BWX Technologies, Inc.
a McDermott company

3005-0304100006

BWXT of Ohio, Inc.
1 Mound Road
P.O. Box 3030
Miamisburg, Ohio 45343-3030
(937) 865-4020

SM-074/02
July 1, 2002

Mr. Richard B. Provencher, Director
Miamisburg Environmental Management Project
U. S. Department of Energy
P. O. Box 66
Miamisburg, OH 45343-0066

ATTENTION: Robert S. Rothman

SUBJECT: Contract No. DE-AC24-97OH20044
BUILDING 102 BUILDING DATA PACKAGE, PUBLIC REVIEW DRAFT

REFERENCE: Statement of Work Requirement C.7.1e - Regulator Reports

Dear Mr. Provencher:

Rob Rothman from your office has approved the release of the following document to the regulators and the public for their review:

- Building 102 Building Data Package, Public Review Draft

The public review period will be from 3 July until 2 August 2002 and BWXTO will respond to any comments received and incorporate the responses into the final document.

If you or members of your staff have any questions regarding the document, or if additional support is needed, please contact Bob Ransbottom at extension 4220.

Sincerely,

C. D. Thompson
SMPP/TFV Project Manager

CDT/VKD:jdg

Enclosures

cc: Tim Fischer, USEPA, (1) w/attachments
Brian Nickel, OEPA, (4) w/attachments
Ruth Vandegrift, ODH, (1) w/attachments
Frank Schmaltz, DOE/MEMP, (1) w/attachments
Randy Tormey, DOE/OH, (1) w/attachments
Dann Bird, MMCIC, (3), w/attachments
Craig Hansen, BWXT of Ohio, (1) w/attachments
Bob Ransbottom, BWXT of Ohio, (1) w/attachments
Val Darnell, BWXT of Ohio, (1) w/attachments
Budd Thompson, BWXT of Ohio, (2) w/attachments
Public Reading Room, (5) w/attachments
DCC

3005-0304100006

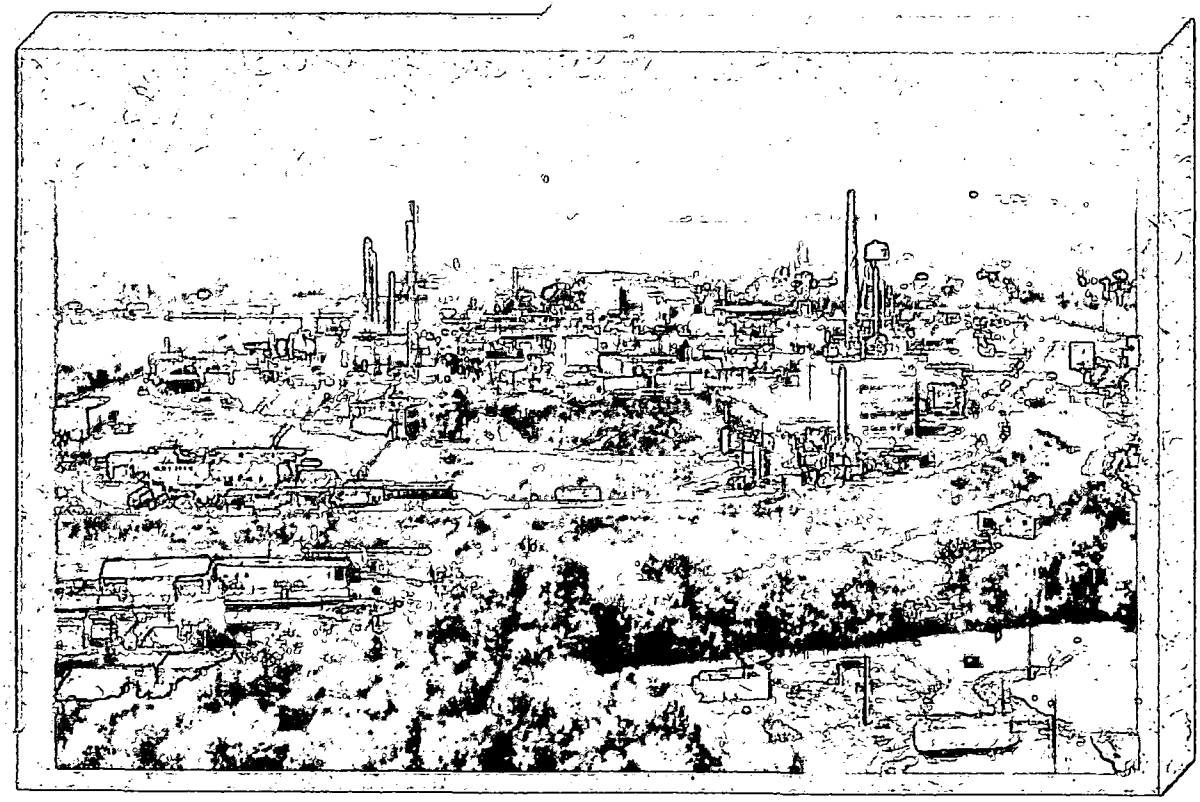
MOUND

Environmental Restoration Program

OhioEPA

MOUND PLANT
Building Data Package
Building 102

Public Review Draft
July 2002



MOUND

Environmental Restoration Program

MOUND PLANT BUILDING DATA PACKAGE

Notice of Public Review Period

The following Building Data Package (BDP) is available for public review in the CERCLA Public Reading Room, 305 E. Central Ave., Miamisburg, Ohio. Public comment on this document will be accepted July 3, 2002 through August 2, 2002.

