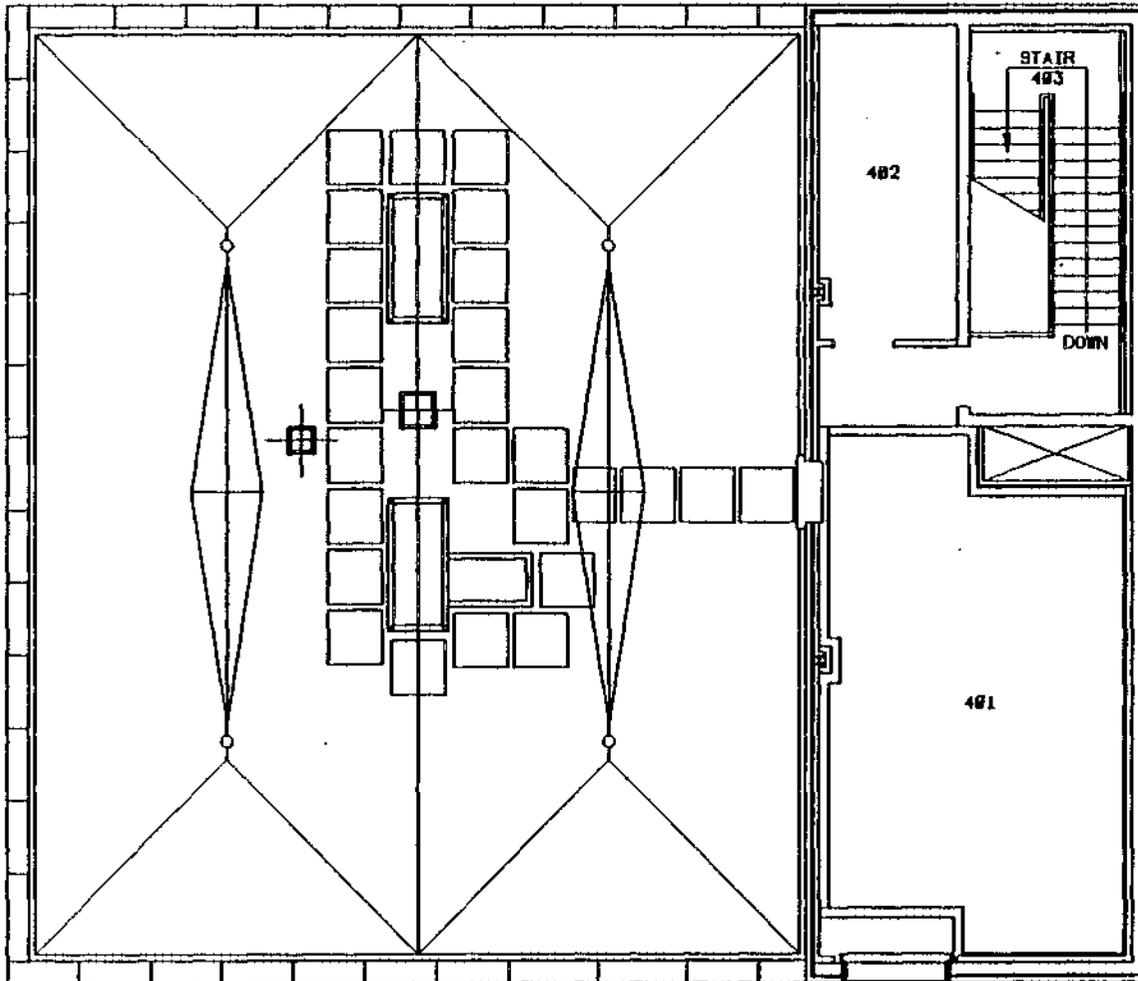


**BLDG #99
 SECOND FLOOR
 BLDG CODE:3099**

NOT FOR PUBLIC DISSEMINATION		CONTROL NUMBER	ISS NUMBER
MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.		FSC911290	12335
		CLASSIFICATION UCNT	
SCALE	DATE	SCALE	AS NOTED
C	14865	SCALE	AS NOTED
	SHEET 8		SHEET 2
STANDARD NO. REL-12/12/91			

9.105-57

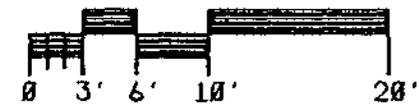
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UNCLASSIFIED

DERIVATIVE CLASSIFIER

R. Myers
S. Class. Anal. 2/20/96
 (Title) (Date)



BLDG 899
PENTHOUSE
BLDG CODE:3088

NOT FOR PUBLIC DISSEMINATION		PROJECT NUMBER	JOB NUMBER
MAY CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION SUBJECT TO SECTION 148 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED (42 USC 2168). APPROVAL BY THE DEPARTMENT OF ENERGY PRIOR TO RELEASE IS REQUIRED.		FSC911290	12335
		ORIGINAL CLASSIFICATION UCNT	
SCALE	DATE	SCALE AS NOTED	
C	TABLE 9	PAGE 4	
STANDARD PD-REL-12/12/91			

9.105-59

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Environmental Appraisal of the Mound Plant

Additional floor plans are located in Appendix I—Unclassified Controlled Nuclear Information (UCNI), found in Volume 12 (Section 10.1) of this report.

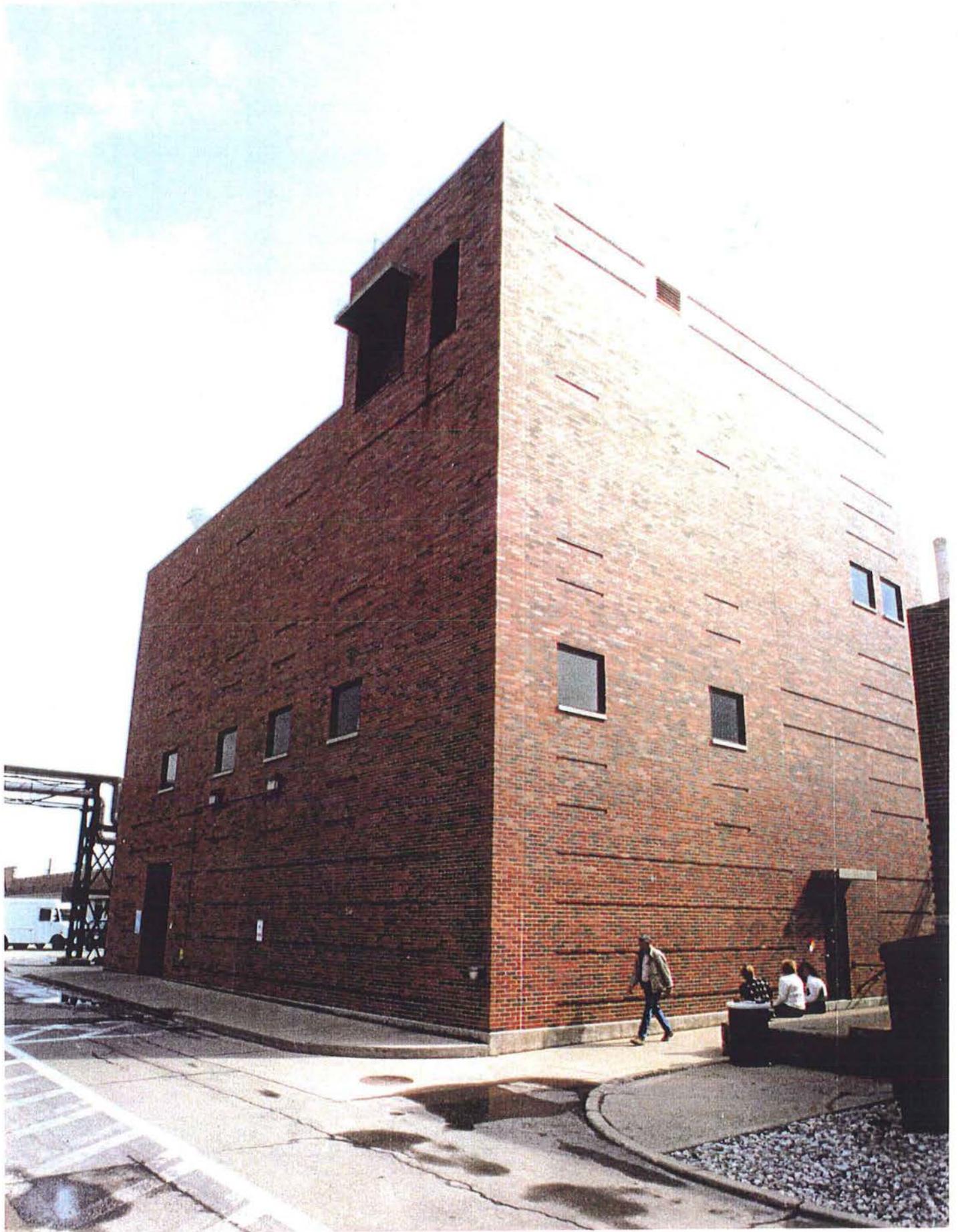
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Environmental Appraisal of the Mound Plant

9.105.6.5 Underground Utility Lines

Environmental Appraisal of the Mound Plant

9.105.6.6 Photographs



Mound Plant Building 99

9.105-69

9.106 Building 100

Environmental Appraisal of the Mound Plant

9.106 BUILDING 100

9.106.1 Scope of Building 100 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.

An appraisal was not conducted for Building 100. As stated in the Executive Summary (Volume 1, Section 1.0) of this report, a review was not conducted for those buildings which were leased or sold by DOE to other parties at the time of the appraisal. The appraisal team visited the outside of the building to confirm that it was leased. A sign in the window stated that the building was leased to an organization named Star City. No walk-through was conducted and no records were reviewed.

9.106.2 Description of Building 100

Building 100 was constructed to become the security precinct building. The building is a 6,300-square-foot reinforced concrete structure built into the surrounding hill. It has a built-up membrane roof. It was constructed in 1989. There is electrical service of 240V.

The building housed offices for security personnel, space for weapons storage, and a locker room and workout area. It is located on the southeastern segment of the site next to the perimeter road, west of Building Modular 4. Its location is shown in Attachment 1 (Section 9.106.4.1).

The building is not known to be contaminated with radioactive or energetic materials. However, thorium and plutonium contamination are known to exist in surrounding SMPP soils.

9.106.2 Summary of Findings

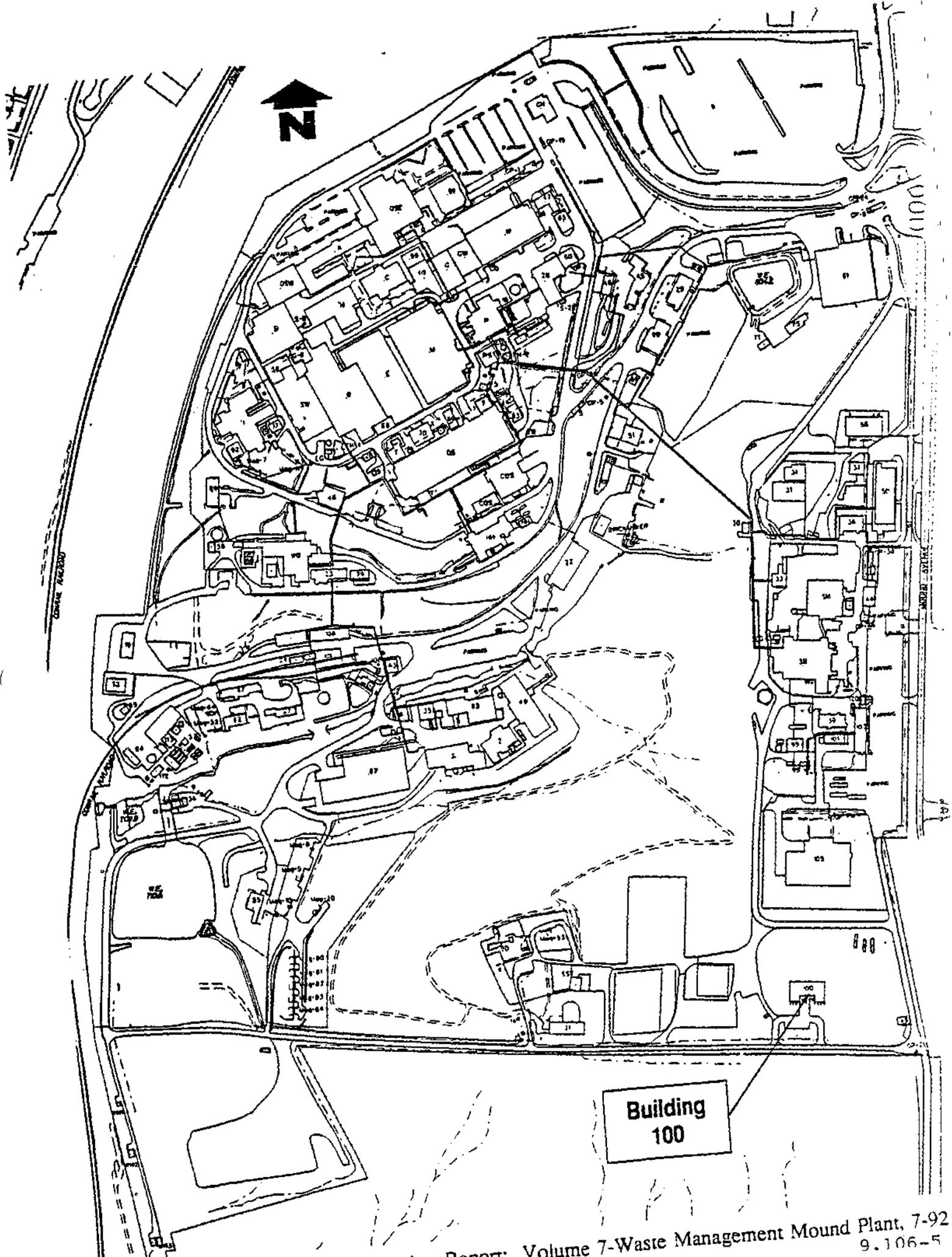
Photographs were taken to document the building. They are included as Attachment 2 (Section 9.106.4.2). Building 100 has undergone Safe Shutdown which includes removal of wastes and other materials plus equipment which cannot be released. A Health Physics safety determination and a liabilities assessment were made. ESA's (ASTM E 1527-94 or ASTM E 1528-93) were not conducted. The building has been leased by DOE to the City of Miamisburg, which accepted the liabilities assessment. The General Purpose Lease between the DOE and the City of Miamisburg requires the sub-lessee to obtain and comply with regulatory agency permits.

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

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Environmental Appraisal of the Mound Plant

9.106.4.1 Location of Building 100



Building
100

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Environmental Appraisal of the Mound Plant

9.106.4.2 Photographs

Mound Plant Building 100



9.106-9

Environmental Appraisal of the Mound Plant

9.107 BUILDING 101

9.107.1 Scope of Building 101 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 101 on February 26, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.107.6.1). 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 9.107.6.2).

9.107.2 Description of Building 101

Building 101 is a single-story modular building with wooden exterior and Hypalon roof. Total area of Building 101 is 1,815 square feet. The building was brought on site in 1986. Building 101 is located on what is known as the SM/PP hill as shown in Attachment 3 (Section 9.107.6.2). Adjacent buildings are Building 39 to the north, Building 102 to the east, Building 105 to the south, and Building 95 to the west. The building has packaged heat and air conditioning with electrical service of 240V provided (*Mound Facility Physical Characterization*, 12-1-93).

Building 101 is used as offices for the area maintenance foreman and planner. Floor plans are presented as Attachment 4 (Section 9.107.6.4). A portion of the building is used to store small parts, tools and chemicals for maintenance jobs on the SM/PP hill. The building has been used for the same purpose since construction. No research, development, or production activities using radioactive or energetic materials have occurred in the building (*Mound Facility Physical Characterization*, 12-1-93).

9.107.3 Summary of Findings

Other than office work, no processes or operations are ongoing in this building. A portion of the building is being used to store maintenance chemicals and solvents for maintenance operations on the SM/PP hill. A chemical inventory was submitted for 1995. No issues of environmental concern were identified during the walk-through or during the review of reference materials.

Environmental Appraisal of the Mound Plant

9.107.4 Observations

9.107.4.1 Air Emissions

No air emissions permits applications have been submitted to the Regional Air Pollution Control Agency (RAPCA) for activities in Building 101. No sources of air emissions are listed in Mound's air emission inventory database or observed during the walk-through. There are no fuel-burning units in the building. There was no visual evidence of fugitive dust.

9.107.4.2 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.

9.107.4.2.1 Sanitary Wastewater

The building has sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.107.6.5), there appears to be no direct connection to the sanitary system. There is a sanitary line between Buildings 39 and 101. Expected discharges to this sanitary line would be from a sink and toilets. 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 building manager, effluent from Building 101 should not deviate from that expected by the sanitary treatment plant manager. Chemicals would not be expected to enter the sanitary system as there are no floor drains or process operations in the building.

9.107.4.2.2 Storm Wastewater

The building has no direct connection to the storm sewer as detailed in Attachment 5 (Section 9.107.6.5). Water from the gutter follows the slope of the surrounding area to a storm sewer. Visual inspection showed no sign of odors, colored discharges, or scarring of the area which would indicate that any materials other than storm water have entered the storm drainage system.

Environmental Appraisal of the Mound Plant

9.107.4.2.3 Process Wastewater

This building does not create or discharge radioactive wastewater to the WD facility. According to Attachment 5 (Section 9.107.6.5), no radioactive wastewater lines service Building 101.

9.107.4.2.4 Chemicals

Chemicals in Building 101 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 101. No floor drains were seen in areas of operations. There is no visual evidence that chemicals have entered the storm or sanitary drains.

9.107.4.3 Potable and Service Water

Potable water is supplied to the building. A backflow prevention device was installed on the janitor's sink. There are no service water lines in this building. The water fountain in the building is not an Environmental Protection Agency (EPA)-listed model suspected of lead contamination.

9.107.4.4 Chemical Storage and Hazardous Materials

No chemicals were listed on the BMQ. A chemical inventory was conducted during the plantwide building assessment. Although the chemical inventory was unavailable at the time of the inspection, it was verified during a closeout meeting. All chemical products are stored in cabinets. At the time of the inspection, a flammable storage cabinet, which meets standard National Fire Protection Association (NFPA) requirements, was being installed. There was no evidence of chemical storage incompatibility among remaining materials and janitorial supplies. Material Safety Data Sheets (MSDS's) for maintenance operations are kept in Building 101.

The building is equipped with appropriate emergency response equipment such as a Halon 1211 fire extinguisher. The inspection tag is present and current. No eyewash or safety shower is present or required since chemicals are not used in the building. There is an Emergency Evacuation Plan, and signs are posted in the building.

No aboveground or underground storage tanks were observed in or around Building 101. No sumps, separators, or catch basins, were observed in or around the building.

The building was tested and does contain suspect asbestos-containing building material (ABCM) (MD-10391, *Asbestos Program Manual*, 9-14-95). There was no visual evidence of friable asbestos in the building. Suspect ABCM was not identified or marked.

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).

Environmental Appraisal of the Mound Plant

9.107.4.5 Solid, Hazardous, and Radioactive Wastes

The solid waste generated in the building results from the offices. 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.

No hazardous waste is generated, collected or transported from Building 101 since the chemical products are not used in the building. Chemical products stored in Building 101 are used in processes on the SM/PP hill. There are no drums of waste, identified or unidentified, in or around the building.

9.107.4.6 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. Paper and aluminum cans are recycled to minimize solid waste.

9.107.5 Findings and Recommendations

Photographs were taken to document the environmental appraisal. They are included as Attachment 6 (Section 9.107.6.6).

The environmental appraisal of Building 101 indicates that no issues of environmental concern or recommended actions were identified during the walk-through or during the review of reference materials.