BDP Building 102: Offices (Process Support Building)

Questions can be referred to Paul Lucas at (937) 865-4578.

BDP Building 102

REV	DESCRIPTION	DATE
WORKING DRAFT (to DOE)		**May 2002**
DRAFT (to Core Team)	Core Team binned No Further Assessment in June 2002; recommendation sheet added to document. Title added to table in Appendix L.	**May 2002**
DRAFT PROPOSED FINAL (incorporates Core Team comments)	Core Team concurrence to forgo Draft Proposed Final; no changes made to text.	**June 2002**
PUBLIC REVIEW DRAFT	Public Review period will be July 3, 2002 through August 2, 2002.	**July 2002**
FINAL		

RECOMMENDATION

Building 102

Background:

Building 102 was built in 1987 to serve as an office facility (Process Support Building) in the Special Metallurgical (SM) area, and continued to serve that function until November 2001, when it was vacated in preparation for transfer to the MMCIC. Building 102 is a two-story, 10,982 square-foot building made of pre-cast concrete with a metal roof. Building 102 is currently inactive and unoccupied.

All radiological surface data, soil sampling (radiological and chemical) data, and radon data are below applicable screening levels. No lead-based paint or asbestos hazards currently exist in the building.

Recommendation:

After thorough review of the environmental data and the Building Data Package, the Core Team agrees that all existing environmental issues associated with Building 102 have been resolved. Future use of Building 102 will be restricted to commercial/industrial use. The Core Team hereby recommends that the U.S. Department of Energy submit a letter to the Administrator of the U.S. EPA for final approval of the lease or sale of this property, as required by Section 120(h) of CERCLA.

DOE/MEMP: _____
Robert S. Rothman, Remedial Project Manager

USEPA: _____
Timothy J. Fischer, Remedial Project Manager

OEPA: _____
Brian K. Nickel, Project Manager

BUILDING DATA PACKAGE (BDP)

Building 102

(Transition)

DOE MOUND PLANT

MIAMISBURG, OHIO 45343

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1.0 GENERAL OVERVIEW

1.1 Introduction

The purpose of this Building Data Package (BDP) is to prepare for the transfer of Building 102 (Offices – Process Support Building) to the Miamisburg Mound Community Improvement Corporation (MMCIC) and to identify, if possible, any recognized environmental conditions (defined below) that may affect the subject property and structure.

Recognized Environmental Condition: The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a likely release, a past release, or a material threat of a release of any hazardous substances or petroleum into structures, or into the air, ground, groundwater, or surface water near the building.

1.2 Scope

This document has been prepared in accordance with the agreements and requirements as specified in the *Work Plan for Environmental Restoration of the DOE Mound Site, The Mound 2000 Approach*. This document is a BDP for Building 102 located at the Department of Energy (DOE) Mound Plant in Miamisburg, Ohio. The investigation performed to support this BDP models procedures found in *ASTM Standard Practice for Environmental Site Assessments; Phase I Environmental Site Assessment Process* (Designation E 1527-97).

The scope of the investigation included Building 102, the soil beneath, and a 15-foot wide perimeter border around the building. The investigation of Building 102 included the following:

A) A building and perimeter inspection.
B) An examination of historical aerial photographs and maps.
C) A review of federal and state regulatory agency records.
D) Personnel interviews.
E) A review of Mound Plant records for:

   1) History of spills, releases, and chemical inventories
   2) Past sampling data

      - Radiological survey
      - Soil sampling
      - Lead-based paint
      - Asbestos
      - Radon

In addition to the building investigation conducted by BWXT of Ohio, Inc. (BWXTO) personnel, documents were reviewed. Information used to compile BDPs includes the following:

- Characterization of Mound's Hazardous, Radioactive, and Mixed Wastes, August 1990
- OU-9 Site Scoping Report, Volumes 1-12
- Mound Facility Physical Characterization, December 1992
- Active Underground Storage Tank Plan, November 1994
- OU-9 Hydrological Investigation, Bedrock Report, January 1994
- OU-9 Hydrological Investigation, Buried Valley Aquifer Report, March 1994
- Environmental Appraisal Report of the Mound Plant, March 1996
- Title Search
- Lease Information
- EDR Report - Radius Map
- Building Prints
- Potential Release Site (PRS) information
- MD-222153, Mound Site Radionuclides By Location, July 1995 Contaminant Surveys
- MLM-3791, Mound Facility Physical Characterization, December 1993

2.0 BUILDING SPECIFIC OVERVIEW

Building 102 was constructed in 1987 as an office building (process support building) in the Special Metallurgical (SM) area (Figures 1 and 3). It fronts Mound Road and is located completely outside of the current Mound security fence. Building 102 is a two-story, 10,982 square-foot building made of pre-cast concrete with a metal roof. The first floor of the building includes an entry, guard-post, conference room, women's and men's restrooms, kitchen, storage closet, and mechanical equipment room; and the second floor includes offices and cubicles. Floor plans are provided as Appendix D.