Environmental Appraisal of the Mound Plant

9.107.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 101 -

Appraisers:

Ronald Paulick
Name Discipline

Philly Parker
Name Discipline

Billie Adams
Name Discipline

Yany Miller for Paul Molloy
Name Discipline

Building Manager: _____

Process Manager: _____

Date: 2-26-96

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

Table of Contents

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

Environmental Appraisal Checklist

Building Name: 101

Appraisers: Paudick/Adkins/Parker

Date: 2-26-96

Clean Water Act (CWA) Screening Checklist

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

CWA Checklist

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

9.107-9

Environmental Appraisal Checklist

Building Name: 101

Appraisers: Paulick/Adams/Parker

Date: 2-26-96

Clean Air Act (CAA) Screening Checklist

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

Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Pautick/Adkins/Parker*

Date: *2-26-96*

CAA Checklist

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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: _____

Environmental Appraisal Checklist

Building Name: 101

Appraisers: *Louick/Adkins/Parker*

Date: 2-26-96

Hazardous Materials (HM) Screening Checklist

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

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.1200(b,f)	All containers of hazardous chemicals shall be labeled as to the identity of the chemical and the appropriate hazard warnings.	(Y) N	
29 CFR 1910.1200(g)	MSDS shall be available to the employees in close proximity to the work area.	(Y) N	MSDS maintained in GW 101, main office. In process of creating an MSDS library for AREA maintenance. should be completed 2/29/96.
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	Storage cabinet for flammables was just moved to area that uses. Not in use yet.
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: *101*

Appraisers: *Budick/Atkins/Parker*

Date: *2-26-96*

HM Checklist

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

9.107-13

Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Pawlick/Adkins/Parker*

Date: *2-26-96*

HM Checklist

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	Y/ <input checked="" type="radio"/> N	
	Does it have proper containment?	Y/N	N/A
	Is there a liquid bulk transfer area?	Y/ <input checked="" type="radio"/> N	
	Is there proper containment?	Y/N	N/A
	Is there an above ground storage tank? If so, complete Table B.	Y/ <input checked="" type="radio"/> 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: _____

9.107-14

Environmental Appraisal Checklist

Building Name: 101

Appraisers:

Date: 2-26-96

Safe Drinking Water Act (SDWA) Screening Checklist

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

SDWA Checklist

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

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
101	Rm 5	EFHA-8-3	ELKAY

Source: _____

9.107-15

9.107-16

Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Paulick/Adkins/Parker* Date: *2-26-96*

RCRA Screening Checklist

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

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

Environmental Appraisal Checklist

Building Name: 101

Appraisers: Paulick/Adkins/Parker

Date: 2-26-96

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	
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	NO HAZ WASTE
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y/N	 V
	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	

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9.107-18

Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Rudick/Adkins/Parner*

Date: *2-26-96*

RCRA Checklist

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

Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Paulick/Adkins/Parker*

Date: *2-26-96*

RCRA Checklist

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

9.107-19

Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Paulick/Adkins/Parker*

Date: *2-26-96*

RCRA Checklist

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

General Comments:

9.107-20

Environmental Appraisal Checklist

Building Name: 101

Appraisers:

Date: 2-26-96

Asbestos Screening Checklist

Does this facility contain ACBM?	<u>(Y)</u> /N	If yes, conduct the following survey.
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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. Is there any evidence of friable asbestos? Is the asbestos removal properly managed? (See questions listed below)	<u>(Y)</u> /N Y/ <u>(N)</u> <u>Y/N</u>	<i>Suspect asbestos</i> 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	

9.107-21

Environmental Appraisal Checklist

Building Name: *. 101*

Appraisers: *Paulick/Adkins/Parker*

Date: *2-26-96*

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

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

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ? If the answer is no, note . If the answer is yes, proceed with next section.	Y/N <i>(N)</i>	No PCB's
	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 <i>(N)</i>	
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: *101*

Appraisers: *Paulick/Adams/Parker*

Date: *2-26-96*

TSCA Checklist

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

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Environmental Appraisal Checklist

Building Name: 101

Appraisers: Paulick/Adkins/Parker

Date: 2-26-96

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitors and PCB-containing electrical equipment are allowed to be stored outside of PCB storage areas, on pallets if stored outside, with containment for 10 percent of the volume of the equipment. Do all PCB's stored in this configuration conform with this requirement?	Y/N	No PCB's ↓
40 CFR 761.45 and .65	Are all PCB storage areas marked with a large PCB mark as described in 40 CFR 761.45 (a)?	Y/N	
40 CFR 761.65 (c) (5)	Have all leaking PCB articles and containers been transferred to non-leaking containers?	Y/N	
40 CFR 761.65 (c) (6)	Do all PCB storage containers for the storage of liquid and non-liquid PCB's comply with DOT shipping container specifications?	Y/N	

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 101

Appraisers:

Date: 2-26-96

Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	Y <input checked="" type="radio"/> N	If yes, conduct the following survey.
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Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW? If the answer is no, note. If the answer is yes, proceed with next section.	Y <input checked="" type="radio"/> N	No LLW 
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 <input checked="" type="radio"/> N	
DOE Order 5820.2A Chapter III, 3.a.	Have the storage configurations in use in this area been taken into account for keeping external exposures to the general public below 25 mrem/yr?	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	

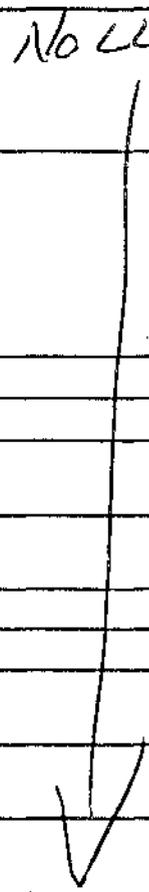
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Environmental Appraisal Checklist

Building Name: 101

Appraisers: *Saudick/Adams/Parker* Date: *2-26-96*

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A Chapter III, 3.d.	Based on field data, is the characterization of the materials in this area sufficient to assure proper segregation to assure proper segregation, treatment, storage, and disposal?	Y / N	<i>No LLW</i> 
	Based on field data does the characterization as documented at the time of generation of the waste ensure that the actual physical and chemical characteristics, and major radionuclide content of this material are recorded and known at all stages of the waste management process?	Y / N	
	Do characterization data include the following:		
	Physical and chemical characteristics of the waste?	Y / N	
	Volume of the waste (including solidification and absorbent material)?	Y / N	
	Weight of the waste (including solidification and absorbent material)?	Y / N	
	Major radionuclides and their concentrations?	Y / N	
	Packaging date, package weight, external volume?	Y / N	
	How were the concentration of radionuclides determined? Direct methods?	_____	
How were the concentrations of radionuclides determined? Indirect methods?	_____		
DOE Order 5820.2A Chapter III, 3.h	Is the storage configuration in long term storage sufficient to meet the performance standard?	Y / N	
	Are records maintained at the facility enabling this waste to be traced from its origin?	Y / N	

Environmental Assessment Checklist

Building Name: 101

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist

Building Name: 101

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A, Chapter II, 3.b	Has the TRU waste been assayed or otherwise evaluated to determine its radioactive content prior to storage?	Y/N	No TRU Waste
	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	V
	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: *101*

Appraisers: *Paulick/Adkins/Parker* Date: *2-26-96*

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A, Chapter II 3.e	Has the TRU waste been segregated in manner that will not permit commingling of TRU waste with LLW or high-level waste?	Y / N	<i>No TRU Waste</i> 
	Has the TRU waste been protected from unauthorized access?	Y / N	
	Has the TRU waste been monitored periodically to ensure that it is not releasing its radioactive and/or hazardous constituents?	Y / N	
	Has this TRU waste storage area been designed, constructed, maintained, and operated to minimize the possibility of fire, explosion, or accidental release of its radioactive and/or hazardous constituents?	Y / N	
	Does the facility have a contingency plan designed to minimize the adverse impacts of fire, explosion, or accidental release of its radioactive and/or hazardous constituents?	Y / N	

GENERAL COMMENTS:

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Environmental Appraisal Checklist

Building Name: 101

Appraisers: Paulick/Adkins/Parker Date: 2-26-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y <input checked="" type="radio"/> N	N/A
	Are there solvent wastes?	Y / N	N/A
	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: *101*

Appraisers: *Paulick/Adkins/Parker* Date: *2-26-96*

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		↓
	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		

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Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Paulick/Adkins/Parker* Date: *2-26-96*

Waste Minimization/Pollution Prevention Activities Checklist

9.107-32

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

Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Paulick/Adkins/Parker*

Date: *2-26-96*

Waste Minimization/Pollution Prevention Activities Checklist

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

9.107-33

Environmental Appraisal Checklist

Building Name: 101

Appraisers: Paubick/Adkins/Parker Date: 2-26-96

Waste Minimization/Pollution Prevention Activities Checklist

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

Environmental Appraisal Checklist

Building Name: *101*

Appraisers: *Paulick/Adkins/Parker* Date: *2-26-96*

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal of the Mound Plant

9.107.6.2 Building Manager's Questionnaire

02/26/96
JW

Building Manager's Questionnaire

Building Name: 101 Building Manager: P.C. Molloy Phone: 3869 Date: 12-07-95
Alternate: T.J. GEESENER Phone: 5568

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 single-story, 1,815-ft² modular building with wooden exterior and hypalon roof. It has packaged heat and 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?

Offices and 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: 101 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

Process(es) Housed: Offices, small tool storage

How Wastes Are Generated:

No hazardous wastes are generated in this building.

Contact:

Phone #:

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

Building Manager's Questionnaire

Building Name: 101 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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: 101 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

13. Does the building have domestic water service? Yes / No
 Is there bottled water? Yes No
14. Does the building discharge to the storm sewer? Yes No
 Where? *Roof conduits.*
15. Does the building discharge to the sanitary sewer? Yes No
 Where? *Existing restrooms.*
16. Has an asbestos survey been conducted? Yes
 What are the results? SUSPECTED

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

Building Manager's Questionnaire

Building Name: 101 Building Manager: P.C. Molloy 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: 101 Building Manager: P.C. Molloy 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?

Transfer to Waste Mgmt.

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

Some, inside; soaps, bathrooms clean.

23. Where do excess janitorial supplies go?

Transfer to Waste Mgmt.

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: 101 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

NONE

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

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

Source: _____

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

Materials	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 101 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: _____

Building Manager's Questionnaire

Building Name: 101 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Yes No

Where are logs found?

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

Source: _____

Building Manager's Questionnaire

Building Name: 101 Building Manager: P.C. Molloy 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: 101 Building Manager: P.C. Molloy 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.

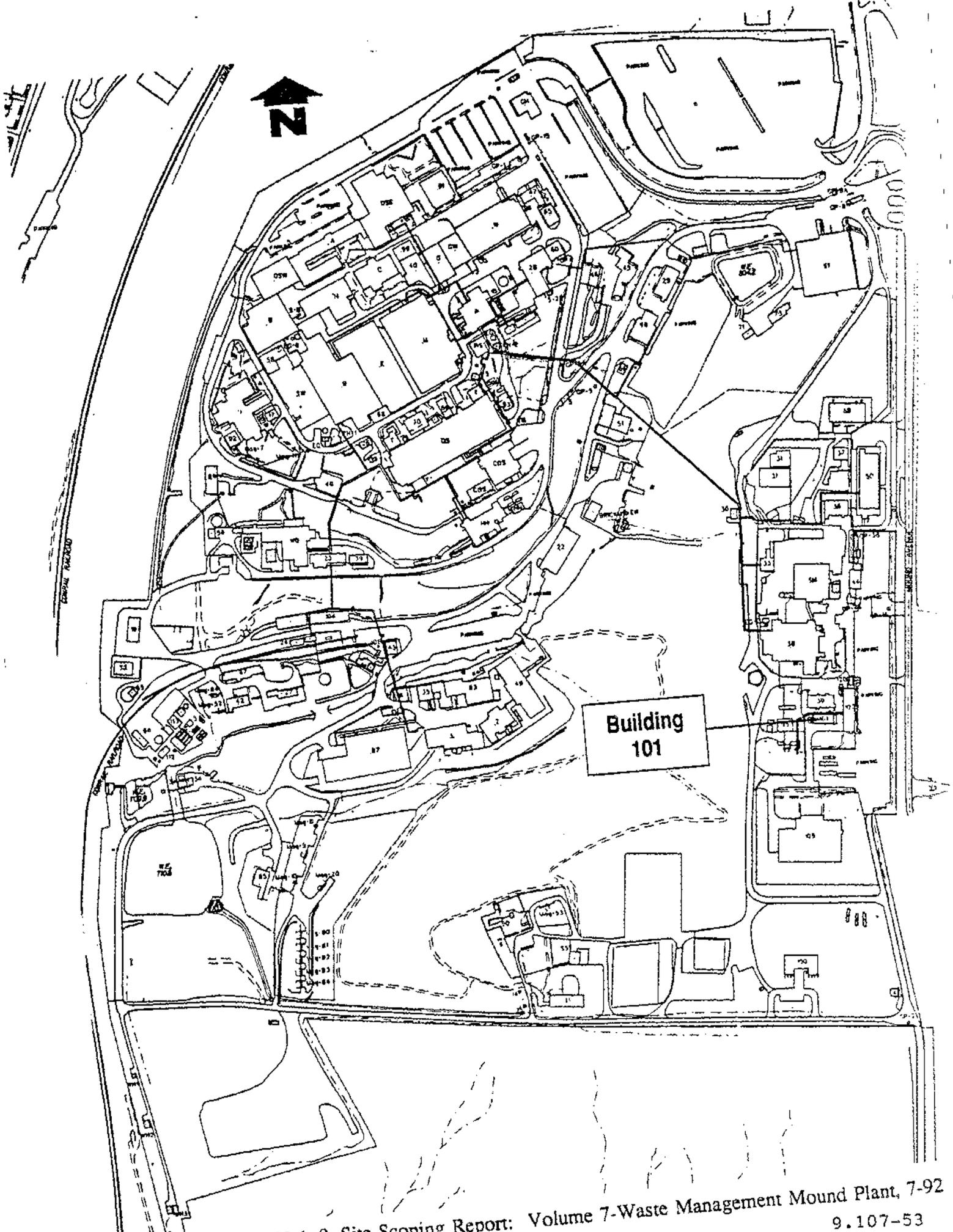
*In progress... removing excess materials
at present time - transfer to waste agent.*

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

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Environmental Appraisal of the Mound Plant

9.107.6.3 Location of Building 101



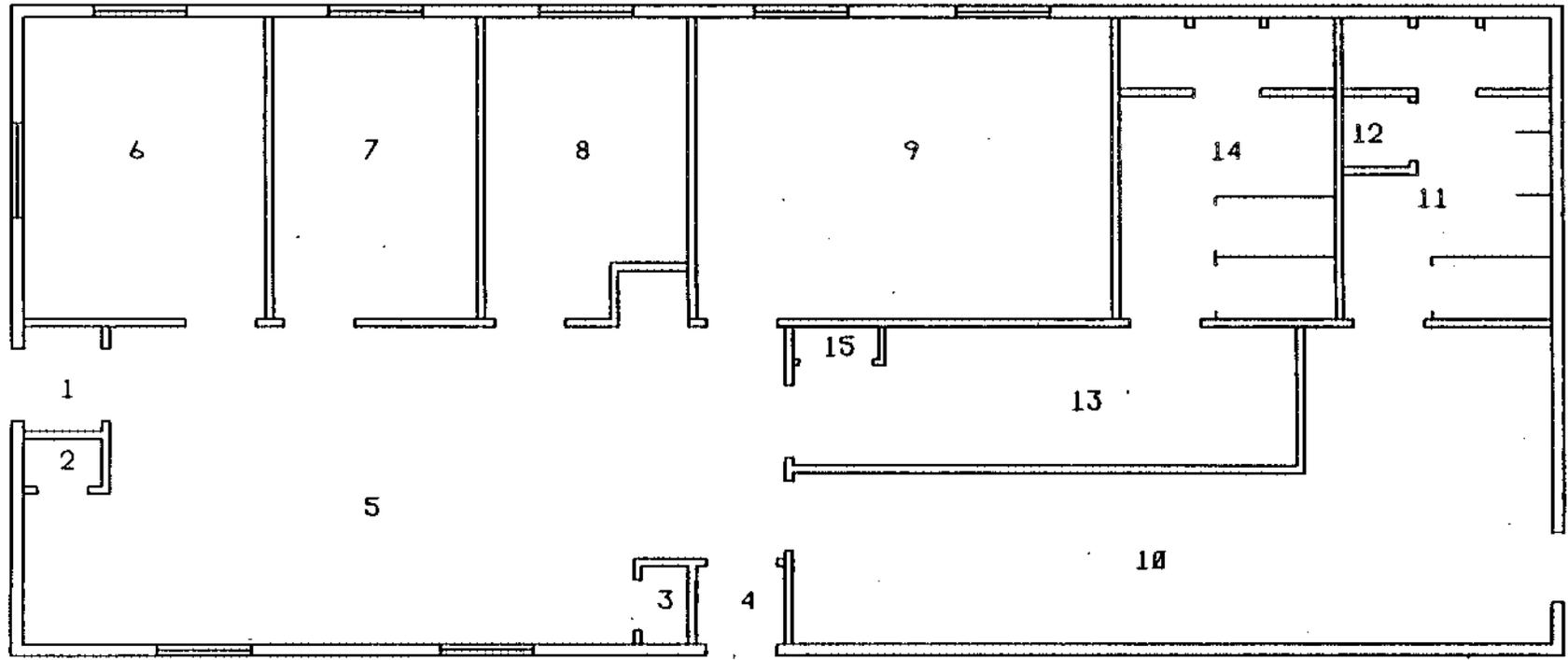
SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92
9.107-53

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Environmental Appraisal of the Mound Plant

9.107.6.4 Floor Plans for Building 101

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



**BLDG #101
FIRST FLOOR
BLDG CODE:3101**

APPROVED:	DATE:
SAFETY COMMITTEE RELEASED:	
_____ NONE _____ TRAINING _____ JEWEL _____ DWG	
TECH. REP.:	
DR. NO.:	
TRACING:	
REDC:	
DWG:	

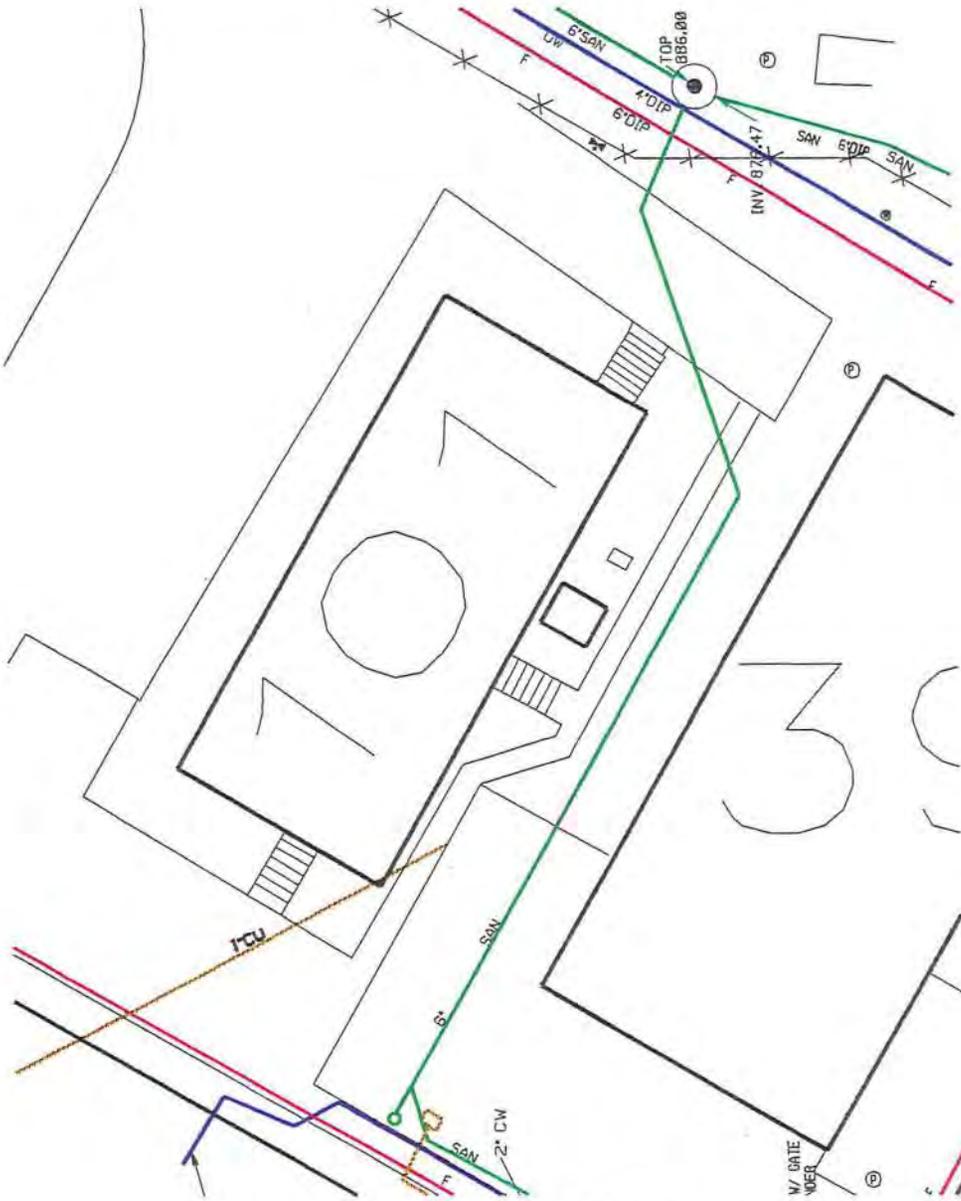
DESIGN NO.	ISSUE NO.	ISSUE	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION	
		B							BLDG #101		
SCALE	DATE	PART CLASSIFICATION							FLOOR PLANS		
LP & JC	PER. REV.	DRAWING CLASSIFICATION							DATE FORW. APPROV.	JOB NO.	
		UNCLASSIFIED							C	FSC911292	
		ONE TYPE SFP							NO. OF BLDG #101	SCALE AS NOTED	SHEET 1 OF 1
APPD	DATE	STATUS MD-REL-12/12/91							ORIGIN	MD-BRS-V3.3	

9.107-57

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Environmental Appraisal of the Mound Plant

9.107.6.5 Underground Utility Lines



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

E.G.&G.-MOUND

UNDERGROUND WATER & WASTE LINES

BLDG. 101
DATE: 03-12-96

UNCLASSIFIED

9.107-61

Environmental Appraisal of the Mound Plant

9.107.6.6 Photographs



Mound Plant Building 101

9.107-65

Environmental Appraisal of the Mound Plant

9.108 BUILDING 102

9.108.1 Scope of Building 102 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 102 on the afternoon of March 5, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.108.6.1). 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 9.108.6.2).

9.108.2 Description of Building

Building 102, an engineering support facility, is a two-story, 10,982-square-foot precast concrete structure with a metal roof, and built slab-on-grade. The building is located on SM/PP hill. Buildings 39 and 101 are to the west; parking lots are to the east and south; and Modular Building 120 is to the north. Location is shown in Attachment 3 (Section 9.108.6.3). Both floors of the building contain offices, conference rooms, storage areas, and lavatories. Floor plans are presented as Attachment 4 (Section 9.108.6.4). The building is serviced by hot water (heat) and chilled water, and electrical service of 240V (*Mound Facility Physical Characterization*, 12-1-93).

Building 102 was built in 1987 (MD-10391, *Asbestos Program Manual*, 9-14-95). The building has been used for the same purpose since construction.

9.108.3 Summary of Findings

Building 102 is currently used for General Purpose Heat Source (GPHS) office support. The building is well-maintained. There were no issues of environmental concern identified during the walk-through or during review of reference material.

9.108.4 Observations

9.108.4.1 Air Emissions

There are no fumehoods. 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. The building is not included in the Mound Air Emissions Database. No air emission permit applications have been submitted to the Regional Air Pollution Control Agency (RAPCA) for activities in the building.

Environmental Appraisal of the Mound Plant

9.108.4.2 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.

9.108.4.2.1 Sanitary

The building has sanitary services. According to a diagram of underground utility lines, presented as Attachment 5 (Section 9.108.6.5), 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 report; therefore, neither dye tests nor smoke tests were conducted.

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

9.108.4.2.2 Storm Wastewater

The building is serviced by a storm drain according to Attachment 5 (Section 9.108.6.5). 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.

9.108.4.2.3 Chemicals

There are no chemicals in Building 102 other than general janitorial supplies. Material Safety Data Sheets (MSDSs) are available for the janitorial chemicals. Drains are clean and appear to drain properly. There has not been any reported spills or releases of any chemicals.

Environmental Appraisal of the Mound Plant

9.108.4.3 Potable and Service Water

Potable water and service water are supplied to the building. Backflow prevention devices are installed at all visible points of potential cross-connection. There are two drinking fountains and one water cooler. According to Environmental Protection Agency (EPA) protocol, annual sampling criteria do not require testing of the fountains. Service water is supplied to the building for heating and within the fire sprinkler system.

9.108.4.4 Chemical Storage and Hazardous Materials

There are no chemicals stored in the building other than janitorial supplies. MSDSs were readily available. Mound personnel do not store or use flammable chemicals in the building.

The building is equipped with appropriate charged fire extinguishers. Each extinguisher is bar-coded. The inspection date database is maintained within the Fire Station, Building 98. There is an Emergency Evacuation Plan, and signs were posted.

A review of the Mound Active Underground Storage Tank Plan and visual inspection indicated that there are no underground or above ground storage tanks in or around the building. There are no sumps, separators, or catch basins, in or around the building.

The building was tested for asbestos-containing building material (ACBM) and ACBM was suspected to be present (MD-10391, *Asbestos Program Manual*, 9-14-95).

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

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

9.108.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes generated are primarily paper (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. The disposal permit is maintained by Waste Management. There is no evidence that hazardous materials or wastes are mixed with solid waste streams.

9.108.4.6 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.

9.108.5 Findings and Recommendations

Environmental Appraisal of the Mound Plant

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.108.6.6). The environmental appraisal of Building 102 indicates that there are no issues of environmental concern related to the structure or processes housed within it.

Environmental Appraisal of the Mound Plant

9.108.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 102

Appraisers:

J. Hausfeld CWA
Name Discipline

M. Meeker RCRA
Name Discipline

Name Discipline

Name Discipline

Building Manager:

Paul Mollo

Process Manager:

Date:

3/5/96

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

Table of Contents

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

Environmental Assessment Checklist

Building Name: 102

Appraisers: J.A. M.W.

Date: 3/5

Clean Water Act (CWA) Screening Checklist

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

CWA Checklist

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

9.108-9

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Clean Air Act (CAA) Screening Checklist

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

CAA Checklist

Regulatory Guideline	Question	Response	Comments
	Are there existing air permits or applications applicable to the building?	Y/N	
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	

102

Building Name:

N/A

Environmental Appraisal Checklist

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: _____

9.108-11

9-108-12

Environmental Appraisal Checklist

Building Name: 162

Appraisers: JJA MM

Date: 3/5

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	NO HAZ Chem.
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	NA
29 CFR 1910.106(d)(7)	Incompatible chemicals are not stored together.	Y/N	NA
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: 102

Appraisers: J.A. M. M.
HM Checklist

Date: 3/5

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	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	1
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	

9.108-13

Environmental Appraisal Checklist

Building Name: _____

Appraisers: _____

Date: _____

HM Checklist

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

Above Ground Storage Tanks Inventory

TABLE B—Above Ground Storage Tanks Inventory							
Building	Capacity (Gal.)	Contents	Estimated Volume	In Service	Containment	Visual Stains/ Contamination	If Empty, Flushed
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				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: 102

Appraisers: J.A. M.W.

Date: 3/5

Safe Drinking Water Act (SDWA) Screening Checklist

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

SDWA Checklist

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

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
102	1 ST FLOOR	OASIS EP8WM-EQ	S/N 8612089691
"	3 RD FLOOR	OASIS EP8WM-EQ	S/N 8612189651
"	" "	BISRH5-P101	BOTTLED WATER S/N 9512144384

Source: _____

9.108-15

Environmental Appraisal Checklist

Building Name: _____

Appraisers: _____

Date: _____

RCRA Screening Checklist

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

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	Has any material generated been characterized RCRA hazardous? Was characterization by analysis or by process knowledge? Are lab results or documentation of process knowledge readily available? Note any uncharacterized material in comment section. Is it waste? If yes, proceed with next section.	Y/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	

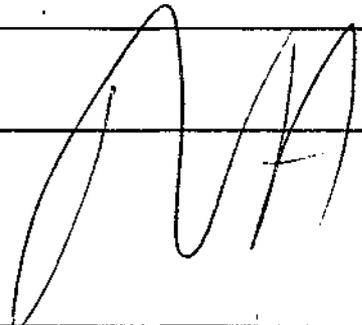
Environmental Appraisal Checklist

Building Name: 102

Appraisers: JAS MA

Date: 3/5

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	

9.108-17

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

RCRA Checklist

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

Environmental Appraisal Checklist

Building Name: 102

Appraisers: *J.A. M...*

Date: 3/5

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	

9.108-19

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

RCRA Checklist

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

General Comments:

Environmental Appraisal Checklist

Building Name: 102

Appraisers: JAM MM

Date: 3/5

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. Is there any evidence of friable asbestos? Is the asbestos removal properly managed? (See questions listed below)	<input checked="" type="radio"/> Y <input type="radio"/> N Y/N Y/N	Suspected 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	<div style="font-size: 2em; font-family: cursive;">NA</div>
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	

9.108-21

Environmental Appraisal Checklist

Building Name: .

Appraisers:

Date:

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

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

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ? If the answer is no, note . If the answer is yes, proceed with next section.	Y / N	
	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: 102

Appraisers: *[Handwritten signatures]*

Date: 3/5

TSCA Checklist

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

9.108-23

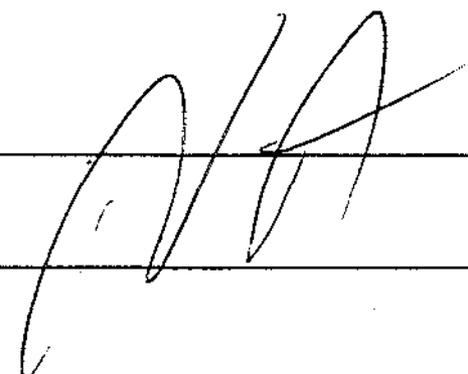
Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

TSCA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 761.65 (c) (2)	Only non-leaking and undamaged large high voltage PCB's capacitors and PCB-containing electrical equipment are allowed to be stored outside of PCB storage areas, on pallets if stored outside, with containment for 10 percent of the volume of the equipment. Do all PCB's stored in this configuration conform with this requirement?	Y / N	
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: 108

Appraisers: JA MW

Date: 3/5

Low-Level Waste and Transuranic Waste Screening Checklist

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

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

9.108-25

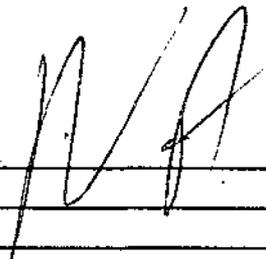
Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Low-Level Waste and Transuranic Waste Checklist

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

Environmental Appraisal Checklist

Building Name: 102

Appraisers: J.A. M.N.

Date: 3/5

Low-Level Waste and Transuranic Waste Checklist

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

9.108-27

Environmental Appraisal Checklist

Building Name:

Appraisers:

Date:

Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
DOE Order 5820.2A, Chapter II, 3.b	Has the TRU waste been assayed or otherwise evaluated to determine its radioactive content prior to storage?	Y / N	
	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: *102*

Appraisers: *JAA MM*

Date: *3/5*

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:

9.108-29

Environmental Appraisal Checklist

Building Name: 102

Appraisers: JH MR

Date: 3/5

Waste Minimization/Pollution Prevention Activities Screening Checklist

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

Waste Minimization/Pollution Prevention Activities Checklist

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

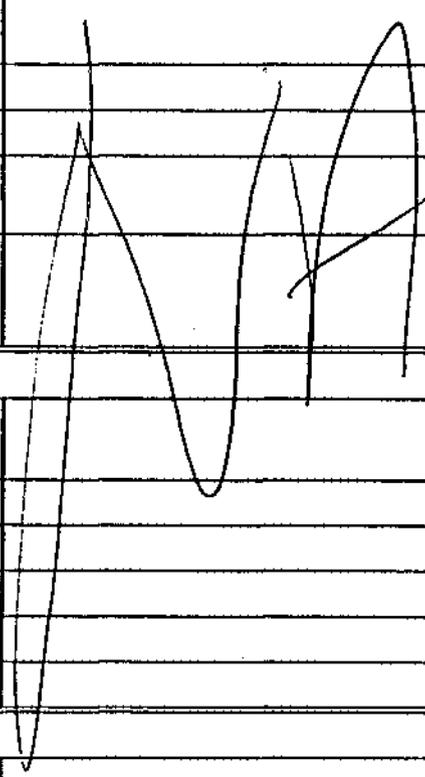
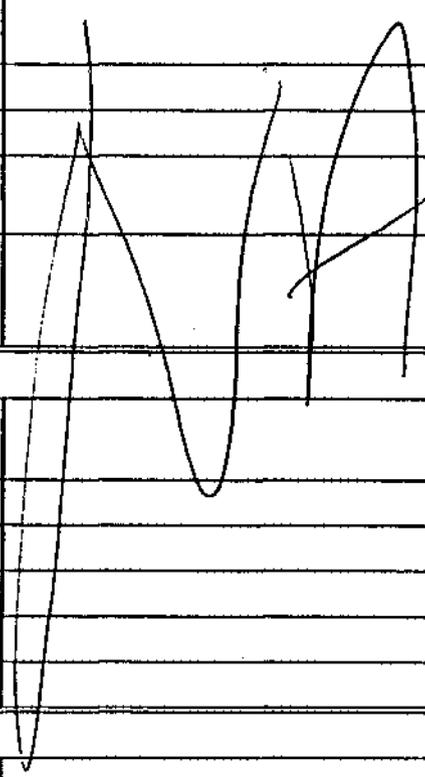
Environmental Appraisal Checklist

Building Name: 102

Appraisers:

Date:

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	

9.108-31

Environmental Appraisal Checklist

Building Name: 107

Appraisers: J.A. M...

Date: 3/5

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:

Appraisers:

Date:

Waste Minimization/Pollution Prevention Activities Checklist

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

9.108-33

Environmental Appraisal Checklist

Building Name: *DJ*

Appraisers: *JA MW*

Date: *3/5*

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	

Environmental Appraisal Checklist

Building Name: 102

Appraisers: *[Signature]*

Date: 3/5

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	If there is a recycling program, what technique is used?	<input checked="" type="radio"/> Y / <input type="radio"/> N	PAPER
	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?		

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Environmental Appraisal of the Mound Plant

9.108.6.2 Building Manager's Questionnaire

03/04/95
PCC

Building Manager's Questionnaire

Building Name: 102 Building Manager: P.C. Molloy Phone: 3869 Date: 12-07-95
Alternate: T.J. GEESNER Phone: 5568

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

- AFTER HOURS ACCESS MUST BE ON MECS SYSTEMS OR ESCORTED ~ 1730 HRS - 0600 HRS DAILY.

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 two-story, 10,982-ft² precast concrete structure with a metal roof. It has hot water and chilled water HVAC services. The building was built in 1987. It is not contaminated with radioactive or energetic materials.

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

5. Provide a drawing of the building.

Attached.

6. What is the current building use?

GPMS office support.

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: 102 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

Process(es) Housed: Offices

How Wastes Are Generated:

No hazardous wastes are generated in this building.

Contact:

Phone #:

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

Building Manager's Questionnaire

Building Name: 102 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: Air Permits 2/4/95

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

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

Source: Air Permits 2/4/95

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

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

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

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

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

Building Manager's Questionnaire

Building Name: 102 Building Manager: P.C. Molloy 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: 102 Building Manager: P.C. Molloy 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?

General janitorial supplies inside building.

23. Where do excess janitorial supplies go?

Excess materials transferred to Waste Mgmt.

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: 102 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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
9460 Part A	1.0
9460 Part B	1.0
EPO Kwick Resin	2.4
Lead Glove	2.4
Leco Polyester Resin	1.0

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

Need updated list generated during recent chemical inventory.

Building Manager's Questionnaire

Building Name: 102 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

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

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

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

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

Source: _____

Building Manager's Questionnaire

Building Name: 102 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Yes No

Where are logs found?

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

Source: _____

Building Manager's Questionnaire

Building Name: 102 Building Manager: P.C. Molloy 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: 102 Building Manager: P.C. Molloy Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

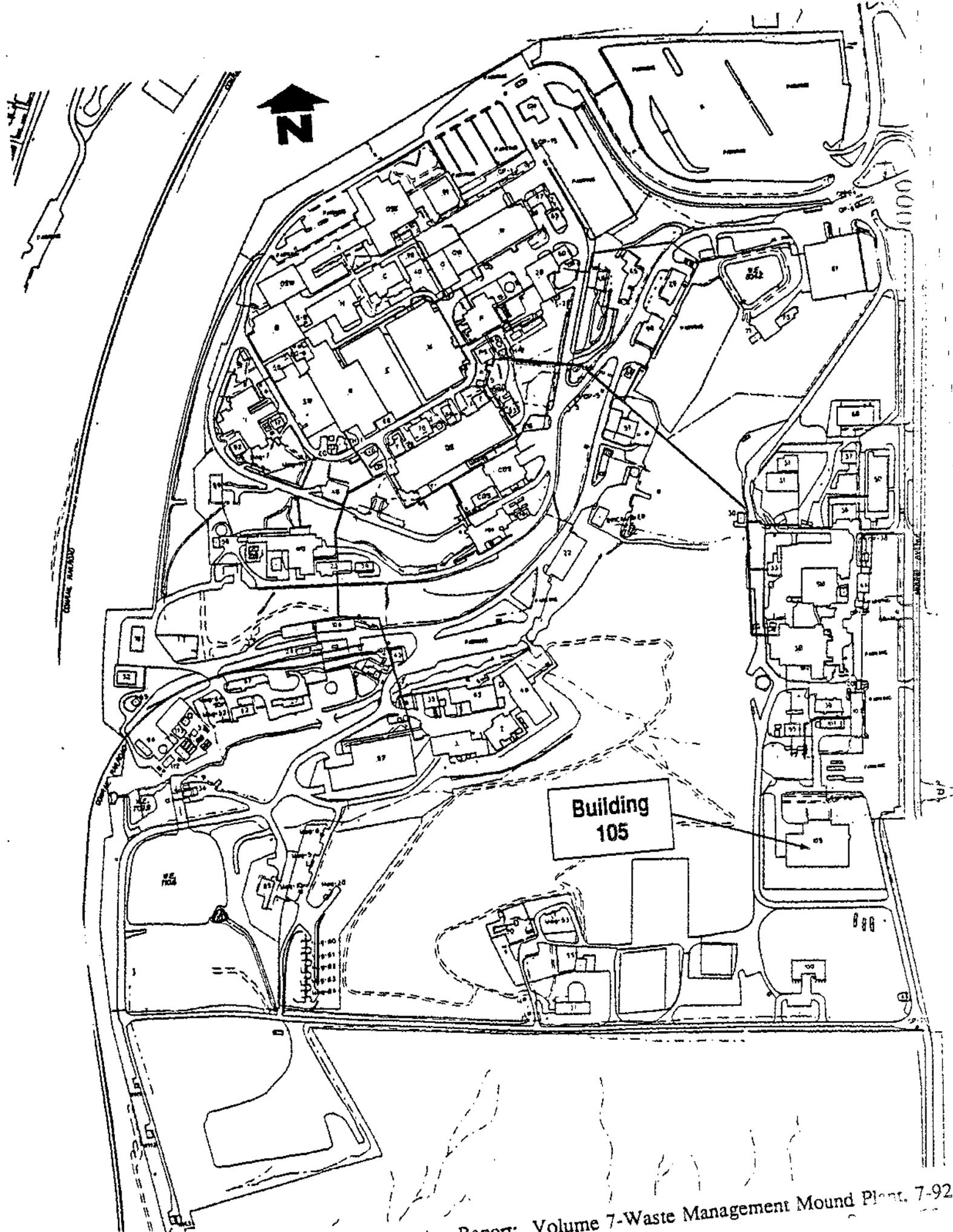
36. Is there a waste minimization program in the building? Yes No
Discuss your ideas about how to minimize waste.

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

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Environmental Appraisal of the Mound Plant

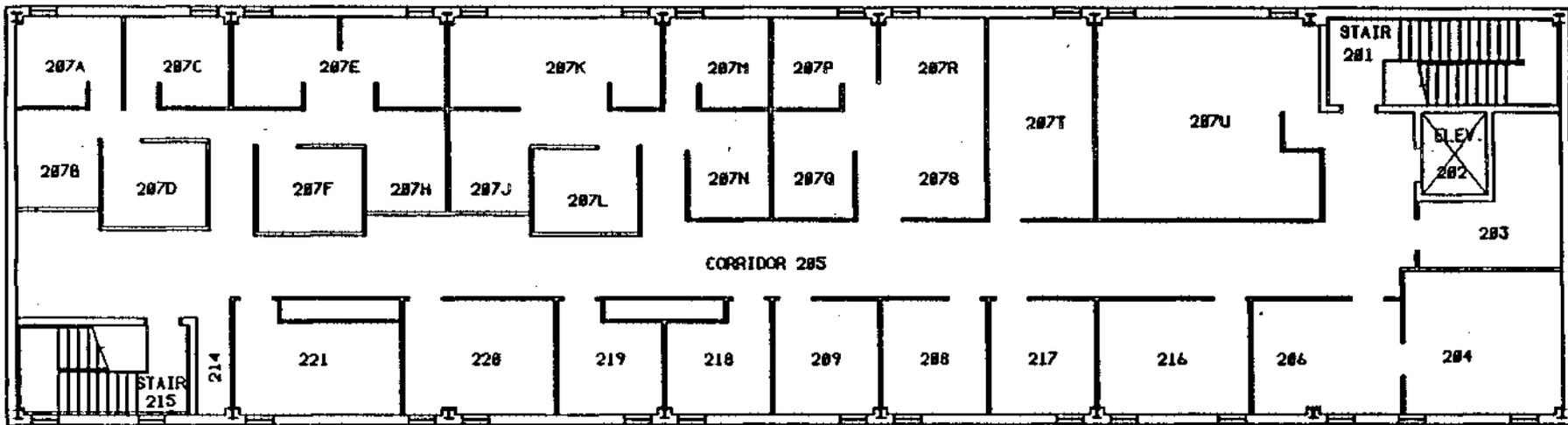
9.108.6.3 Location of Building 102



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Environmental Appraisal of the Mound Plant

9.108.6.4 Floor Plans for Building 102



BLDG #102
SECOND FLOOR
BLDG CODE:3102

PROJECT NUMBER	FSC911293	JOB NUMBER	12335
GENERAL CLASSIFICATION	UNCLASSIFIED		
BLK	C	LINE 14865	SCALE AS NOTED
ISSUE #	8	SHEET #	2
REVISION	MD-REL-52/12/91		

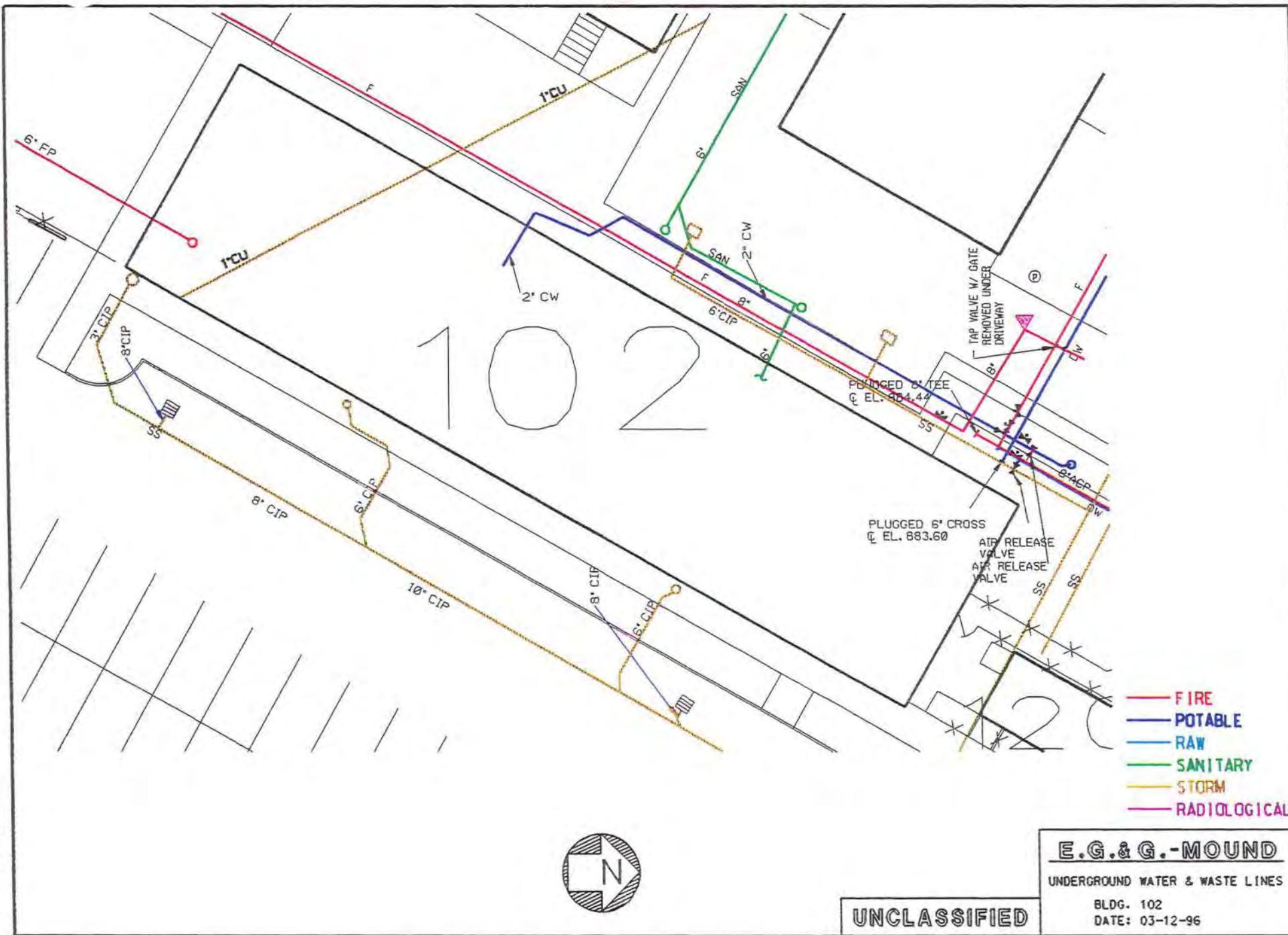
9.108-57

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Environmental Appraisal of the Mound Plant

9.108.6.5 Underground Utility Lines

19-8016
9.108-61



UNCLASSIFIED

E.G.&G.-MOUND

UNDERGROUND WATER & WASTE LINES

BLDG. 102

DATE: 03-12-96

Environmental Appraisal of the Mound Plant

9.108.6.6 Photographs



Mound Plant Building 102

9.108-65

Environmental Appraisal of the Mound Plant

9.109 BUILDING 104

9.109.1 Scope of Building 104 Report

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

A team of environmental professionals prepared to perform a walk-through of Building 104 on the morning of January 29, 1996, however, it was determined through the building manager that the building had just been leased to the City of Miamisburg. Therefore, an environmental appraisal was not conducted.

9.109.2 Description of Building 104

Building 104, the maintenance shop for the test firing area, is a one-story, 1,800-square-foot, steel frame structure with steel siding and roof. It is constructed slab-on-grade with a loading dock and ramp. The location is shown in Attachment 1 (Section 9.109.4.1). The building is bounded by a road, paved loading area, and grassy areas. Across the street to the east are Buildings PH and 24. The structure contains offices, a lavatory, an electronics and small parts assembly room, parts storage, and a fabrication/maintenance shop. Utility services are hung on the walls and ceiling. The building is serviced by central steam heat and chilled water, and electric service of 240V (*Mound Facility Physical Characterization*, 12-1-93).

Building 104 was constructed in 1991 (*Capital Assets Management Process, CAMP Report, FY96*). The building has been used for the same purpose since construction. No research, development, or production activities using radioactive or energetic materials have occurred in the building (*Mound Facility Physical Characterization*, 12-1-93).