The building is serviced with central steam for heating and chilled water for cooling. The building has potable water and sanitary services provided by the Mound Plant facility. Electric service is 240 volts.

2.1 Current Uses of Building 102

Building 102 is currently inactive and unoccupied.

2.2 Past Uses of Building 102

Building 102 was built to serve as an office facility (Process Support Building), and continued to serve in that function until November 2001, when it was vacated in preparation for transfer to the MMCIC.

2.3 Summary of Environmental Concerns and Findings - Building 102

Table 1: Summary of Environmental Concerns and Findings

Description	Comment	Resolution
Lead-Based Paint	Due to its year of construction (1987), it is unlikely that the building has lead-based paint. See Appendix J.	If lead-based paint were present in the building, it would not present a concern unless it was damaged.
Chemicals	N/A	N/A
Fluorescent Lamps and Polychlorinated Biphenyls (PCBs)	N/A	N/A
Air Emissions	N/A	N/A
Asbestos	Due to its year of construction (1987), it is unlikely that the building contains asbestos-containing material. See Appendix I.	If asbestos were present in the building, it would not present a concern unless it was damaged.
Drainage Sumps	N/A	N/A
Lead	N/A	N/A
Mercury	N/A	N/A
Radiological	Within acceptable limits.	N/A
Septic System	N/A	N/A
Wastewater	Handled by Mound wastewater facility.	N/A
Stains & Corrosion/HVAC	N/A	N/A
Storage Tanks	N/A	N/A
Solid Waste Disposal	N/A	N/A
Migratory Hazards	N/A	N/A
Radon	Within acceptable limits.	N/A
Energetic Material/HVAC	N/A	N/A

N/A: not applicable

2.4 Radiological Characterization Summary for Building 102

An assessment of Building 102 was performed to review operational history and radiological survey information. Operational history indicates the building was constructed as an office facility, and continued to serve that function through November 2001. There were no radiological process systems in the building and no radioactive materials are known to have been used or stored in the building. *Mound Facility Physical Characterization* report and other site assessments have asserted that Building 102 was not contaminated with any radiological or energetic materials.

A review of radiological survey data supports the conclusion that Building 102 was not contaminated with radiological materials. Confirmatory surveys, using large area gas proportional detectors and following guidance in "Generic Process for the Disposition of Buildings That Have Potential or Actual Radiological Contamination", and prior surveys were all less than applicable limits (see Table 2, Note 3). The building is also non-impacted per the guidance in the Multi-Agency Radiological Survey and Site Investigation Manual (MARSSIM). The review team concluded that the building meets radiological surface release criteria and no further radiological surveys are warranted. Supporting documentation for the information summarized in the following table is contained in Appendix G.

Table 2: Radiological Summary

TYPE	RSDS (Radiological Survey Data Sheet)	LOCATION	SURVEY RESULTS (dpm/100 cm^2) (Note 1)	SURFACE CONTAMINATION GUIDELINES (dpm/100 cm^2) (Note 2)
Highest Alpha Smearable Activity	01-38-543	Building Surfaces & Equipment	3.23	20
Highest Alpha Fixed Activity	Notes 3 & 4	Building Surfaces & Equipment	< 100	100
Highest Beta Smearable Activity	01-38-543	Horizontal Surfaces & Equipment	3.91	1,000
Highest Beta Fixed Activity	Note 4	Misc.	< 5,000	5,000
Highest Tritium Smearable Activity	01-OSA-068	Horizontal Surfaces & Equipment	67	10,000

Note 1: Radiological activity may be present and not be a concern (within applicable limits). This may result from or be a function of counting statistics, instrument variances, the randomness of decay, radon presence, and/or natural fluctuations in background levels.

Note 2: Guideline values per DOE Order 5400.5, Radiation Protection of the Public and the Environment.

Note 3: Initial radiological surveys on three of the first floor air vent lint samples exceeded the guideline level of < 100 dpm/100cm^2 alpha, with a maximum result of 350 dpm/100cm^2. Because of the sample locations, the elevated readings were suspected to be caused by radon. Accordingly, samples were held overnight to allow for decay and reanalyzed. Next day readings were all below the 100 dpm/100cm^2 screening level, thus confirming that radon had caused the initial apparent exceedences.

Note 4: All final radiological survey results indicated < 100 dmp/100cm^2 alpha and < 5,000 dpm/100cm^2 beta.

3.0 SITE DESCRIPTION

3.1 Site/Vicinity Location and Characteristics

Building 102 is located at the DOE Miamisburg Environmental Management Project (MEMP), formerly known as Mound Plant. Mound Plant is situated in the City of Miamisburg, Miami Township, Montgomery County, State of Ohio as shown in Appendix B.

The Mound Plant at one time was situated on approximately 300 acres of land and contained approximately 130 buildings with a total of approximately 1.4 million square feet of floor space (the number of buildings is constantly diminishing as buildings are decommissioned and either sold or demolished). The original 182-acre site, purchased by the Manhattan Engineering District in 1946, consisted of two hills and an intervening valley that runs approximately east and west. The 124-acre tract acquired in 1981 was an undeveloped mixture of fields and woods that undulates and slopes downward to the west, away from the main site. This area was acquired to serve as a buffer and has been used as a staging area and parking area for contractors working onsite.

To the west lies a railroad line and the north south trending Miami-Erie Canal. The northern boundaries of the site abut the residential area of Miamisburg, Ohio. Mound Road marks the northern half of the eastern perimeter of the facility then veers east, away from the southern half of the eastern boundary. A public golf course (belonging to the City of Miamisburg), the Miamisburg Mound Memorial Park, old agricultural fields, residential lots, and vacant wooded lots border against the facility along Mound Road. Benner Road formed the southern property line of the Mound Plant (at the 300-acre stage), with agricultural fields and farms occupying the lands beyond.

3.2 Description of Structures, Roads, Other Improvements in Proximity to Building 102

As shown on Figures 2 and 4, Building 102 is bordered on the east by an asphalt parking lot; the south by a concrete walkway, small grassy area, and paved driveway; and the west and north by concrete walkways and the Mound Site security fence. To the west, beyond the security fence are two trailer offices. In the vicinity of Building 102 are overhead pipes (west), a parking lot (east), a utility pole, and a security fence.

3.3 Current and Past Uses of Buildings in Proximity to Building 102

The closest buildings to Building 102 are Buildings 95 and 38. Building 95 (located west of Building 102) consists of one main and two ancillary buildings totaling approximately 2,900 square feet and is the Chiller Plant for the SM/PP and Test Fire Valley areas. Building 38 (located northwest of Building 102) is a 44,327 square-foot building used for plutonium processing. These facilities are believed to have had no environmental impact on Building 102.

Buildings 101 (Modular Offices) and 39 (Maintenance Offices) had been located just west of Building 102, but were demolished in 1998. The area where those buildings had been located is currently occupied by temporary trailers used for office space.

4.0 RECORDS REVIEW

4.1 General/Historical CERCLA Information

In compliance with permit requirements under Resource Conservation and Recovery Act (RCRA), the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), and the Clean Air Act (CAA), Mound Plant has applied for or has received permits for its surface water discharges, air emissions, and hazardous waste program. Mound Plant is currently operating a hazardous waste storage facility under a RCRA Part B Permit dated October 18, 1996. Mound Plant also maintains a National Pollutant Discharge Elimination System (NPDES) surface water discharge permit with Facility I.D. number OH 0009857. Operations that produce particulate or vaporous emissions are either permitted or registered with the Regional Air Pollution Control Agency (RAPCA) and the Ohio Environmental Protection Agency (OEPA). Mound Plant also submits annual Emergency and Hazardous Chemical Inventory forms to OEPA, pursuant to the Superfund Amendment and Reauthorization Act (SARA), Title III, the Emergency Planning and Community Right-to-Know Act. The 2001 version of this report indicated that no chemicals are stored in Building 102.

The Mound Plant was identified as a contaminated site on the National Priorities List under CERCLA (Superfund) in 1989. The Mound Plant site was originally listed because of volatile organic compound (VOC) contamination in the western end of the lower valley area. The cleanup of the Mound site was originally to be accomplished under the CERCLA mandated procedures for regulating Superfund Sites using the operable unit (OU) system to define and characterize cleanup areas. As the cleanup effort went forward, it became apparent that the Mound site did not fit the profile for a cleanup strategy based on the operable units. The DOE, the United States Environmental Protection Agency (USEPA), and OEPA designed a new decision making process for the cleanup of the Mound site. The new process is known formally as a "removal site evaluation process" and informally as the "Mound 2000 Process." The Mound 2000 Process system divided the Mound site into geographical parcels containing over 400 PRSs with approximately equal numbers of PRSs concerned with potentially contaminated soil and with potential contamination in or associated primarily with building operations. A PRS is an area where knowledge of historic or current use indicates that the site may have had releases of radioactive and/or hazardous materials. For a more detailed description, refer to the *Work Plan for Environmental Restoration of the DOE Mound Site, the Mound 2000 Approach*.

4.2 Specific Record Sources

4.2.1 Occurrence Reports

- None

4.2.2 Spills and Releases

- None

4.2.3 Associated PRS Overview

As a result of the investigations and documentation accomplished to comply with the CERCLA cleanup process via the Federal Facilities Agreement (FFA)/DOE Environmental Restoration (ER) Program, DOE and BWXTO have tabulated all the PRSs identified under the various regulatory programs in effect at the site. Of these 440 PRSs, one is near Building 102 (see Table 3). Additional information is included in Appendix N.

Table 3: PRSs in Proximity to Building 102

PRS	CERCLA or Bldg. Related	Binning Status	Comments
383	CERCLA	No Further Assessment (NFA)	Elevated Soil Gas Location.

4.2.4 Sampling Data

4.2.4.1 Radiological Surveys

Radiological survey data of Building 102 indicates all readings are below screening criteria (see Section 2.4). Supporting documentation is provided in Appendix G.

4.2.4.2 Soil Sampling Data

Appendix L contains a graphic and table presenting results of all soil sampling data within a 15-foot perimeter of Building 102. All analytical results were below applicable screening levels.