9.109.3 Summary of Findings

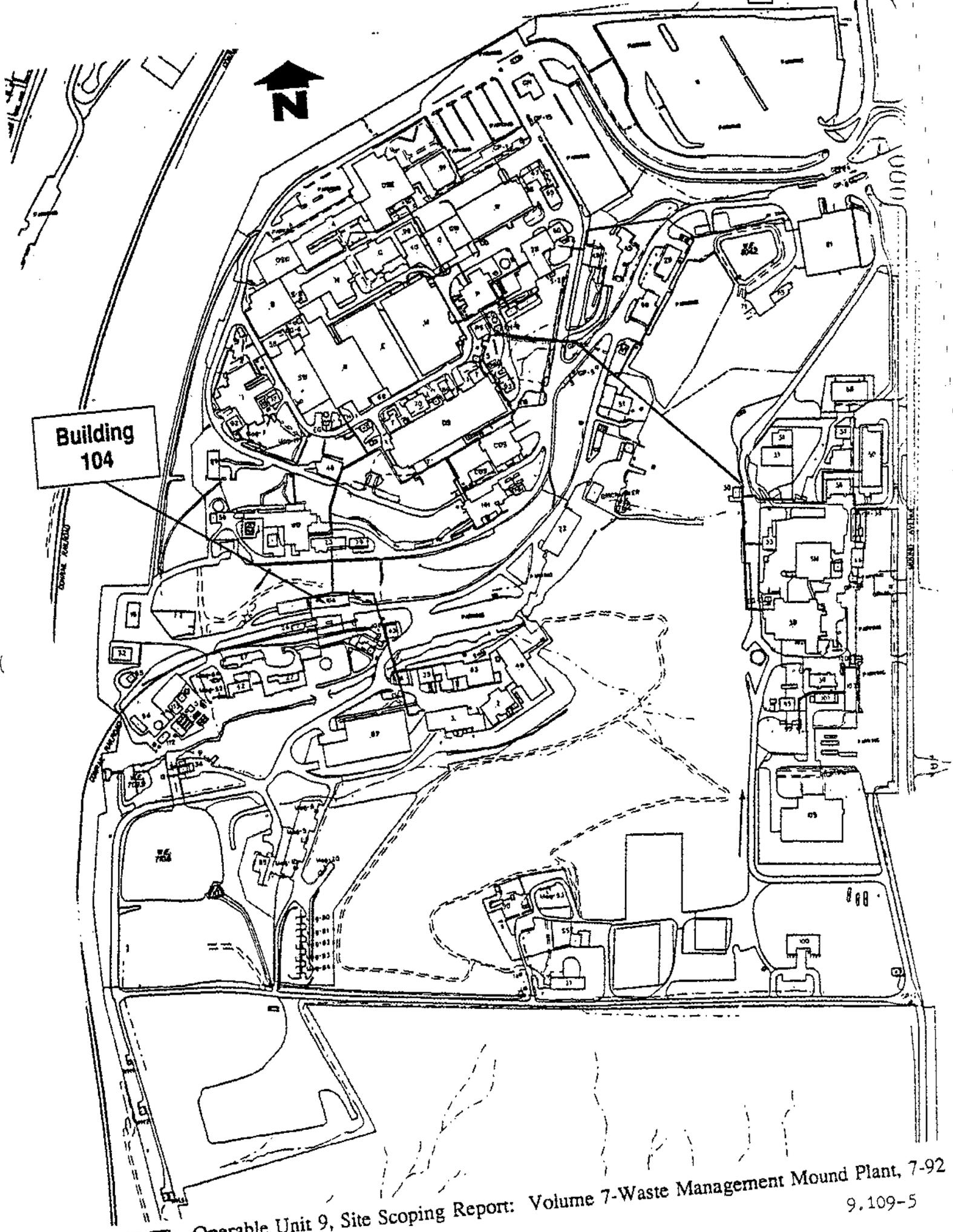
A photo was taken to document the building. It is found in Attachment 2 (Section 9.109.4.2). Building 104 has undergone Safe Shutdown which includes removal of wastes and other materials plus equipment which cannot be released. A Health Physics safety determination and a liabilities assessment were made. ESA's (ASTM E 1527-94 or ASTM E 1528-93) were not conducted. The building has been leased by DOE to the City of Miamisburg, which accepted the liabilities assessment. The General Purpose Lease between the DOE and the City of Miamisburg requires the sub-lessee to obtain and comply with regulatory agency permits.

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

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Environmental Appraisal of the Mound Plant

9.109.4.1 Location of Building 104



Building
104



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Environmental Appraisal of the Mound Plant

9.109.4.2 Photographs



Mound Plant Building 104

9.109-9



In Building 104, a Safe Shutdown building, these containers appeared without the knowledge of the building manager.

Environmental Appraisal of the Mound Plant

9.110 BUILDING 105

9.110.1 Scope of Building 105 Report

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

The appraisal team prepared to perform a walk-through of Building 105 on the morning of January 29, 1996; however, it was confirmed by the building manager that the building had been leased to the City of Miamisburg. Therefore, an environmental appraisal was not conducted. No Building Manager's Questionnaire (BMQ) was available and the Environmental Appraisal Checklist (EAC) was not completed since the building was leased.

9.110.2 Description of Building 105

Building 105, a parts machining shop, has two-stories, and an area of 38,000 square feet. It is a steel-framed, cast-in-place concrete-walled, slab-on-grade structure with a metal roof. Its location is shown in Attachment 1 (Section 9.110.4.1). The building is bounded on all sides by open area and roadways. It is isolated from other buildings in the Mound Fire Test Area. The first floor of the building contains offices, lavatories, a locker room, storage, and a large machining area. The second floor contains 3,600 square feet. It is an equipment room converted to office spaces utilizing relocatable partitions. The building is serviced by sanitary and storm water service lines. Hot water provides heating and chilled water is used for cooling. Electric service of 480V is provided to the building (*Mound Facility Physical Characterization*, 12-1-93).

Building 105 was constructed in 1971 (*Capital Assets Management Process, CAMP Report, FY96*). The building has been used for the same purpose since construction. Production activities using energetic materials have occurred in the building. Research, development and testing activities using radioactive materials have not occurred. (*Mound Facility Physical Characterization*, 12-1-93).

9.81.3 Summary of Findings

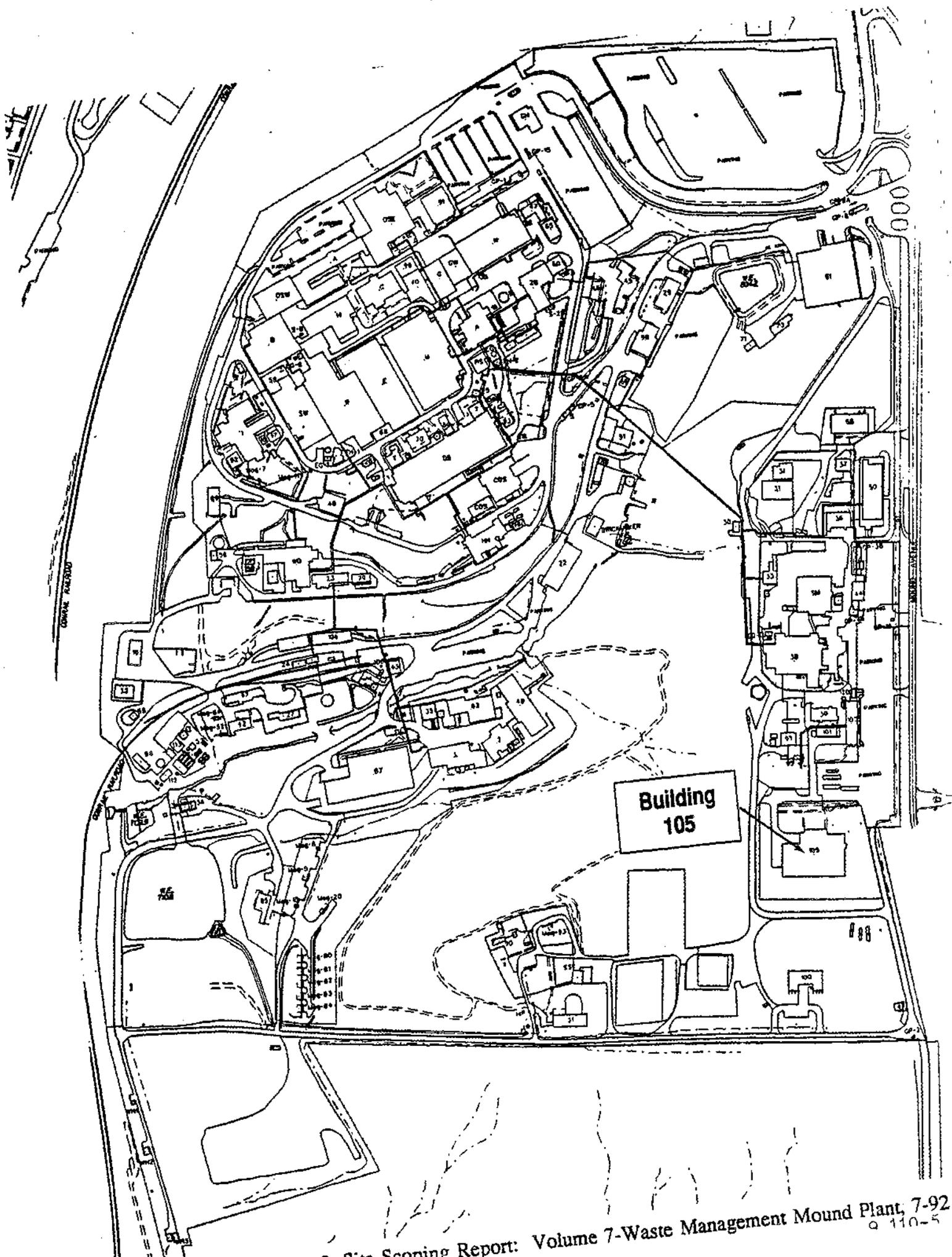
Building 105 has undergone Safe Shutdown which includes removal of wastes and other materials plus equipment which cannot be released. A health physics safety determination and a liabilities assessment were made. An Environmental Site Assessment (ASTM E 1527-94 or ASTM E 1528-93) was not conducted. The building has been leased by the Department of Energy (DOE) to the City of Miamisburg which accepted the liabilities assessment. The General Purpose Lease between the DOE and the City of Miamisburg requires the sub-lessee to obtain and comply with regulatory agency permits.

Environmental Appraisal of the Mound Plant

Photographs were taken to document the building. They are included as Attachment 2 (Section 9.110.4.2). Since the building has been leased, an EAC was not prepared and no further action was taken concerning this building.

Environmental Appraisal of the Mound Plant

9.110.4.1 Location of Building 105



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Environmental Appraisal of the Mound Plant

9.110.4.2 Photographs

Mound Plant Building 105

9.110-9



9.111 Building 106

Environmental Appraisal of the Mound Plant

9.111 BUILDING 106

9.111.1 Scope of Building 106 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 visit to the former location of Building 106 on the morning of January 29, 1996. The Environmental Appraisal Checklist (EAC) was not used to record findings since the building has been removed. The appraisers were accompanied by the former building manager. A Building Manager's Questionnaire (BMQ) was not made available to the appraisal team.

9.11.2 Description of Building 106

Building 106, a general storage facility, was a one-story, 200-square-foot, metal walled and roof structure. The commercial Butler building was built slab-on-grade. Its location is shown in Attachment 1 (Section 9.111.4.1). The building site is bordered on all sides with a gravel hardstand. It was nestled in beside Building 1 to the east and Building 43 to the west. The building was serviced by electrical service of 120V (*Mound Facility Physical Characterization*, 12-1-93).

Building 106 was constructed in 1985 (MD-10391, *Asbestos Program Manual*, 9-14-95). The building was used for the same purpose since construction. It was used to store cartons, wooden cases, and metal shipping containers for packaging items containing explosives (*Mound Facility Physical Characterization*, 12-1-93).

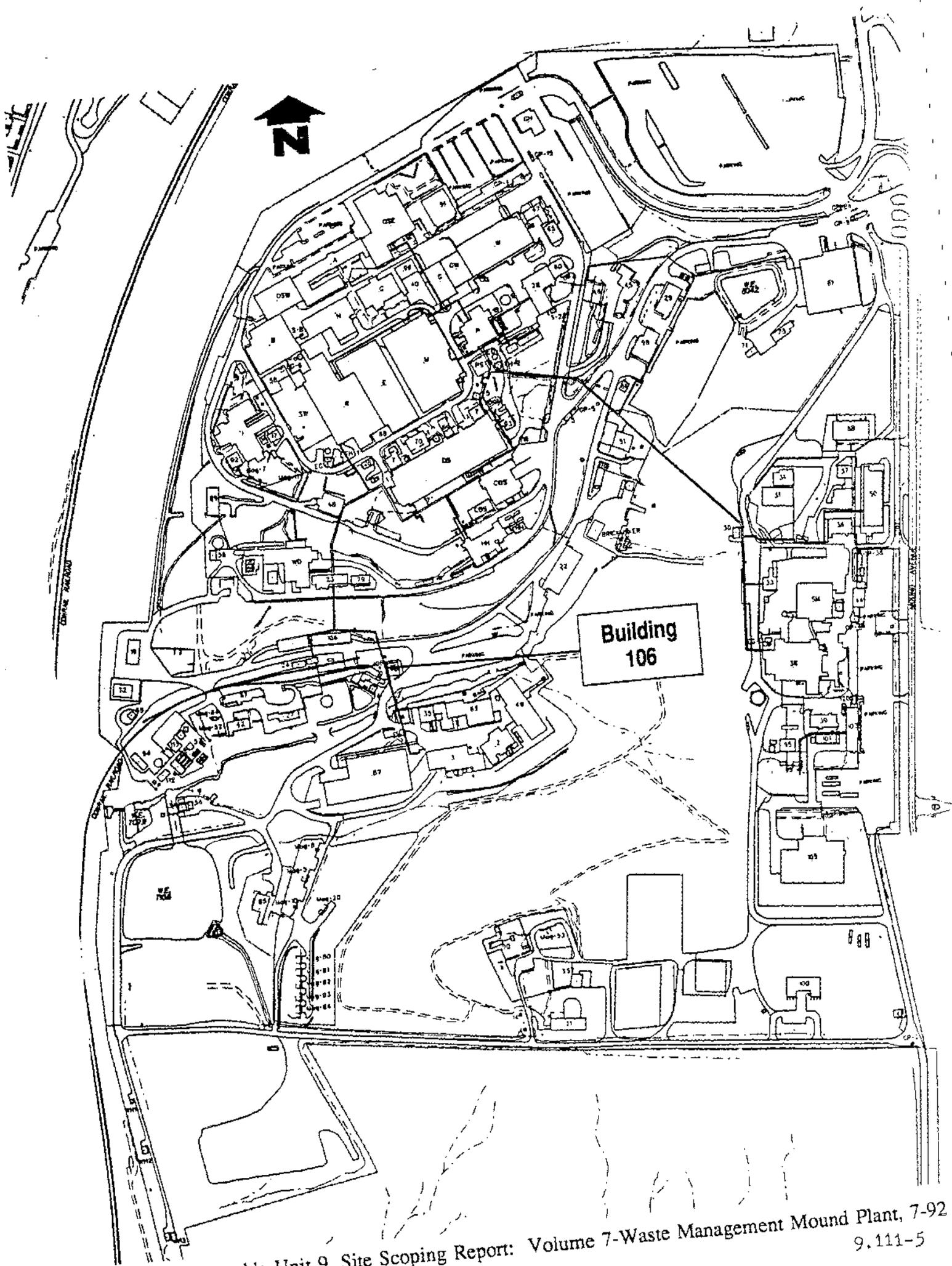
9.111.3 Summary of Findings

Building 106 has undergone Safe Shutdown which includes removal of wastes, materials, and equipment. A Health Physics safety determination and a liabilities assessment were made. An ESA (ASTM E 1527-94 or ASTM E 1528-93) was not conducted. The building has been sold and removed from Mound. Since the building has been sold, an EAC was not prepared and no further action was taken concerning this building.

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Environmental Appraisal of the Mound Plant

9.111.4.1 Location of Building 106



SOURCE: Operable Unit 9, Site Scoping Report: Volume 7-Waste Management Mound Plant, 7-92
9.111-5

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Environmental Appraisal of the Mound Plant

9.112 BUILDING 112

9.112.1 Scope of Building 112 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 on the morning of January 30, 1996. The Environmental Appraisal Checklist (EAC) was used to report findings. The EAC is presented in Attachment 1 (Section 9.112.6.1). 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 9.112.6.2).

9.112.2 Description of Building 112

The Mound Wastewater Treatment Plant (MWWTP), commonly referred to as the Sanitary Disposal (SD) Facility, is comprised of three numbered buildings. Building 57, Sanitary Sewage Treatment, contains the control house and several plant processes. Building 112, two detached structures, provides integrated process support consisting of sand filters, effluent treatment, and testing and monitoring. Building 113, consisting of another two detached structures, houses the dewatering equipment and chemical and equipment storage. The MWWTP is west of the retention basin and Building 34 and east of Buildings 72 and 19. The location is shown in Attachment 3 (Section 9.112.6.3).

The MWWTP is classified as a single-stage system comprised of an advanced secondary treatment plant with two major flow streams: (1) liquid treatment processes; and (2) residual treatment processes. A tertiary treatment stage has been added to the liquid treatment process. These processes are shown schematically in Figure 1.

The average design flow of the facility is 120,000 gallons-per-day (gpd). The current average flow, during Monday through Thursday is 38,000 gpd and on Friday through Sunday, 20,000 gpd. Wastewater from Mound sanitary facilities collects and flows by gravity into the influent wet well, the grit chamber or concrete tank No. 101. Plant influent is normally pumped through fine screens that remove debris, including grit and discharges directly into the first flow equalization tank (No. 103). During cleaning and maintenance of the grit chamber, influent is rerouted into the comminutor, concrete tank No. 102, and then to the first flow equalization tank. Influent is measured for pH as it passes into the equalization basins, concrete tanks Nos. 103-106, where mechanical mixers and aeration prevents settling in the tanks. From this stage, the flow is pumped to the aeration process pits, steel tanks 107 and 108, where the principal secondary

Environmental Appraisal of the Mound Plant

treatment process takes place. A new concrete clarifier with a sludge withdrawal scraper completes the secondary settling process.

Secondary settling tank liquid effluent is discharged to a wet well, an unnumbered concrete tank in Fig. 1, where it is pumped through sand filters for tertiary treatment. Sand filter discharge flows by gravity to the chlorine contact tank, four in-line, steel-lined concrete tanks, No. 111-114, where it is disinfected with sodium hypochlorite. This stage is normally limited to May through September operation under the NPDES permit. Effluent from this step is dechlorinated using sodium bisulfite. Effluent from the chlorine contact tank is then metered and monitored before discharge (Outfall 001) through a common outfall line with discharge from the Mound Retention Basin into the Great Miami River (Outfall 001).

Sludge from the aeration tanks and the new clarifier is periodically pumped into one of two sludge-holding, concrete tanks where fly ash is added. The supernatant is returned to the plant influent for retreatment and the sludge is pumped to the belt filter press. Stranco polymer is added to the sludge as it is passed to the filter press. Filtrate from the filter press is returned to the plant influent for further treatment. A Sorband post mixer unit completes the sludge treatment prior to testing, characterization, and bagging as low-level waste (LLW).

This environmental appraisal addresses Building 112, a one-story, sanitary disposal sand filter building. An adjacent detached structure, unnamed and unnumbered, was also appraised. Other process stages are described with their respective Buildings 57 or 113, reports 9.79 and 9.113, respectively. Building 112 houses a portion of the sanitary wastewater treatment plant. Unit operations in the building are a sand filter, chlorinator, and a wastewater sampler.

Building 112, containing 547 square feet and constructed in 1985, and its adjoining detached unnumbered building, containing 144 square feet and constructed in 1993, are steel framed with metal sides and roof on a concrete pad. Both are commercial Butler buildings. The floor plans are presented as Attachment 4 (Section 9.112.6.4). Both have electric power, potable water, and electric heat. Building 112 also has service water. These buildings contain the tertiary treatment process and final effluent treatment (hypochlorite and reduce), effluent monitoring equipment, external chlorine contact chambers, in tank Nos. 111 and 112, and two external chlorine neutralizing chambers, both unnumbered.

The building and facilities have been used for the same purpose since construction.

9.112.3 Summary of Findings

During the walk-through, review of reference materials, and discussions with the process manager and primary licensed operator, it was noted that the building and process support treatment facilities appeared to be well-maintained with proper housekeeping procedures. All piping was properly color coded and labeled; records and logs are complete and up-to-date; Material Safety Data Sheets (MSDS's) sheets are available; Emergency Response Plans are posted; and no regulatory or permit deficiencies were observed.

Environmental Appraisal of the Mound Plant

Two potential best management practice review items were noted.

Of particular interest to the appraisal team was the effluent process treatment modification which substitutes the injection of 12.5 percent hypochlorite in solution for chlorine gas. And, since the installation of the Dynasand Filter in Building 112, there has been no reportable incident of noncompliance with the NPDES Permit.

The MWWTP meets the Ohio Environmental Protection Agency's (OPEA) definition of a Publicly Owned Treatment Works (POTW). As such, a POTW is exempt from the Resource Conservation and Recovery Act (RCRA) under Part 260.10. The Clean Water Act (CWA) and SDWA apply to the liquid effluent and under the NPDES Permit (OEPA Permit 1I000005*DF) is properly monitored at Sampling Station 1I000005601, located at the end of the liquid treatment process. The monitoring equipment is located in the Building 112 annex.

Plant operators' licenses were posted, and a copy of the same, as well as copies of the NPDES permit and LLW procedures were found in the utility foreman's office, Building P.

9.112.4 Observations

9.112.4.1 Air Emissions

Buildings 112 and its annex are serviced by small heating units, potable water, and exhaust fans; all other areas are directly exposed to the weather. There are no process air emission sources in Building 112 or its annex. There is no evidence of fugitive dust or unusual odors at or around the building.

9.112.4.2 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.

The MWWTP, including Building 112, has only a sanitary wastewater collection system which cycles into the influent intake side of the treatment process. Injection controls for the hypochlorite and sodium bisulfite are in Building 112. Automatic controls and alarms which

Environmental Appraisal of the Mound Plant

monitor hypochlorite and sodium bisulfite concentration rates are located in the annex along with plant and separate environmental laboratory monitoring equipment. Samples are analyzed to ensure conformance with NPDES permit limitations, including CBOD₅, TSS, fecal, and Cl₂ at the final MWWTP effluent discharge point (Station 001).

9.112.4.2.1 Sanitary Wastewater

The MWWTP is the sanitary wastewater treatment plant and Building 112 drains, runoffs, blowdown discharge lines, and backwash systems are connected to the raw influent inlet to the plant. The plan of underground lines is presented as Attachment 5 (Section 9.112.6.5). There are no sanitary facilities within the building or its annex. Exterior grates and drains were not tested to confirm that they connect to the sanitary system; however, visual inspection of the exposed collection system revealed that drainage was to the influent inlet. Inspection showed no signs of odors, colored discharges, or scarring which would indicate that any materials were not being collected into the system. Confirmation of drainage of sanitary wastewater into the MWWTP intake was not within the scope of the effort, therefore, neither dye tests nor smoke tests were not conducted.