4.2.4.3 Chemical History

Building 102 was used as an office facility. During a walk-through on April 1, 2002, small amounts of janitorial supplies were observed. The most recent (March 2002) annual chemical inventory report found no "emergency and hazardous" chemicals located in the building.

4.2.4.4 Lead-Based Paint

No previous lead surveys or sampling data could be found for this building; however, due to its date of construction, paint is unlikely to contain lead. All of the observed paint coatings were intact and undisturbed. No lead-based paint hazards currently exist within the building, and no further action would be necessary unless any of the paint coatings were to be disturbed. See Appendix J.

4.2.4.5 Asbestos

No previous asbestos surveys or sampling data could be found for this building. The materials potentially suspect for containing asbestos in accordance with EPA protocol were drywall, ceiling tiles, floor tile, and insulation finishing mastic, which were present. The drywall, floor tile, and finishing mastic were noted to be in good condition and did not present a hazard in their current condition. Ceiling tiles were in good condition throughout and would not present a hazard unless disturbed. Given the age of construction, it is unlikely that any of these materials would contain asbestos. No action is necessary unless the materials are to be disturbed. See Appendix I.

4.2.4.6 Radon

The results of a 1989-90 Mound Indoor Radon study indicated an average radon concentration of 0.9 picoCuries/liter (pCi/L) in Building 102 (Appendix H). The USEPA recommended standard for a maximum radon level is 4.0 pCi/L.

4.3 Review of Building Prints

Building prints were reviewed and floor plans are included in Appendix D.

4.4 Aerial Photographs

Aerial photographs from 1983 (prior to construction), 1994 (following construction), and 1996 (most recent aerial photo) were reviewed and are presented in Appendix E.

4.5 Interviews

Past Building Manager, P.C. Molloy, was interviewed via a building manager questionnaire (included in Appendix F). The subsequent Building Manager was Art Wright, and the current Building Manager is Gary Weidenbach. No significant items in the building were identified based on the questionnaire or interviews.

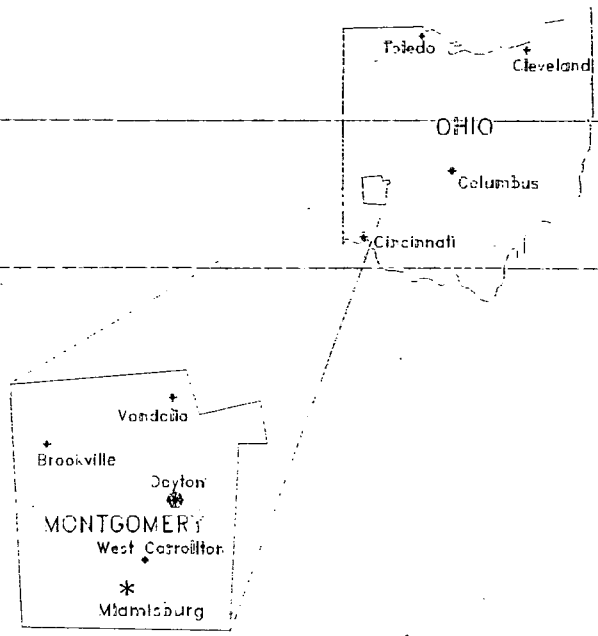
Appendix A

General Listing of Acronyms

ASTM	American Society for Testing and Materials
BDP	Building Data Package
BWXTO	BWXT of Ohio, Inc.
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
cm^2	centimeters squared
CWA	Clean Water Act
DOE	United States Department of Energy
DPM	disintegrations per minute
EPA	United States Environmental Protection Agency
ER	Environmental Restoration (Program)
FFA	Federal Facility Agreement
HAZMAT	hazardous materials
MARSSIM	Multi-Agency Radiological Survey and Site Investigation Manual
MEMP	Miamisburg Environmental Management Project
N/A	not applicable
NPDES	National Pollutant Discharge Elimination System
OEPA	Ohio Environmental Protection Agency
OU	Operable Unit
PCB	polychlorinated biphenyl
pCi/L	picoCuries per liter
PRS	Potential Release Site
RI/FS	Remedial Investigation/Feasibility Study
RAPCA	Regional Air Pollution Control Agency
RCRA	Resource Conservation and Recovery Act
RSDS	Radiological Survey Data Sheet
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