9.112.4.2.2 Storm Wastewater

Building 112 is not directly serviced by storm drains. However, rainwater falling on the surrounding area can become part of the surface groundwater runoff or be captured into the plant drainage system and be returned to the influent intake to the system.

9.112.4.2.3 Process Wastewater

Small concentrates of radioactive wastewater from other buildings sometimes is contained within the influent. Therefore, large items and grit removed in the grit chamber are handled as LLW. This part of the plant system is discussed in the appraisal report on Building 57 (Volume 8, Section 9.57). Radioactive particles are removed as part of the plant sludge and the sludge is processed as LLW for disposal. This process is described in the appraisal report for Building 113 (Volume 10, Section 9.113). To ensure compliance with the NPDES permit, industrial hygiene personnel monitor the plant liquid effluent to ensure acceptable limits are not exceeded. This part of the plant system is discussed in this appraisal report.

9.112.4.2.4 Chemicals

Two different chemicals, sodium hypochlorite and sodium bisulfite, are stored and used in the Building 112. Reserve chemical drums are stored in the annex to Building 118. The list is included in the BMQ, Attachment 2 (Section 9.112.6.2). Chemical storage and handling procedures are in place for proper disposal of chemicals. The quantity and type of chemicals, as well as their respective ages, was found to be compatible with daily and annual plant requirements. There is no evidence that chemicals have, or can be discharged into surface runoff water. Backwash from the Dynasand filters is returned to the plant influent intake.

Environmental Appraisal of the Mound Plant

9.112.4.3 Potable and Service Water

Potable and service water is supplied to Building 112 and only potable water to its annex. Backflow prevention devices are installed at all visible points of potential cross connection. There are no mechanical drinking water fountains.

9.112.4.4 Chemical Storage and Hazardous Materials

There are no chemicals stored in Building 112 other than those associated with the treatment process; therefore, a flammable storage cabinet is not required. Chemicals used with the plant process of liquid effluent treatment are stored and properly labeled on their respective drums. Up-to-date MSDS's are available at the operator's office in Building 57.

All chlorine gas cylinders have been removed and no other cylinders are within or outside Building 112.

Buildings 112 and its annex are equipped with properly located eye washes and charged fire extinguishers. Each extinguisher is bar-coded. The inspection date database is maintained in the Fire Station, Building 98.

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

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

Research, development, and production activities using radioactive or energetic materials do have sanitary service to the MWWTP.

9.112.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes are not generated in this portion of the MWWTP system. There is no evidence that hazardous materials or LLW are mixed with solid wastes.

The Building 112 process does not generate hazardous or explosive wastes. Salts in solution are generated as result of the sodium hypochlorite/sodium bisulfite neutralization process. The amount generated does not violate the NPDES permit as the permit does not address concentration limitations. A copy of the OEPA letter endorsing the substitution of this process in place of chlorine gas is maintained in the utility foreman's office.

9.112.4.6 Waste Minimization and Pollution Prevention

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

Environmental Appraisal of the Mound Plant

The plant process design which includes the collection and retreatment of all plant unit discharges plus a minimal use of chemicals for effluent treatment comprises the MWWTP, including Building 112, waste minimization and pollution prevention programs.

9.112.5 Findings and Recommendations

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.112.6.6).

The environmental appraisal of Building 112 indicates that the following action items, in recommended priority, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place. Please note that these findings address issues related to Building 112 and the system processes described for this building. To determine all action items related to the MWWTP, please review the appraisal reports for Buildings 57 (Volume 8, Section 9.76) and Building 113 (Volume 10, Section 9.113).

- 112-1 For accountability and record purposes, a separate building number for the annex may be appropriate.
- 112-2 There were no records found that tanks Nos. 111 and 112 have been inspected since 1993. In addition, since the first two chambers are on the Active UST Plan list, the remaining two chambers should be considered to be added to the plan.

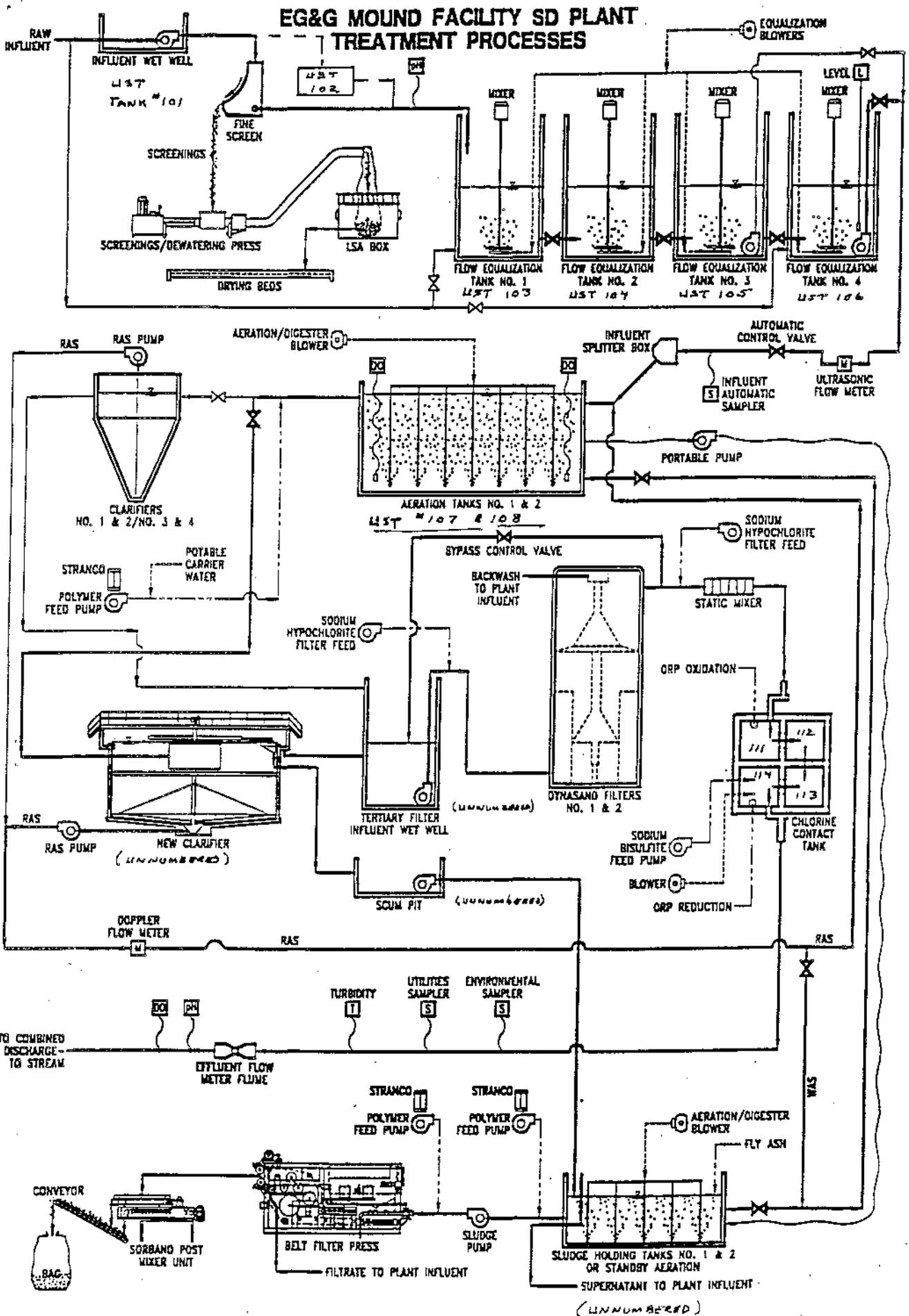


Figure 1

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Environmental Appraisal of the Mound Plant

9.112.6.1 Environmental Appraisal Checklist

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

Table of Contents

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

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM # 4

Date: 1-30-96

Clean Water Act (CWA) Screening Checklist

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

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list?	(Y) N	
	Are they properly contained?	(Y) N	
	Is the building in operation? What are the processes and where do they discharge to?	(Y) N <u>SANITARY</u>	BACKWASH FROM THE SAND FILTERS IS RETURNED TO THE PLANT INTAKE AND REPROCESSED AS PART OF THE INFLUENT
	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)	WATER TREATMENT CHEMICALS HYPOCHLORITE AND/OR REDUCING WOULD RETURN FOR TREATMENT AS PART OF THE PLANT INFLUENT.

9.112-13

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM #4

Date: 1-30-96

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	
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: 112

Appraisers: Team #4

Date: 1-30-96

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	<i>Blank</i>				
			Y/N	Y/N					
			Y/N	Y/N					

Source: _____

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM 44

Date: 1-30-92

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 STORED
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	NONE

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Environmental Appraisal Checklist

Building Name: 112

Appraisers: Team # 4

Date: 1-30-96

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	NONE STORED
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	NONE
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	NONE
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y / N	NONE
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y / N	NONE
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y / N	NONE
	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	

9.112-17

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Environmental Appraisal Checklist

Building Name: 112

Appraisers: Terry # 4

Date: 1-30-96

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 Assessment Checklist

Building Name: 112

Appraisers: Team # 4

Date: 1-30-96

Safe Drinking Water Act (SDWA) Screening Checklist

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

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

TABLE C—Water Fountain Survey			
Building	Location	Model #	Comments / Date of Analysis for Lead

Source: _____

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM #4

Date: 1-30-96

RCRA Screening Checklist

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

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

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Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM # 7

Date: 1-30-96

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: 112

Appraisers: TEAM #4

Date: 1-30-96

RCRA Checklist

9.112-22

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

Environmental Assessment Checklist

Building Name: 112

Appraisers: TEAM # 4

Date: 1-30-96

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		

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Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM # 4

Date: 1-30-96

RCRA Checklist

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

General Comments:

9.112-24

Environmental Assessment Checklist

Building Name: 112

Appraisers: Team # 4

Date: 1-30-96

Asbestos Screening Checklist

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

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

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

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Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM #4

Date: 1-30-96

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

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

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

Environmental Assessment Checklist

Building Name: 112

Appraisers: TEAM 24

Date: 1-30-96

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 area floors curbed and constructed of continuous smooth and impervious materials?	Y / N	
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y / N	
40 CFR 761.62 (b) (1) (iii)	No drains are allowed in storage areas. Are there drains in the storage areas?	Y / N	

TSCA Checklist

9.112-28

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

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM # 2

Date: 1-30-96

Low-Level Waste and Transuranic Waste Screening Checklist

Does this facility contain radioactive waste?	<input checked="" type="radio"/> Y <input type="radio"/> N	If yes, conduct the following survey.
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Low-Level Waste and Transuranic Waste Checklist

Regulatory Guideline	Question	Response	Comments
Low-Level Waste			
DOE Order 5820.2A Chapter III	Can any waste generated in, or from, this building be characterized either through process knowledge or by analyses to determine if it is LLW? If the answer is no, note. If the answer is yes, proceed with next section.	<input checked="" type="radio"/> Y <input type="radio"/> N	SMALL PARTICLES SUSPENDED IN THE LIQUID EFFLUENT MAY BECOME ENTRAINED WITHIN THE SAND FILTER. SUCH RETURNS TO THE INFLUENT INTAKE TO THE PLANT. REFER TO BLDG 113 FOR SLUDGE DESCRIPTION
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 / <input checked="" type="radio"/> N	
DOE Order 5820.2A Chapter III, 3.a.	Have the storage configurations in use in this area been taken into account for keeping external exposures to the general public below 25 mrem/yr? Is the waste stored in a configuration that protects ground-water resources?	Y / N	
DOE Order 5820.2A Chapter III, 3.b.	Has monitoring been conducted in this area in accordance with DOE Order 5820.2A in order to evaluate the area against the performance standard? Based on field data, does the monitoring conducted in this area conform to the performance standard?	Y / N	

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Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM # 4

Date: 1-30-96

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 Assessment Checklist

Building Name: 112

Appraisers: TEAM 4

Date: 1-30-96

Low-Level Waste and Transuranic Waste Checklist

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

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM # 4

Date: 1-30-96

Low-Level Waste and Transuranic Waste Checklist

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

Environmental Assessment Checklist

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Appraisers: TEAM #4

Date: 1-30-96

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:

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM 04

Date: 1-30-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals?	Y/N	If yes, conduct the following survey:
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Waste Minimization/Pollution Prevention Activities Checklist

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

Environmental . raisal Checklist

Building Name: 112

Appraisers: TEAM #4

Date: 1-30-96

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	

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Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM #4

Date: 1-30-96

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	
<u>CYANIDE AND REACTIVE WASTES</u>			
	Has non-cyanide or low concentration of cyanide process replaced zinc cyanide bath?	Y / N	
	Are any of these processes used to recycle cyanide wastes?	Y / N	
	Refrigeration/crystallization?	Y / N	
	Evaporation?	Y / N	
	Ion exchange?	Y / N	
	Membrane separation which includes reverse osmosis or electro dialysis?	Y / N	
<u>VEHICLE MAINTENANCE</u>			
	How are auto parts cleaned?	Y / N	
	Solvent sink?	Y / N	
	Solvent dunk bucket?	Y / N	
	Solvent dip tank?	Y / N	
	Are parts cleaning solvents used for anything else besides cleaning parts?	Y / N	
	Are spills reduced by locating sinks or dunk buckets near auto service bays?	Y / N	

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM #4

Date: 1-30-96

Waste Minimization/Pollution Prevention Activities Checklist

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

Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM 9 V

Date: 1-30-96

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	
<u>SOLVENT WASTES</u>			
	Has there been an attempt to reduce volume or toxicity by:		
	Eliminating solvents?	Y/N	
	Reducing the use of solvents?	Y/N	
	Reducing the loss of solvents?	Y/N	
	Increasing recyclability?	Y/N	
	Are solvents segregated?	Y/N	
	Are waste solvents free from water and garbage?	Y/N	
	Are recycled solvent containers labeled as such?	Y/N	
	Are containers kept closed?	Y/N	
	Free and sheltered from the elements?	Y/N	
	Are solvent tanks kept as free from contaminations as possible so that the waste can be recycled?	Y/N	
	Is a method used to minimize the use of new materials such as a countercurrent process?	Y/N	

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Environmental Appraisal Checklist

Building Name: 112

Appraisers: TEAM # 4

Date: 1-30-96

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? 3/1/96	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?	_____ _____	

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Environmental Appraisal of the Mound Plant

9.112.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw Phone: 865-4894 Date: 12-07-95
Alternate: F. RAKER Phone: 865-3438

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

NONE

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

SAFETY SHOES & GLASSES

3. Are there any restricted areas? Yes
Where are they?

No

4. Provide a physical description of the building.

This is a steel frame and metal (Butler) structure with metal roof containing 785 ft². It has electric heat. ~~Equipment in the building is probably slightly contaminated with radioactive material.~~

Liquid EFFLUENT.
DOES NOT CONTAIN LLW
REMOVED REFER TO
BDDG 113

← THIS IS NOT DOCUMENTED
OR POSTED TO MY KNOWLEDGE,

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 tertiary sand filters for sanitary waste disposal.

ANNEX HAS MONITORING EQUIPMENT.

Source: Mound Buildings, 5-9-95

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

NONE

Source: Mound Buildings, 5-9-95

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

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

Process(es) Housed: Sand filters

How Wastes Are Generated:

No hazardous wastes are generated in this building.

Contact: A. Upshaw / F. RAKER
Phone #: 4894 / 3438

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

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

CHLORINE GAS REMOVED, WAS USED FOR LIQUID EFFLUENT TREATMENT, NOW USE HYPOCHLORITE / RESORCITE. MONIT. EQUIPMENT INSTALLED IN ANNEX

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: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: Air Permits 2/4/95

12. For existing permits are emissions monitored? At what frequency? Where are the records maintained? 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? SUSPECTED NONE NOTED DURING APPRAISAL

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

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

17. Does the building contain transformers or capacitors? No

Source: PCB ANNUAL DOCUMENT LOG

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

Source: PCB ANNUAL DOCUMENT LOG

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

Chemical Name	State	Amount (MAX)
NONE		
SANTIGEN (SODIUM HYPOCHLORITE) SAYGEN 12.5%	LIQUID	165 gal (average)
Reducite	LIQUID	165 gal (average)

Source: Chemical Inventory 1994/5

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Chemical	Amount	Clean-up Measures

Source: _____

21. Where do waste chemicals go?

WASTE MANAGEMENT IF NEEDED,
 BUT RARELY.

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

NONE

23. Where do excess janitorial supplies go?

N/A

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

HIS HAS
 BEEN
 SLOWLY
 DELETED

Registration Number	Content	Quantity	Last Inspection Date	Preventive Maintenance Performed	Inside Or Outside
7782-50-5	chlorine	02G		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? NO
 EFFLUENT FROM CLARIFIER

Double-Walled	Contents	Days/Year in Use	Overflow Tank	Previous Overflow
Y / <u>(N)</u>	TREATED SAN. WASTE WATER	365	Y / <u>(N)</u>	Y / <u>(N)</u>

Source: PROCESS KNOWLEDGE & VISUAL INSPECTION

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

Materials	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Process	Waste	Stored	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: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

Yes No

Where are logs found?

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

Source: _____

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

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

Source: _____

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

Building Manager's Questionnaire

Building Name: 112 Building Manager: A.W. Upshaw 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.

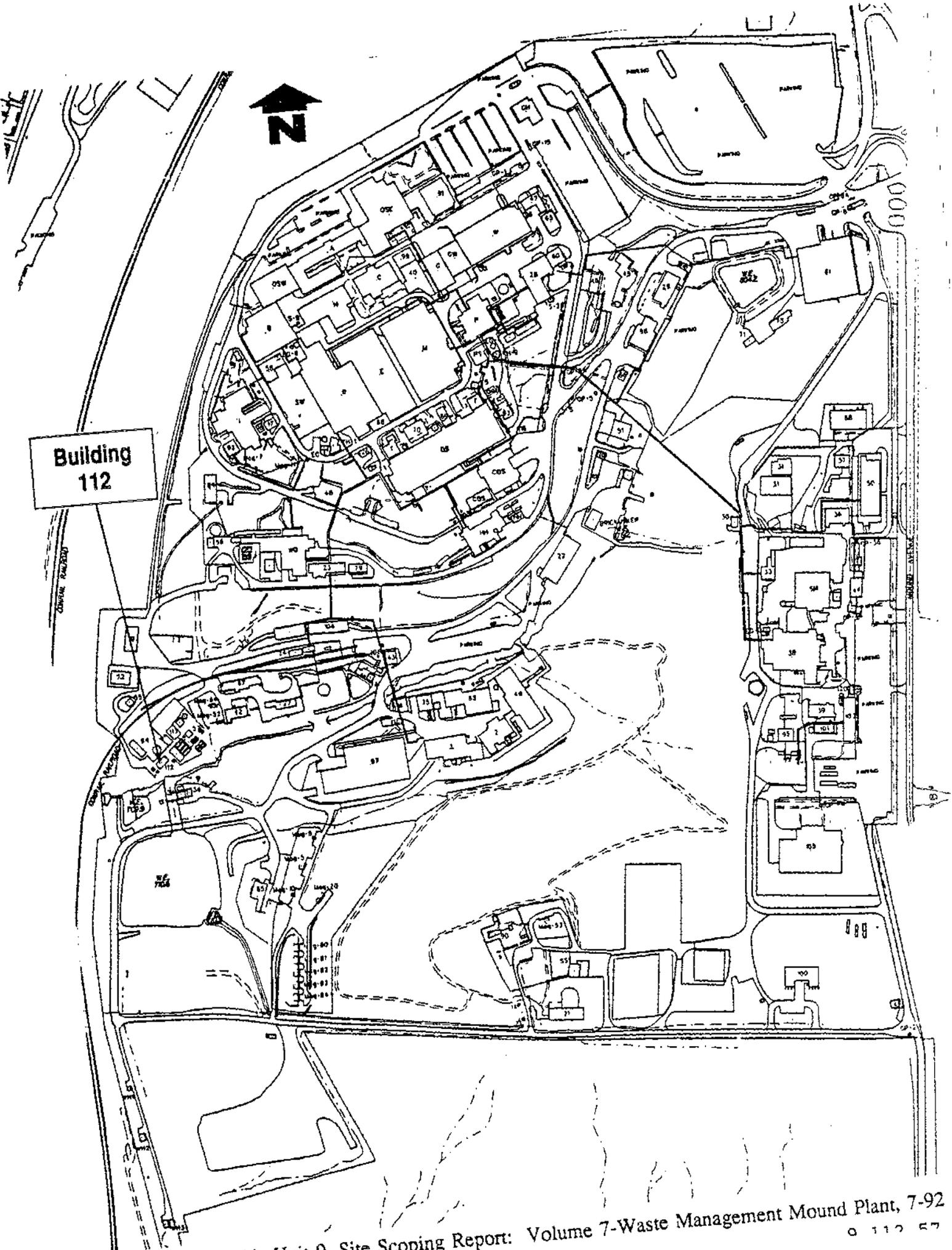
*BUILDING NOT OCCUPIED BY PLANT PERSONNEL EXCEPT FOR WATCH
CYCLE INSPECTION AND BACK FLUSHING OF SAND FILTERS*

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

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Environmental Appraisal of the Mound Plant

9.112.6.3 Location of Building 112



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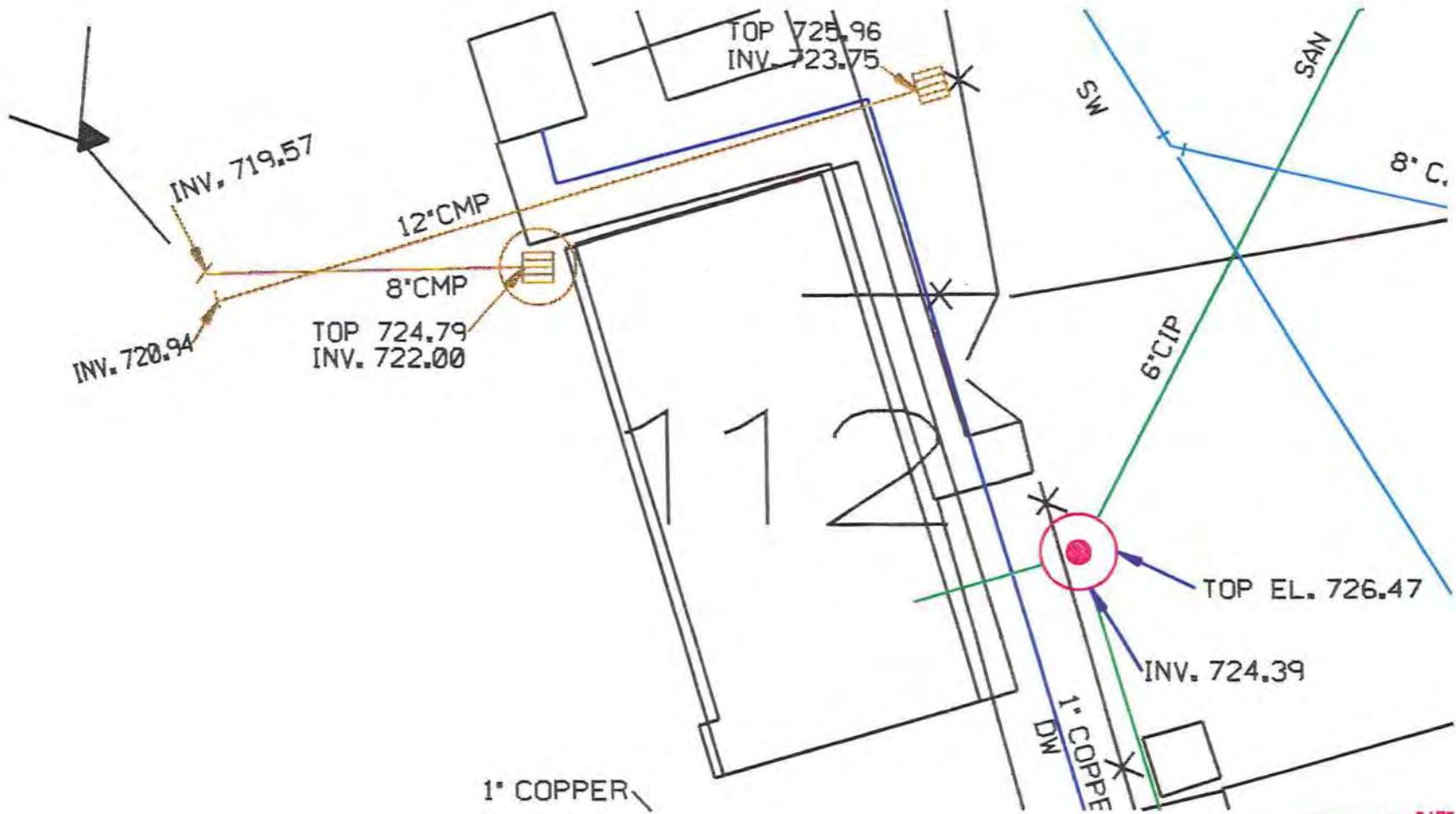
Environmental Appraisal of the Mound Plant

9.112.6.4 Floor Plans for Building 112

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9.112.6.5 Underground Utility Lines



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



E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
BLDG. 112

DATE: 3-4-96

UNCLASSIFIED

9.112-65

Environmental Appraisal of the Mound Plant

9.112.6.6 Photographs



Mound Plant Building 112

9.112-69

Environmental Appraisal of the Mound Plant

9.113 BUILDING 113

9.113.1 Scope of Building 113 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 113 on the morning of January 30, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.113.6.1). 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 9.113.6.2).

9.113.2 Description of Building 113

The Mound Wastewater Treatment Plant (MWWTP), commonly referred to as the Sanitary Disposal (SD) Facility, is comprised of three numbered buildings. Building 57, Sanitary Sewage Treatment, contains the control house and several plant processes. Building 112, two detached structures, provides integrated process support consisting of sand filters, effluent treatment, and testing and monitoring. Building 113, consisting of another two detached structures, houses the dewatering equipment and chemical and equipment storage. The MWWTP is west of the Mound retention basin and Building 34 and east of Buildings 72 and 19. The location is shown in Attachment 3 (Section 9.113.6.3).

The MWWTP is classified as a single-stage system comprised of an advanced secondary treatment plant with two major flow streams: (1) liquid treatment processes; and (2) residual treatment processes. A tertiary treatment stage has been added to the liquid treatment process. These processes are shown schematically in Figure 1.

The average design flow of the facility is 120,000 gallons-per-day (gpd). The current average flow, during Monday through Thursday is 38,000 gpd and on Friday through Sunday, 20,000 gpd. Wastewater from Mound sanitary facilities collects and flows by gravity into the influent wet well, the grit chamber or concrete tank No. 101. Plant influent is normally pumped through fine screens that remove debris, including grit and discharges directly into the first flow equalization tank (No. 103). During cleaning and maintenance of the grit chamber, influent is rerouted into the comminutor, concrete tank No. 102, and then to the first flow equalization tank. Influent is measured for pH as it passes into the equalization basins, concrete tanks Nos. 103-106, where mechanical mixers and aeration prevents settling in the tanks. From this stage, the flow is pumped to the aeration process pits, steel tanks 107 and 108, where the principal secondary treatment process takes place. A new concrete clarifier with a sludge withdrawal scraper completes the secondary settling process.

Environmental Appraisal of the Mound Plant

Secondary settling tank liquid effluent is discharged to a wet well, an unnumbered concrete tank in Fig. 1, where it is pumped through sand filters for tertiary treatment. Sand filter discharge flows by gravity to the chlorine contact tank, four in-line, steel-lined concrete tanks, No. 111-114, where it is disinfected with sodium hypochlorite. This stage is normally limited to May through September operation under the NPDES permit. Effluent from this step is dechlorinated using sodium bisulfite. Effluent from the chlorine contact tank is then metered and monitored before discharge (Outfall 001) through a common outfall line with discharge from the Mound Retention Basin into the Great Miami River (Outfall 001).

Sludge from the aeration tanks and the new clarifier is periodically pumped into one of two sludge-holding, concrete tanks where fly ash is added. The supernatant is returned to the plant influent for retreatment and the sludge is pumped to the belt filter press. Stranco polymer is added to the sludge as it is passed to the filter press. Filtrate from the filter press is returned to the plant influent for further treatment. A Sorband post mixer unit completes the sludge treatment prior to testing, characterization, and bagging as low-level waste (LLW).

This environmental appraisal addresses Building 113, listed as a one-story, sanitary disposal dewatering building. Other process stages are described with their respective Buildings 57 and 112, reports 9.76 and 9.113, respectively.

Building 113, constructed in 1990 (MD-10391, *Asbestos Program Manual*, 9-14-95), was designed to hold the belt filter press thus removing the necessity for two of the three exposed ground sludge drying beds. This structure is steel-framed with metal sides and roof on a concrete pad. The commercial Butler building contains 1,600 square feet. Floor plans are presented in Attachment 4 (Section 9.113.6.4). Equipped with electricity, potable water, and electric heat, the building houses the belt filter press which is the sludge dewatering unit, the Sorband post mixer unit, and the injection unit for fructose corn syrup, used to feed the aeration tank microbes during periods of low influent flow. Not listed but associated with this building are two unnumbered, concrete sludge holding tanks (unnumbered concrete tanks where fly ash is added to sludge received from the aeration tanks and scum from the new clarifier).

The building and facilities have been used for the same purpose since construction.

9.113.3 Summary of Findings

During the walk-through, review of reference materials, and discussions with the process manager and primary licensed operator, it was noted that the building and support facilities appeared to be well-maintained with proper housekeeping procedures. All piping was properly color coded and labeled; records and logs complete and up-to-date; Material Safety Data Sheets (MSDS's) were available; Emergency Response Plans posted; and no regulatory or permit deficiencies observed.

Not listed on the opposite side of the sludge holding tanks is an unnumbered building, referred to as the Building 113 Annex. It is of the same type and construction date as Building 113. It contains 547 square feet and provides storage space for bulk chemicals used in Building 113 and

Environmental Appraisal of the Mound Plant

spare equipment for the MWWTP. It is equipped with electricity, electric heat, and an exhaust fan.

Four potential best management practice review items were noted.

The MWWTP is classified by the Ohio Environmental Protection Agency (OEPA) as a Publicly Owned Treatment Works (POTW); the POTW is exempt from the Resource Conservation Recovery Act under Part 260.10. The Clean Water Act (CWA) and the Safe Water Drinking Act (SDWA) applies to the liquid effluent and under the National Pollution Discharge Elimination System (NPDES) Permit (OEPA Permit 11000005*DD) is properly monitored at Sampling Station 1100000561, located at the end of the liquid treatment process. The monitoring equipment is located in Building 112.

Sludge which is passed through the belt filter press and post Sorband mixer unit in Building 113 is considered to be contaminated with LLW. The dry sludge is bagged, tested, characterized, and labeled prior to being delivered to Waste Management for transportation offsite as such. Sludge testing for the past five years reveals that heavy metals and hazardous chemicals do not exceed regulatory limits.

9.113.4 Observations

9.113.4.1 Air Emissions

Building 113 and its annex are serviced by small heating units and exhaust fans, principally designed to enhance airflow during hot weather. The sludge holding tanks are open tanks and exposed to the weather. There are no primary air emission sources. There is no evidence of fugitive dust or unusual odors at or around the building. No air emissions permit applications have been submitted to OEPA for activities in the building.

9.113.4.2 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.

Environmental Appraisal of the Mound Plant

Building 113, as part of the MWWTP, has only a sanitary wastewater collection system which cycles into the influent intake side of the treatment process.

9.113.4.2.1 Sanitary Wastewater

The MWWTP is the sanitary wastewater treatment plant and Building 113, like all plant facilities, buildings drains, runoffs, blowdown discharge lines, backwash systems, lavatories, showers, and catch basins is connected to the raw influent inlet to the plant. According to Attachment 5 (Section 9.113.6.5), there are no connections in Building 113 to the facility's underground sanitary lines. However, filtrate from the filter press is recycled back into the plant's raw influent intake line for retreatment.

Exterior grates and drains were not tested to confirm that they connect to the sanitary system. Inspection showed no signs of odors, colored discharges, or scarring which would indicate that any materials were not being collected into the system. Confirmation of drainage of sanitary wastewater into the MWWTP intake was not within the scope of the effort, therefore, neither dye tests nor smoke tests were conducted.

9.113.4.2.2 Storm Wastewater

Building 113 and its annex are not directly serviced by storm drains. Storm water off the buildings flows to the nearest open grate collection system and is added to the plant influent.

9.113.4.2.3 Process Wastewater

Small concentrates of radioactive wastewater sometimes are contained within the influent. Therefore, large items and grit removed in the grit chamber are handled as LLW. This part of the plant system is discussed in the appraisal report on Building 113. Radioactive particles are removed as part of the plant sludge and the sludge is processed as LLW for disposal. This process is described in this appraisal report. To ensure compliance with the NPDES permit, Health Physics personnel monitor the plant liquid effluent to ensure acceptable limits are not exceeded. This part of the plant system is discussed in the appraisal report on Building 112 (Report 9.112).

9.113.4.2.4 Chemicals

Only six different chemicals are now stored and used in the MWWTP. The list is included in Attachment 2 (Sections 9.112.6.2 and 9.113.6.2), the BMQ's for Buildings 112 and 113. In the event there is an influent pH adjustment required, the chemicals are obtained from Building P. Chemical storage and handling procedures are in place for proper disposal of chemicals. The quantity and type of chemicals, as well as their respective ages, was found to be compatible with daily and annual plant requirements. There is no evidence that chemicals have, or can be discharged into surface runoff water.

Environmental Appraisal of the Mound Plant

9.113.4.3 Potable and Service Water

Potable and service water are supplied to Building 113. The annex has potable water for the eyewash. Backflow prevention devices are installed at all visible points of potential cross connection. There are no mechanical drinking water fountains. There are no potable water spigots.

9.113.4.4 Chemical Storage and Hazardous Materials

There are no chemicals stored in Building 113 other than those associated with the treatment process; therefore, a flammable storage cabinet is not required. Chemicals used with the plant process of treating effluent are stored and properly labeled on their respective drums. Up-to-date MSDS's are available at the operator's office in Building 113.

Building 113 is equipped with a properly located eyewash and charged fire extinguishers. Each extinguisher is bar-coded. The inspection date database is maintained in the Fire Station Building 98.

Building 113 and its annex were tested and do not contain asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95).

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

Research, development, and production activities, using radioactive or energetic materials, do have sanitary service to the MWWTP.

9.113.4.5 Solid, Hazardous, and Radioactive Wastes

Solid waste generated is the dewatered LSA sludge. The disposal permit is maintained by Waste Management. There is no evidence that hazardous materials or LLW are mixed with solid wastes. Sludge testing records for the past five years reveal that heavy metals and hazardous chemicals do not exceed regulatory limits. A significant portion of the end process testing was terminated in FY 1996. An independent laboratory was utilized to test the dewatered sludge prior to shipment for disposal.

Backwash, process drains, and filtrate from the belt filter press contain suspected LSA which is returned to the plant raw influent intake for retreatment. LSA sludge periodically removed from the sludge holding tanks and/or aeration tank is dewatered, packed in containers in approved shipping bags, characterized, and tested by Health Physics to verify each shipment is within DOE external contamination limits. Sludge is characterized in accordance with Mound Procedure MD-81240, Issue 8, *Low Level Waste Management Procedures*, Mound Procedure MD-70523, *Characterization of Hazardous Waste*, and OAC 3745-52-11. The results are verified as an acceptable lot by the Waste Compliance Section, and then turned over to Waste Management for pick up and removal by Envirocare. The time from bagging to removal from Mound is less than

Environmental Appraisal of the Mound Plant

90 days. Waste disposal manifests and Certificates of Disposal are maintained by the EG&G Waste Management Group.

9.113.4.6 Waste Minimization and Pollution Prevention

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

The plant process design which includes the collection and retreatment of all plant unit discharges plus a minimal use of chemicals for effluent treatment comprises the MWWTP, including Building 113, waste minimization and pollution prevention programs.

9.113.5 Findings and Recommendations

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.113.6.6).

The environmental appraisal of Building 113 indicates that the following action items, in recommended priority, should be planned and scheduled for accomplishment thus assuring that best management and operating practices are in place. Please note that these findings address issues related to Building 113 and the system processes described herein. To determine all action items related to the MWWTP, please review the appraisal reports for Buildings 57 and 112, reports 9.76 and 9.112, respectively.

- 113-1 While all drains are connected to the influent intake side of the plant, it is possible for filtrate to be spread throughout on the building concrete deck and perhaps flow out the service entrance onto the soil. Since the filtrate may contain LLW, heavy metals, and hazardous chemicals, the feasibility of adding secondary containment should be considered.
- 113-2 While outside testing of discharge sludge over the past five years has not indicated that the contents of heavy metals and hazardous chemicals exceed regulatory threshold limits and Health Physics data does not indicate that the MREM/HR does not present a health hazard, consideration should be given to posting warning signs at the entrances to Building 113.
- 113-3 There were no records found that the sludge holding tanks have been inspected nor are they listed on the Active Underground Storage Tank Plan. Both tanks should be considered to be added to the plan and scheduled for inspection.
- 113-4 There is an apparent plant account error for Building 113 as the 547-square-foot size indicated is more adequately reflected as the size of its annex. For accountability and record purposes the description of Building 113 and its annex should be reviewed and a separate building number for the annex may be appropriate.

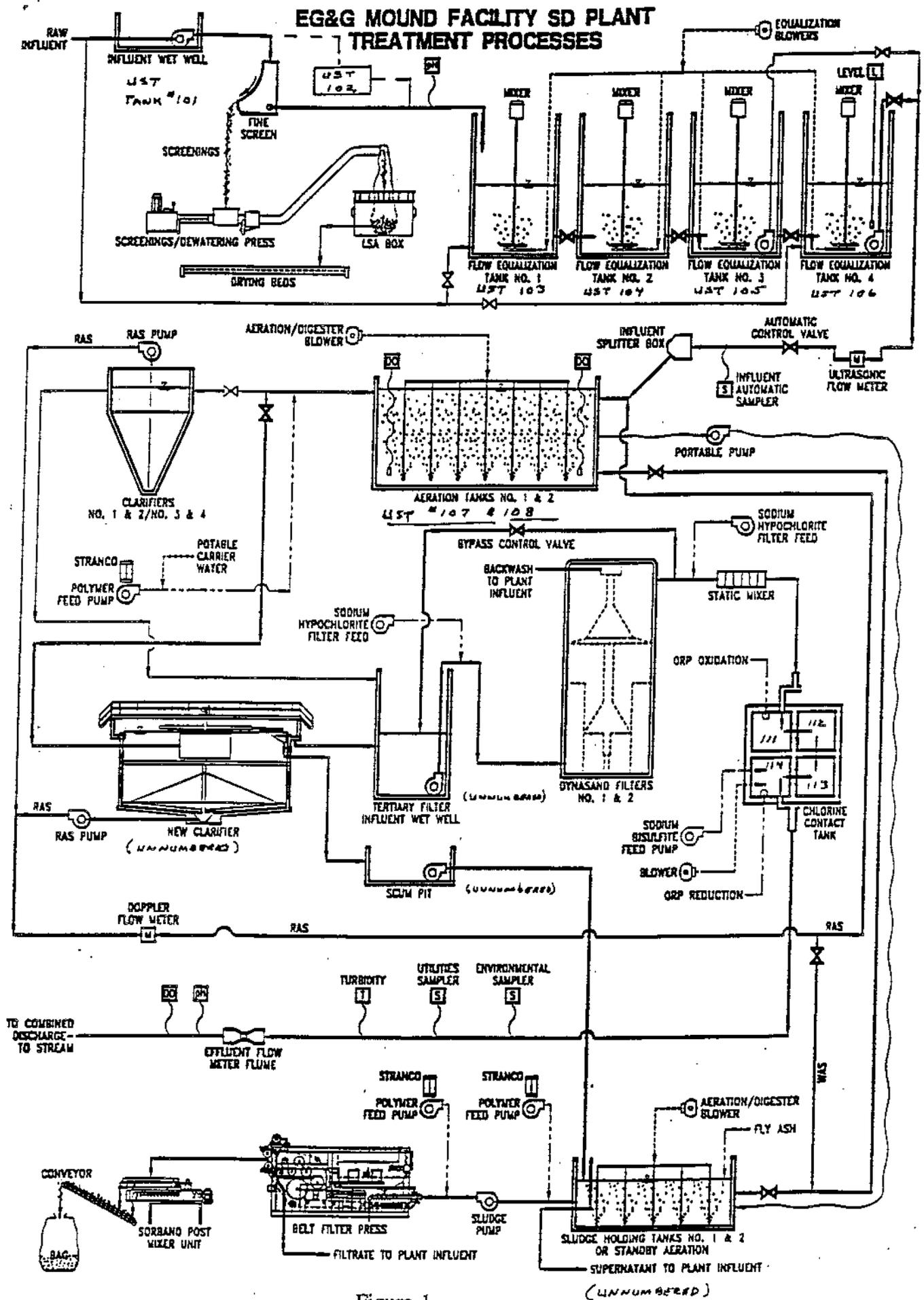


Figure 1

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Environmental Appraisal of the Mound Plant

9.113.6.1 Environmental Appraisal Checklist

ENVIRONMENTAL APPRAISAL CHECKLIST

Building Name 113 SANITARY DISPOSAL DOWATERING

Appraisers:

TEAM # 4

MARK GILLIAT ENGINEER
Name Discipline

MARCIA VANNET CHEMIST
Name Discipline

MYRON SMITH, JR ENGINEER
Name Discipline

- -
Name Discipline

Building Manager: A.W. Upshaw (x-4894), ALT. F. FAKER (x-3458)

Process Manager: JOHN "MIKE" WARELL Primary licensed operator

Date: 30 January 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: 113

Appraisers: Team 04

Date: 1-30-96

Clean Water Act (CWA) Screening Checklist

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

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list?	(Y) N	
	Are they properly contained?	(Y) N	
	Is the building in operation? What are the processes and where do they discharge to?	(Y) N _____ _____	SLUDGE TREATMENT, EFFLUENT TREATMENT. DEWATER EFFLUENT BACK TO PLANT INTAKE - Sludge passed
	Do the floor drains, sinks & toilets appear to be draining properly?	Y / N	NONE
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary Storm	NONE COLLECTION SYSTEM 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	WATER / SLUDGE TREATMENT CHEMICALS COMPATIBLE WITH MWWTP PROCESS.

9.113-13

Environmental Appraisal Checklist

Building Name: 113

Appraisers: TEAM #4

Date: 1-30-96

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)	
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: //3

Appraisers: TEAM # 4

Date: 1-30-96

CAA Checklist

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

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

Blank

Source: _____

9.113-15

9.113-16

Environmental Appraisal Checklist

Building Name: 113

Appraisers: TEAM 24

Date: 1-30-96

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	IN PLANT OPERATOR'S OFFICE Bldg 57.
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	NO FLAMMABLES
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 Assessment Checklist

Building Name: 113

Appraisers: TEAM 4

Date: 1.30.96

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	Y/N	N/A
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	Y/N	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	Y/N	NONE
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	NONE
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	Y/N	NONE
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y/N	NONE
29 CFR 1910.104(2)(10)	Oxygen stored as a liquid shall be on a noncombustible surface. Asphalt is considered combustible. Wood and long dry grass shall be cut back 15 ft. from the container.	Y/N	NONE
29 CFR 1910.104	Bulk oxygen storage shall be permanently placarded "OXYGEN - NO SMOKING - NO OPEN FLAMES".	Y/N	NONE
	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	

HM Checklist

9.113-18

Regulatory Guideline	Question	Response	Comments
	Is there a process area?	Y/N	SLUDGE Dewatering
	Does it have proper containment?	Y/N	However, Secondary Containment Record
	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: 113

Appraisers: TEAM #4

Date: 1-30-96

Safe Drinking Water Act (SDWA) Screening Checklist

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

Regulatory Guideline	Question	Response	Comments
OAC 3745 95-02 (A)	Do actual or potential cross-connections exist between potable (light green) and service water (dark green)?	<input checked="" type="radio"/> Y <input type="radio"/> N	
OAC 3745 95-04 (B)(C)	Are backflow prevention devices installed where cross connections (hoses connected to faucets, hot water tank vented directly to a drain) exist?	<input checked="" type="radio"/> Y <input type="radio"/> N	
	Are sources of service water (janitorial and laboratory faucets, or outdoor spigots) posted as non-potable water sources?	Y / N	NONE
	Does the facility contain any water coolers or fountains that are not lead free? Complete Table C.	Y / <input checked="" type="radio"/> N	

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead

Source: _____

9.113-19

RCRA Screening Checklist

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

Regulatory Guideline	Question	Response	Comments
OAC 3745 52-11	<p>Has any material generated been characterized RCRA hazardous? Was characterization by analysis or by process knowledge? Are lab results or documentation of process knowledge readily available? Note any uncharacterized material in comment section. Is it waste? If yes, proceed with next section.</p>	<p>Y / <input checked="" type="radio"/> N analysis / process <input checked="" type="radio"/> Y / N Y / N</p>	<p>FOR THE 5 YEAR PERIOD ENDING 9/95. TESTING TERMINATED AS A COST SAVINGS (PER BIDD MANAGER) AS NO LIMITS EXCEEDED.</p>
OAC 3745 52-11	<p>Are any of the materials noted RCRA hazardous waste? If no, note and stop here. If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.</p>	<p>Y / <input checked="" type="radio"/> N</p>	

9.113-20

Environmental / arial Checklist

Building Name: 113

Appraisers: TEAM # 4

Date: 1-30-96

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	THE SLUDGE DRYING BED AND SLUDGE HOLDING TANKS COULD BE CLASSIFIED AS A SATELLITE ACCUMULATION AREA IF THE HAZARDOUS WASTES IN THE EXCEEDED FEDERAL/STATE REG. LIMITS. HOWEVER, IN 5 YEARS, LIMITS HAVE NOT BEEN EXCEEDED. BAGS OF DRIED SLUDGE ARE LABELED, CHARACTERIZED, TESTED AND PROMPTLY REMOVED BY W.A.I.
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y/N	
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y/N	
	Are the containers in good condition?	Y/N	
	Are the waste compatible with the containers?	Blank 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: 113

Appraisers: TEAM # 4

Date: 1-30-96

RCRA Checklist

9.113-22

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

Environmental Appraisal Checklist

Building Name: 113

Appraisers: Team # 4

Date: 1-30-96

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)	SEE COMMENTS PART I AS SLUDGE HOLDING TANKS NOT DEFINITION OF UST DESIGN.	
	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)	Same Two Tanks (SLUDGE HOLDING)	

9.113-23

Environmental Appraisal Checklist

Building Name: 113

Appraisers: TEAM # 4

Date: 1-30-96

RCRA Checklist

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

General Comments:

9.113-24

Asbestos Screening Checklist

Does this facility contain ACM?