Appendix B

Map of Montgomery County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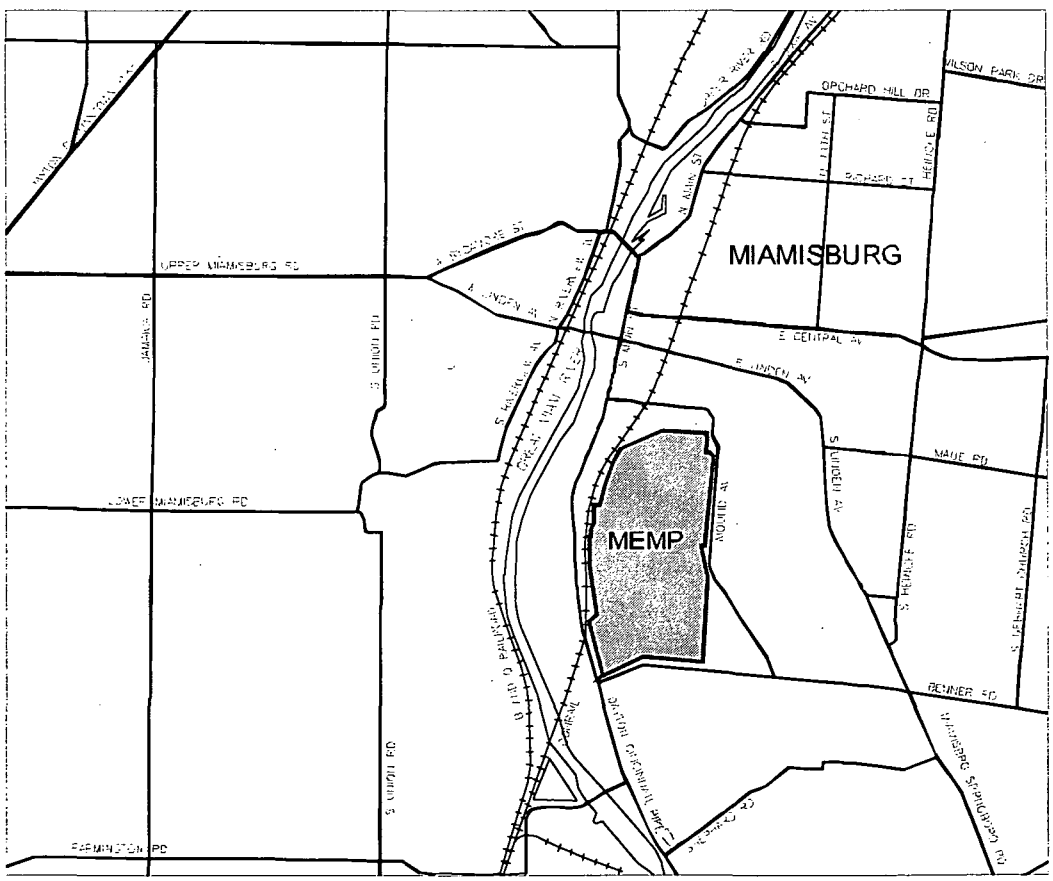
OHIO
Columbus
Cincinnati
Vandalia
Brookville
Dayton
MONTGOMERY
West Carrollton
Miamisburg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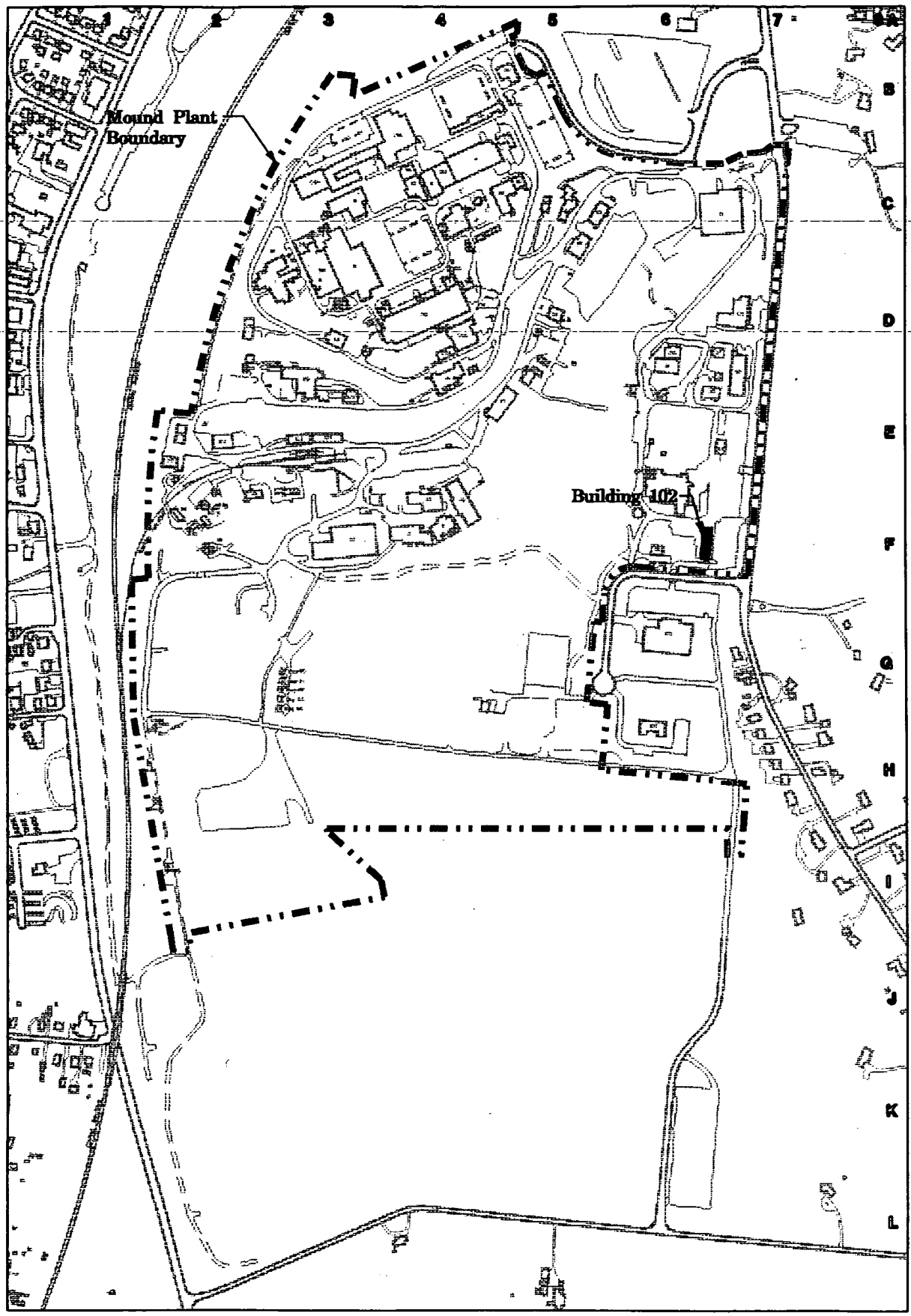
DAYTON CINCINNATI HIGHWAY