Y/N

If yes, conduct the following survey.

Asbestos Checklist

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

Regulatory Guideline	Question	Response	Comments
ADAPTED FROM TSCA ACM IN SCHOOLS:			
	Has this building been characterized either through process knowledge, by analyses, or by inspection to determine if it contains asbestos? If no for this building or area note this conclusion in the comment section. Is there any evidence of friable asbestos? Is the asbestos removal properly managed? (See questions listed below)	Y/N Y/N Y/N	If there is no asbestos removal, do not complete the following section.
NESHAPS FOR ASBESTOS FOR ANY ONGOING ASBESTOS REMOVAL:			
40 CFR 61.156	There are no discharges of visible emissions to the outside air from collection, processing, packaging, transporting, or deposition of ACM during the removal.	Y/N	
40 CFR 61.152(b) (1)	ACBM is treated with water in accordance with 40 CFR 152(b)? <i>Blank</i>	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: 113

Appraisers: TEAM #4

Date: 1-30-96

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.
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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? If yes, are auditable records maintained.	Y / N	
	Are any PCB transformers in use, or stored for possible reuse, that contain PCB's at concentrations of 500 ppm or greater?	Y / N	
40 CFR.30 (a) (1) (ix)	Are they visually inspected quarterly? If yes, are auditable records maintained?	Y / N	

9.113-26

Environmental Appraisal Checklist

Building Name: 113

Appraisers: Team #1

Date: 1-30-96

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 area floors curbed and constructed of continuous smooth and impervious materials?	Y / N	
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y / N	
40 CFR 761.62 (b) (1) (iii)	No drains are allowed in storage areas. Are there drains in the storage areas?	Y / N	

9.113-27

Environmental Appraisal Checklist

Building Name: 113

Appraisers: Team # 4

Date: 1-30-96

TSCA Checklist

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

GENERAL COMMENTS:

9.113-28

Environmental Appraisal Checklist

Building Name: 113

Appraisers: TEAM #41

Date: 1-30-96

Low-Level Waste and Transuranic Waste Screening Checklist

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

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

* SECONDARY CONTAINMENT OF THE SLUDGE PILES IS RECOMMENDED.

** MONITORING & SIGNS RECOMMENDED EVEN THOUGH CONCENTRATIONS ARE EXTREMELY LOW.

Environmental Appraisal Checklist

Building Name: 113

Appraisers: TEAM #4

Date: 1030-96

Low-Level Waste and Transuranic Waste Checklist

9.113-30

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	FIVE YEARS IN INDEPENDENT LAB TESTING. TERMINATED 9/95
	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?	_____	BY THE I. H. DIVISION
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	NO LONG TERM STORAGE. SHORT TERM <90 DAYS
	Are records maintained at the facility enabling this waste to be traced from its origin?	Y / N	ORIGIN SOURCE UNDETERMINED AS ALL PLANT BUILDINGS WITH PROCESS HAVE

SANITARY SEWER CONNECTIONS. AUDIT TRAIL FROM Bldg 113 TO FINAL DESTINATION
By W.M.

- Good Mgmt Practice is to continue lab testing analysis because of variety of heavy metals & hazardous wastes. Also, outleaking of Bldgs by DOE w/o process knowledge by occupants.
- NOTE 5 YEARS of testing indicated. NO LIMITS

Low-Level Waste and Transuranic Waste Checklist

9.113-32

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 Assessment Checklist

Building Name: 113

Appraisers: TEAM #4

Date: 1-30-96

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?	Blank Y/N	
	Has this TRU waste storage area been designed, constructed, maintained, and operated to minimize the possibility of fire, explosion, or accidental release of its radioactive and/or hazardous constituents?	Y/N	
	Does the facility have a contingency plan designed to minimize the adverse impacts of fire, explosion, or accidental release of its radioactive and/or hazardous constituents?	Y/N	

GENERAL COMMENTS:

Environmental Appraisal Checklist

Building Name: 113

Appraisers: TEAM #4

Date: 1-30-86

Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals?	Y/N	If yes, conduct the following survey.
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Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y/N	
	Are there solvent wastes?	Y/N	
	Is vehicle maintenance performed?	Y/N	
	Are oils used ?	Y/N	
	Are these corrosive wastes?	Y/N	
	Are there sludges?	Y/N	
	Are there halogenated organic (nonsolvent) wastes?	Y/N	
	Are metals recovered from wastewater?	Y/N	
	Is waste sludge generated?	Y/N	
	Are any waste minimization practices used that reduce the generation of sludge?	Y/N	FURTHER TREATMENT OF SLUDGE AND REMOVAL OF SLUDGE WATER
	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: #3

Appraisers: TEAM #4

Date: 1-30-96

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? <i>Blank</i>	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	<i>PPM of HEAVY METALS IN SLUDGE (LLWS) IS TOO SMALL TO BE ECONOMICALLY RECOVERABLE</i>
	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	

9.113-35

Environmental Appraisal Checklist

Building Name: 113

Appraisers: TEAM #4

Date: 1-30-96

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: 113

Appraisers: TEAM # 4

Date: 1-30-96

Waste Minimization/Pollution Prevention Activities Checklist

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

9.113-37

Environmental Appraisal Checklist

Building Name: 113

Appraisers: TEAM #4

Date: 1-30-96

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? <i>Blank</i>	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?	<i>Blank</i> Y/N	
	Are solvents segregated?	Y/N	
	Are waste solvents free from water and garbage?	Y/N	
	Are recycled solvent containers labeled as such?	Y/N	
	Are containers kept closed?	Y/N	
	Free and sheltered from the elements?	Y/N	
	Are solvent tanks kept as free from contaminations as possible so that the waste can be recycled?	Y/N	
	Is a method used to minimize the use of new materials such as a countercurrent process?	Y/N	

9.113-38

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal of the Mound Plant

9.113.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: 113 Building Manager: A.W. Upshaw Phone: 865-4994 Date: 12-07-95
Alternate: F. Baker Phone: 865-4998

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

Same as 57

TRAINING NVO-325 FOR
SLUDGE PRESS OPERATION. ALSO
HANDLING, PACKING, CHARACTERIZATION
OF SLUDGE (LLW).

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

Same as 57

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

4. Provide a physical description of the building.

This structure is a steel frame and metal (Butler) building with metal roof. It has electric heat. Total area is 547 ft². Equipment in the building is contaminated with radiological material.

THIS EQUIPMENT IS NOT
POSTED AS SUCH & TO MY
KNOWLEDGE
SHOULD NOT BE.

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

5. Provide a drawing of the building.

Attached. ALSO CONTAINS A DETACHED NUMBER

6. What is the current building use?

The building houses a sludge dewatering press for sanitary waste disposal.

Source: Mound Buildings, 5-9-95

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

None that I am aware of.

Source: Mound Buildings, 5-9-95

Building Manager's Questionnaire

Building Name: 113 Building Manager: A.W. Upshaw Phone: 605-4994 Date: 12-07-95
Alternate: F. Baker Phone: 605-3439

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: Sanitary waste sludge treatment

How Wastes Are Generated:

Sanitary ^{raw} waste from the plant site is processed. The by-product of this ^{treatment} ~~No details available on waste generation.~~ _{quick} ^{is a} ~~is a~~ ^{sanitary sludge and screenings.}

Contact: A. Upshaw / F. Baker
Phone #: 4994 / 3439

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

Building Manager's Questionnaire

Building Name: 113 Building Manager: A.W. Upshaw Phone: 865-4894 Date: 12-07-95
 Alternate: F. Raker Phone: 865-3438

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: 113 Building Manager: A.W. Upshaw Phone: 865-4994 Date: 12-07-95
 Alternate: Flake Phone: 865-3433

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? Yes No

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

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

NON-VISUALIZED. DATE OF CONSTRUCTION WOULD PRECLUDE USE OF SEMS.

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

Building Manager's Questionnaire

Building Name: 113 Building Manager: A.W. Upshaw Phone: 265-4894 Date: 12-07-95
 Alternate: F. Raker Phone: 265-3438

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 SEE ATTACHED		
CHEMICAL INVENTORY →	liquid	110 gal
FAY ASH		
ANCO 8007	liquid	110 gal (average)
ANCO 8510	liquid	165 gal (average)

Source: Chemical Inventory 1994/5

Building Manager's Questionnaire

Building Name: 113 Building Manager: A.W. Upshaw Phone: 865-4894 Date: 12-07-95
 Alternate: F. Reizer Phone: 865-3432

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?

Processed through waste management.
~~This is gone though.~~ EACH SLUDGE SHIPMENT. VARIES
 USUALLY ONCE/MONTH.

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

None

23. Where do excess janitorial supplies go?

N/A

Source: _____

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

Chemical	Amount	Chemical	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 113 Building Manager: A.W. Upshaw Phone: 865-4894 Date: 12-07-95
 Alternate: F. RAVEL Phone: 865-7438

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? Sludge holding tanks 1 & 2
 Yes No Unknown ~~SEE BUILDING 57~~ HST UNNUMBERED
 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	SLUDGE	365	Y / (N)	Y / (N)

Source: Process Knowledge

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

Materials	Amount
Oil Waste, Fuel Oil, Absorbed, Soil, Fluorco	452.2
Oil Waste, Fuel Oil, Absorbed, Soil, Fluorco	486.7

~~DELETE~~

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

Waste sludge is processed.

Building Manager's Questionnaire

Building Name: 113 Building Manager: A.W. Upshaw Phone: 265-4894 Date: 12-07-95
 Alternate: F. Baker Phone: 265-3438

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: 113 Building Manager: A.W. Uoshaw Phone: 865-40914 Date: 12-07-95
 Alternate: F. Baker Phone: 865-3438

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: 113 Building Manager: A.W. Upshaw Phone: 865-4894 Date: 12-07-95
 Alternate: F. Rakar Phone: 865-3428

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

Where are logs found? POWER HOUSE & WASTE MANAGEMENT

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: 113

Building Manager: A.W. Upshaw

Phone: 865-4894

Date: 12-07-95

Alternate: F. Baker

Phone: 865-3433

36. Is there a waste minimization program in the building?

Yes

No

Discuss your ideas about how to minimize waste.

The sludge dewatering press is a waste minimization process.

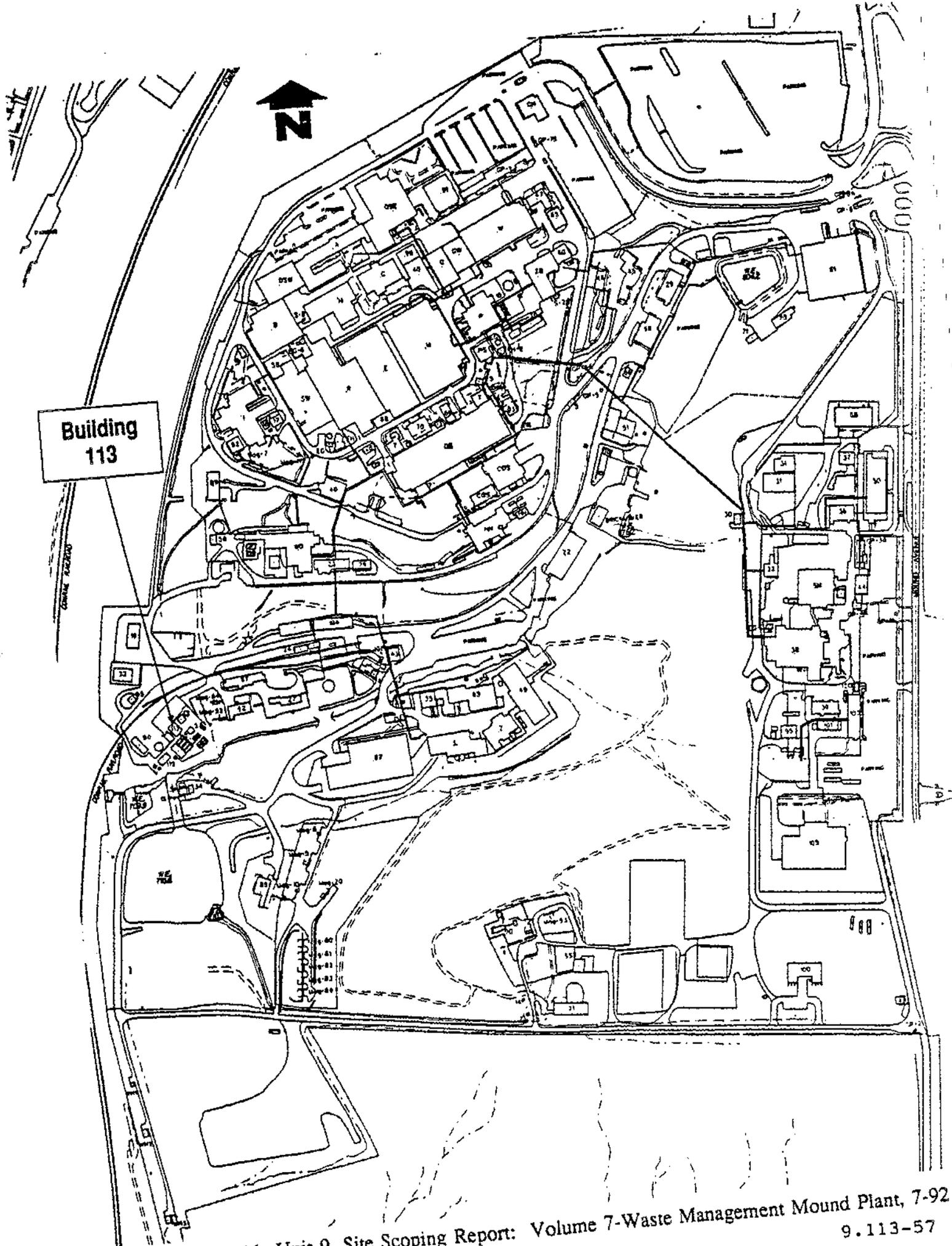
37. Has a pollution prevention program been developed for the building? Yes No

During Press operation quality control standards are required to assure ^{the} waste stream is not contaminated by foreign materials, AND SURROUNDING AREA NOT CONTAMINATED WITH LIQUID EFFLUENT OR LLW SLUDGE.

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Environmental Appraisal of the Mound Plant

9.113.6.3 Location of Building



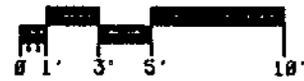
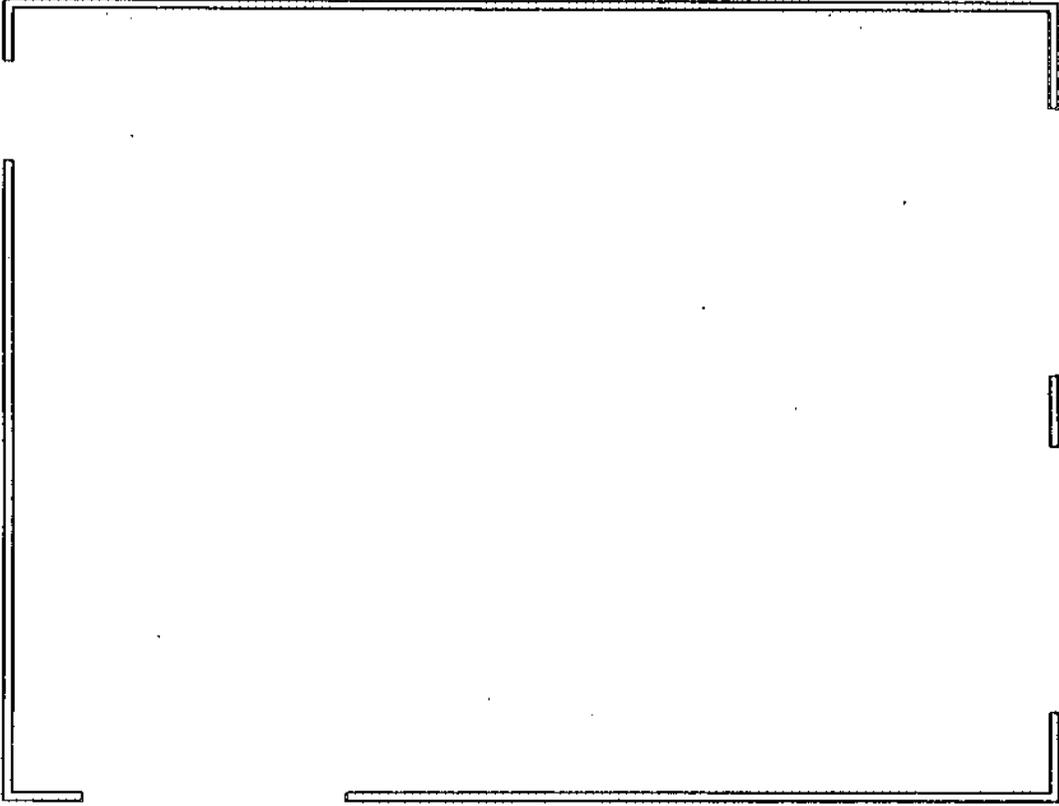
Building
113

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Environmental Appraisal of the Mound Plant

9.113.6.4 Floor Plans for Building

REV	DATE	REVISION	BY	CHKD	DES	APPR	#
0	12/12/91	ASBUILT ISSUE					



**BLOG #113
FIRST FLOOR
BLOG CODE:3113**

APPROVALS:

SAFETY COMMITTEE REVIEWED: _____ DATE: _____

TECH. REV. _____

DES. REV. _____

TRACOC _____

TRACOC _____

TRACOC _____

TRACOC _____

DESIGN NO.	PROJ. NO.	DATE	REV.	BY	CHKD.	DES.	APPR.	#
CLASSIFICATION		UNCLASSIFIED		C		FSC911298 12335		
PROJECT		BLOG #113		FLOOR PLANS		SHEET 1 OF 1		
STATUS		MD-REL-12/12/91		ORIGIN		MD-8R3-V3.0		

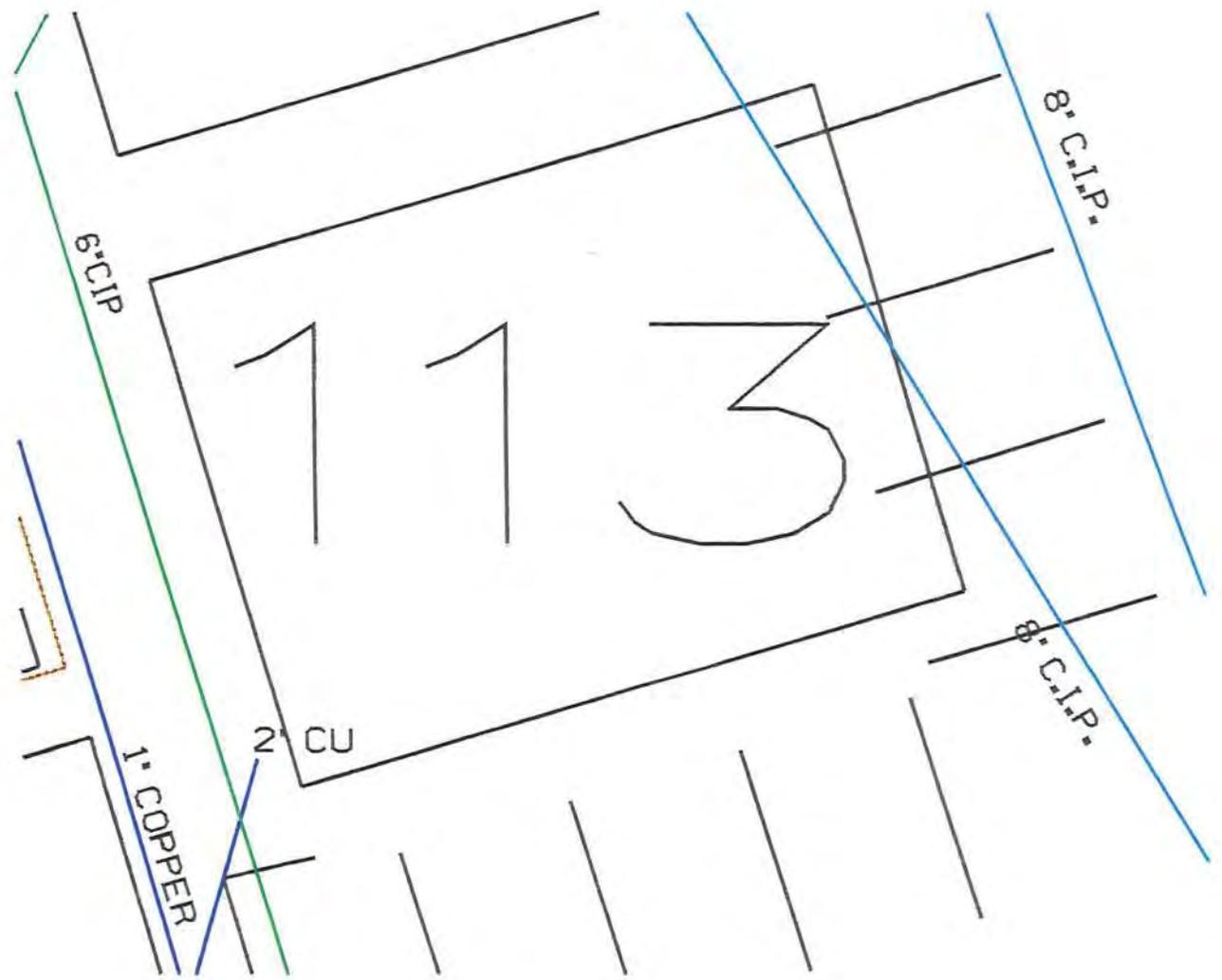
9.113-61

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Environmental Appraisal of the Mound Plant

9.113.6.5 Underground Utility Lines

9.113-65



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



UNCLASSIFIED

E.G. & G. - MOUND
 UNDERGROUND WATER & WASTE LINES
 BLDG. 113
 DATE: 5-4-96

Environmental Appraisal of the Mound Plant

9.113.6.6 Photographs

Mound Plant Building 113



9.113-67



In Building 113 low specific activity (LSA) sludge press has no secondary containment.