Appendix C

Figures



Legend

- Structures
- Paved roadway
- Unpaved roadway
- Railroad
- Water course
- Fence
- Mound Plant boundary
- Contour line

0 100 200 400 600 800 1000
Scale In Feet

03/25/02	ISSUE FOR GENERAL USE	SSP			
DATE	REVISION	BY	CHKR	ENG	M

MOUND
Environmental Restoration Geographic Information System

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

( ) TITLE CLASSIFICATION

Figure 1
Location of Building 102

DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE: D
DRAWING NUMBER: gen_site_plan.dgn
JOB NUMBER
DWG TYPE: SITE
DRWG
CHKD
SCALE: Graphic
SHEET 1 OF
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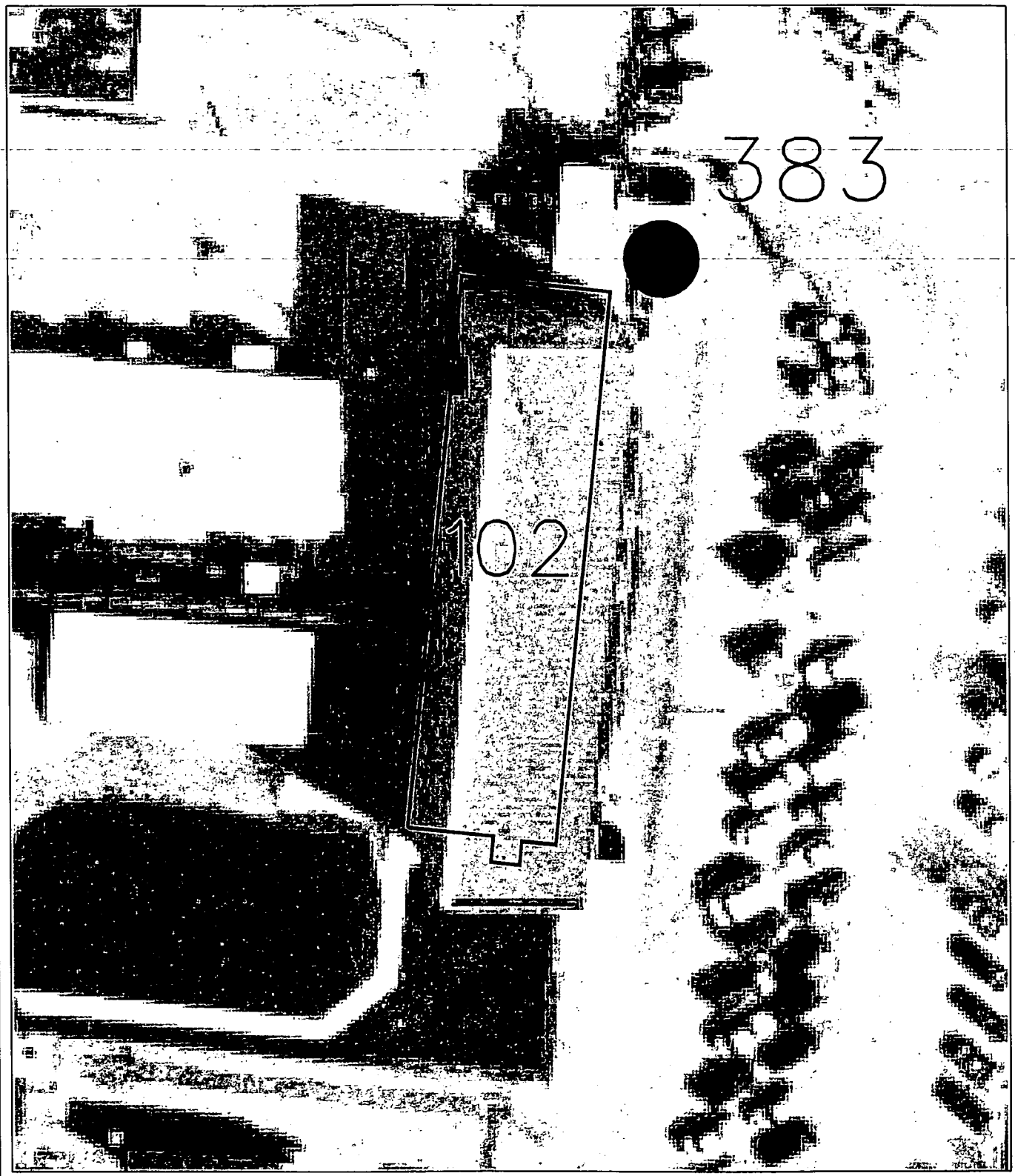
ORIGIN: NSTATION / J