Low specific activity (LSA) sludge press is located inside Building 113. Spills would drain onto the ground.



Two sludge holding tanks are not included in the Active Underground Storage Tank (UST) Inventory.

Environmental Appraisal of the Mound Plant

9.114 BUILDING 120

9.114.1 Scope of Building 120 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 120 on the afternoon of February 27, 1996. The Environmental Appraisal Checklist (EAC) was used to record findings. The EAC is found in Attachment 1 (Section 9.114.6.1). The appraisers were accompanied by 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 9.114.6.2).

9.114.2 Description of Building 120

Building 120 is a 350-square-foot, one-story, wood-sided structure. The building has a metal roof and rests on concrete footings. The location is shown in Attachment 3 (Section 9.114.6.3). The building is bounded by a parking lot on the east, Building 102 to the south, a grassed area leading to a street on the west, and Building 38 to the northwest. Floor plans are presented in Attachment 4 (Section 9.114.6.4). The facility is serviced by a 240V three-phase power.

Building 120 was constructed in 1980 (MD-10391, *Asbestos Program Manual*, 9-14-95). The building was built for an office and the storage of Radiological Assistance Team supplies. Building 120 is now used as an administrative office for the Decontamination and Decommissioning (D&D) Group. The building has electric floor heaters and an electric, packaged, forced-air conditioner. There is no lavatory facility.

9.114.3 Summary of Findings

Building 120 is well-maintained. There were no issues of environmental concern noted during the walk-through or in the review of reference materials.

9.114.4 Observations

9.114.4.1 Air Emissions

There are no fumehoods. 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 the Ohio Environmental Protection Agency (OEPA) for activities in the building.

Environmental Appraisal of the Mound Plant

9.114.4.2 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.

9.114.4.2.1 Sanitary Wastewater

The building does not have sanitary services. According to the visual inspection and a diagram of underground utility lines, presented as Attachment 5 (Section 9.114.6.5), the building is not serviced by a sanitary line.

9.114.4.2.2 Storm Wastewater

There are no interior drains and the exterior of the building is not directly serviced by storm drains. Storm water from the roof becomes surface water and is absorbed into the ground or flows to the nearest storm drain approximately 50 feet away. 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.

9.114.4.2.3 Chemicals

There are no chemicals in use or stored in the building. According to the process manager, the previous occupants of the building did not use or store chemicals in the building.

9.114.4.3 Potable and Service Water

Potable water is not supplied to the building. Bottled water is used for drinking water. Service water is also not supplied to the building.

9.114.4.4 Chemical Storage and Hazardous Materials

Chemicals, including janitorial supplies, and hazardous materials are not stored in the building.

Environmental Appraisal of the Mound Plant

The building is equipped with an appropriate charged fire extinguisher. The extinguisher was bar-coded. The inspection date database is maintained in the Fire Station, Building 98. There is an Emergency Evacuation Plan, and a sign was posted within the administrative office space.

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

The building was tested and it is suspected that it contains asbestos-containing building material (MD-10391, *Asbestos Program Manual*, 9-14-95). There were no signs of friable asbestos.

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

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

9.114.4.5 Solid, Hazardous, and Radioactive Wastes

Solid wastes generated are primarily paper. There is paper and aluminum can recycling to minimize solid waste. Solid wastes are removed by janitorial personnel to a local collection point, then shipped 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.

9.114.4.6 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. There do not appear to be additional opportunities for waste minimization activities within Building 120.

9.114.5 Findings and Recommendations

Photographs were taken to document environmental appraisal activities. They are included as Attachment 6 (Section 9.114.6.6). The environmental appraisal of Building 120 indicates that no action items are necessary.

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Environmental Appraisal of the Mound Plant

9.114.6.1 Environmental Appraisal Checklist

**ENVIRONMENTAL APPRAISAL
CHECKLIST**

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team # 4

Date: 2-27-96

Clean Water Act (CWA) Screening Checklist

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

CWA Checklist

Regulatory Guideline	Question	Response	Comments
40 CFR 122 Appendix D Table V	If chemicals are used/stored in the building, are they on the attached list? Are they properly contained?	Y / N Y / N	N/A
	Is the building in operation? What are the processes and where do they discharge to?	<input checked="" type="radio"/> Y / N _____ _____	NO PROCESSES
	Do the floor drains, sinks & toilets appear to be draining properly?	Y / N	NONE
OAC 3745-33	Do the floor drains and sinks drain to a sanitary or storm sewer?	Sanitary Storm	NONE
	Is there a sump/pit in the building? If so, what does it contain? How often is it pumped out? Does water collect in sump? Does sump have secondary containment?	Y / <input checked="" type="radio"/> N _____ _____ Y / N Y / N	
	Are there any manholes, catch basins, drains, or fill pipes in or around the building? If so, are there any unusual appearances, colors, and/or odors? Describe in comment section. Can chemicals flow into the drain?	<input checked="" type="radio"/> Y / N Y / <input checked="" type="radio"/> N Y / <input checked="" type="radio"/> N	

Environmental Appraisal Checklist

Building Name: 120

Appraisers: TEAM 24

Date: 2-27-96

Clean Air Act (CAA) Screening Checklist

Regulatory Guideline	Question	Response	Comments
	Are there any rooms that have air emissions sources that vent to the outside of the building, e.g., fumehoods, equipment? If so, note the rooms.	Y / (N)	
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 or lab fumehoods used exclusively for chemical or physical analyses and bench scale lab equipment? These sources do not require a permit. However, the air emissions database should be updated.	Y / (N)	
	Has there been any release of air contaminants from this building?	Y / (N)	

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

CAA Checklist

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

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

Blank

Source: _____

9.114-11

Environmental Appraisal Checklist

Building Name: 120

Appraisers: TEAM #4

Date: 2-27-96

Hazardous Materials (HM) Screening Checklist

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

HM Checklist

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

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

HM Checklist

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

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-23-96

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: _____

9.114-14

Environmental Appraisal Checklist

Building Name: 120

Appraisers: TERN 4

Date: 2-23-96

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	<i>Blank</i>
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>Blank</i>

Source: _____

9.114-16

Environmental Appraisal Checklist

Building Name: 120

Appraisers: TEAM #4

Date: 2-27-96

RCRA Screening Checklist

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

RCRA Checklist

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

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

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 <input checked="" type="checkbox"/>	
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	NONE
	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	

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: TERRY H

Date: 2-27-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments
OAC 3745-52-11 (A)	If a Satellite accumulation area has been abandoned and/or if waste left in place, and the containers may be subject to the 90-day-storage exclusion.		<i>Blank</i>
	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?	Y / N	
	Where is the log?		
	Is it properly completed, dated, and signed?	Y / N	
OAC 3745-52-34(B)	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	
	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: 120

Appraisers: Team #4

Date: 2-27-96

RCRA Checklist

Regulatory Guideline	Question	Response	Comments	
II. HAZARDOUS WASTE STORED IN TANKS				
OAC 3745-52-32 (B)	Has any chemical waste stored in a tank, piece of process equipment or ancillary equipment been in storage in excess of 90-days?	Y / N	<i>Blank</i>	
	If the answer was no, then proceed with the following:			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		

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: *Team 4*

Date: 2-27-96

RCRA Checklist

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

General Comments:

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

Asbestos Screening Checklist

Does this facility contain ACM?	(Y) / N	If yes, conduct the following survey.
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Asbestos Checklist

SUSPECTED - PERHAPS FLOOR TILE

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

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

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: TEAM #4

Date: 2-27-96

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

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

Regulatory Guideline	Question	Response	Comments
40 CFR 761	Has any waste generated in, or from, this building been characterized either through process knowledge or by analyses to determine if it contains PCB's ? If the answer is no, note . If the answer is yes, proceed with next section.	Y / N	<i>Blank</i>
	Based on an inspection, are any of the materials or equipment potentially PCB contaminated? If no, note and stop here. If yes, note the location of the management unit, and the method of management, and proceed.	Y / N	
40 CFR 761.65 (c) (5)	Are PCB articles or containers stored in this building checked for leaks at least once every 30 days? 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: 120

Appraisers: Team #4

Date: 2-27-96

TSCA Checklist

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

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

TSCA Checklist

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

9.114-24

Environmental Analysis Checklist

Building Name: 120

Appraisers: TEAM #4

Date: 2-27-96

Low-Level Waste and Transuranic Waste Screening Checklist

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

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

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: TEAM # 4

Date: 2-27-96

Low-Level Waste and Transuranic Waste Checklist

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

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-94

Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

Low-Level Waste and Transuranic Waste Checklist

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

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

Low-Level Waste and Transuranic Waste Checklist

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

GENERAL COMMENTS:

9.114-29

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team # 4

Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Screening Checklist

Does this facility generate waste or use chemicals?	Y / N	If yes, conduct the following survey.
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Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Based on available information and a walk through, are there any apparent opportunities to curtail the consumption of raw materials (including but not limited to paper, chemicals, electricity, and etc.). If yes, list candidate areas in the comment section.	Y / N	<i>Blank</i>
	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: 120

Appraisers: Team # 4

Date: 2-27-96

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	<i>Blank</i>
	Are baghouse filters used to collect pesticides and pesticide intermediates?	Y / N	
	Are solid wastes generated from the collection of baghouse dust?	Y / N	
	Wet instead of dry grinding used?	Y / N	
	The output spray dried?	Y / N	
	Has baghouse emptying and recycling of baghouse fines been scheduled?	Y / N	
	Have operations been evaluated to improve procedures such as handling, storage and spill prevention for increased efficiency?	Y / N	
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	

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

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

Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team #4

Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal Checklist

Building Name: 120

Appraisers: Team # 4

Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	Are these treatment techniques used to promote separation of oil/water wastes?		
	Reclaiming process to remove water and solvents by heat?	Y/N	
	Gravity settling?	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: 120

Appraisers: Team #4

Date: 2-27-96

Waste Minimization/Pollution Prevention Activities Checklist

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

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Environmental Appraisal of the Mound Plant

9.114.6.2 Building Manager's Questionnaire

Building Manager's Questionnaire

Building Name: 120 Building Manager: R.A. Ward Phone: 3821 Date: 12-07-95
Alternate: K. KOEHLER Phone: 4886

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

NONE

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

NONE

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

4. Provide a physical description of the building.

Building is a 350-ft² modular structure. 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?

Building is used for ~~storing Radiological Assistance Team supplies.~~
D & D GROUP ADMINISTRATIVE OFFICE.

Source: Mound Buildings, 5-9-95

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

OFFICE - RAY MARTIN - RADIOLOGICAL SUPERVISOR
D & D GROUP

Source: Mound Buildings, 5-9-95

Building Manager's Questionnaire

Building Name: 120 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~~ ADMINISTRATIVE OFFICE

How Wastes Are Generated:

No details available on wastes. ONLY PAPER WASTE GENERATED

Contact:
Phone #:

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

Building Manager's Questionnaire

Building Name: 120 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: 120 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? SUSPECTED

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

Building Manager's Questionnaire

Building Name: 120 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: 120 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: 120 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
 Alternate: _____ Phone: _____

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

NONE

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

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

Source: _____

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

Materials	Amount

Source: _____

Building Manager's Questionnaire

Building Name: 120 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: 120 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: 120 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: 120 Building Manager: R.A. Ward Phone: _____ Date: 12-07-95
Alternate: _____ Phone: _____

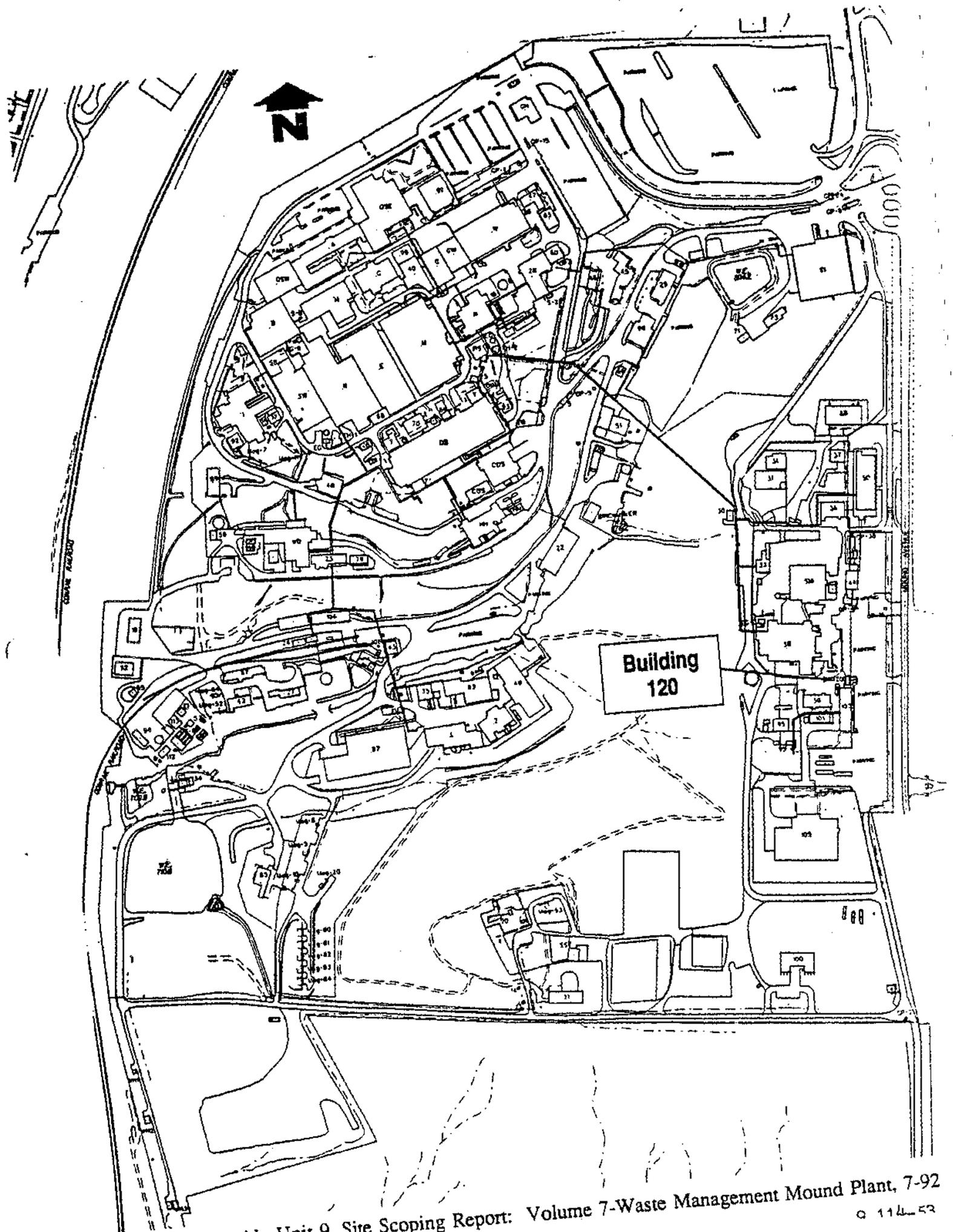
36. Is there a waste minimization program in the building? Yes No
Discuss your ideas about how to minimize waste.

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

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Environmental Appraisal of the Mound Plant

9.114.6.3 Location of Building 120



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

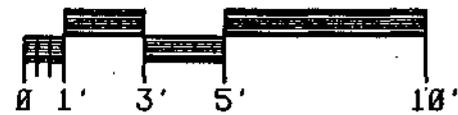
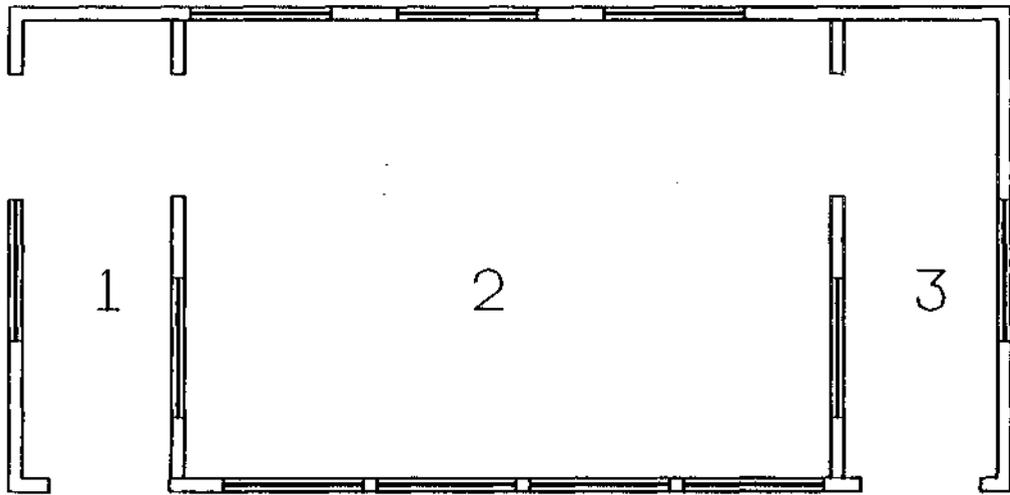
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Environmental Appraisal of the Mound Plant

9.114.6.4 Floor Plans for Building 120

REV	DATE	REVISIONS	BY	CHKD	DATE	APPROV	BY
0	12/12/91	ASBUILT ISSUE					



**BLDG #120
FIRST FLOOR
BLDG CODE:3120**

APPROVALS:	DATE:
SAFETY COMMITTEE REVIEWED:	
_____ NAME _____ TRACOC _____ TENC _____ DROC	
TECH. REP. _____	
SR. PRJ. _____	
TRACOC _____	
TENC _____	
DROC _____	

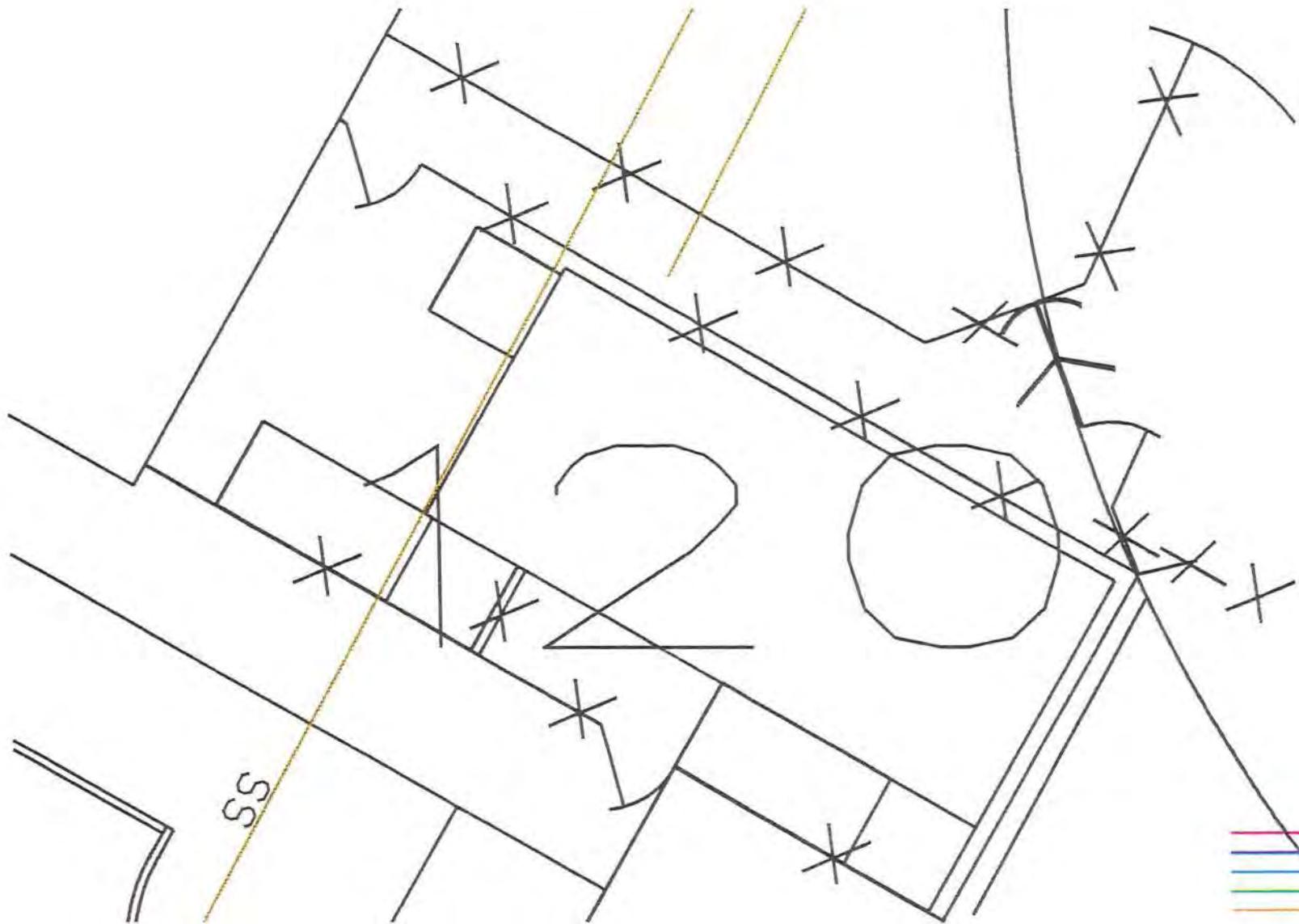
DESIGN ID	PROJ. NO.	DATE	REV	1	2	3	4	5	6	TITLE	(U) TITLE CLASSIFICATION		
			0							BLDG #120 FLOOR PLANS			
CF & AC	PERF. REV.		GRAPHIC CLASSIFICATION							ETC (MARKED APPROV)	JOB NUMBER		
			UNCLASSIFIED							C	FSC911299	12335	
APPROV	DATE		JOB TYPE: SFP							BLDG #120	CASE 14865	SCALE AS NOTED	SHEET 1 OF 1
			STATUS: MD-REL-12/12/91							ORIGIN: MD-883-V3.0			

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Environmental Appraisal of the Mound Plant

9.114.6.5 Underground Utility Lines



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



E.G. & G. - MOUND

UNDERGROUND WATER & WASTE LINES
BLDG. 120

DATE: 3-4-96

UNCLASSIFIED

9.114.61

Environmental Appraisal of the Mound Plant

9.114.6.6 Photographs



Mound Plant Building 120

9.114-65