gen_site_plan.dgn



PRS Point

PRS Area

MOUND

Environmental Restoration Geographic Information System

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ISSUE																					

SHEET	1	2	3	4	5	6
ISSUE	*					

PART CLASSIFICATION

DRAWING CLASSIFICATION: UNCLASSIFIED

SIZE | DRAWING NUMBER: vicinity.dgn | JOB NUMBER

DOC TYPE: STE | PROJ: ER-GIS | CADD | SCALE | SHEET 1 OF

STATUS: MD-REL -**-**/**-**/**-** | ORIGIN: MSTATION / J

Figure 2
Building 102 and Vicinity

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	03/26/02		SSF					

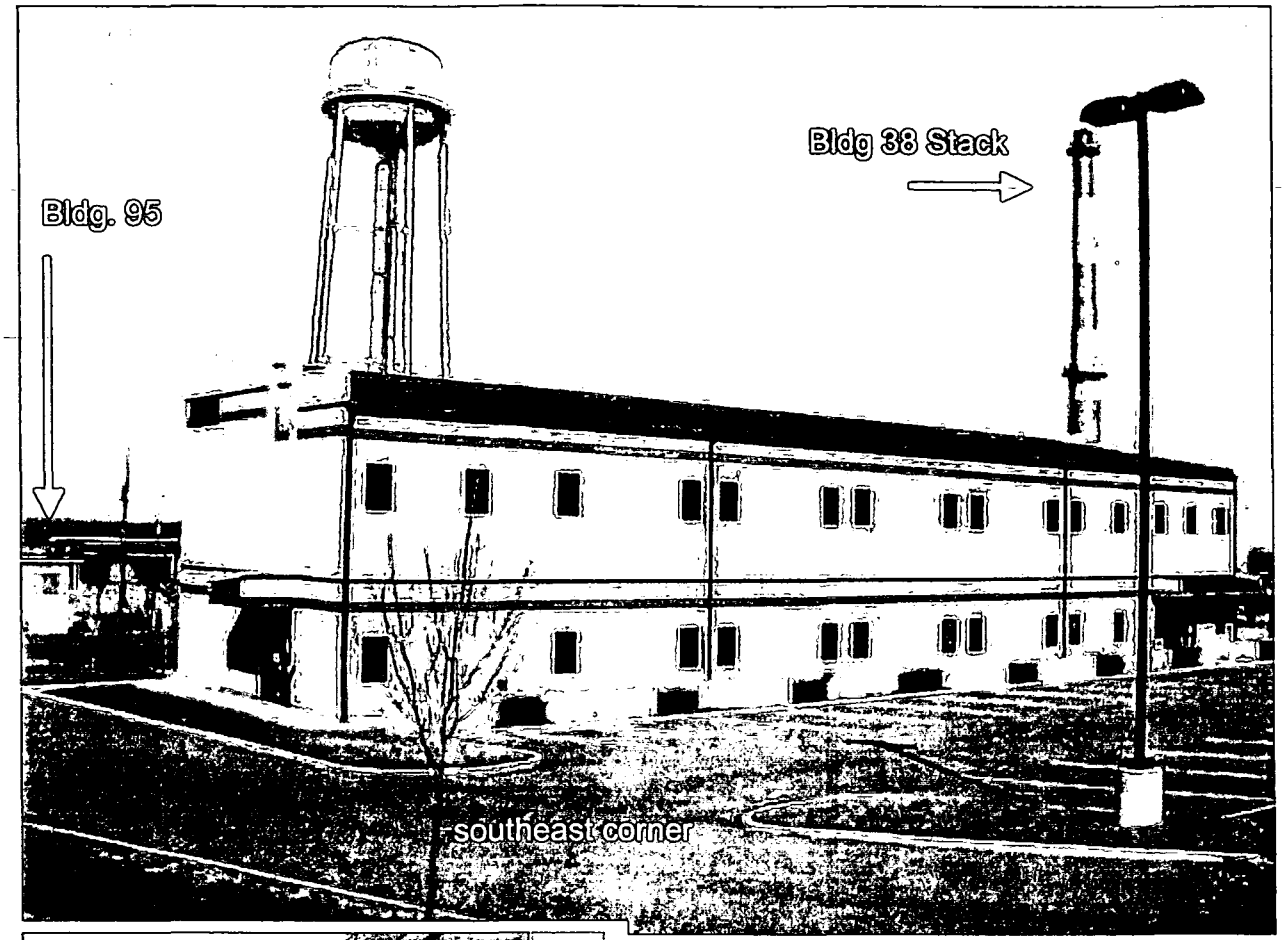
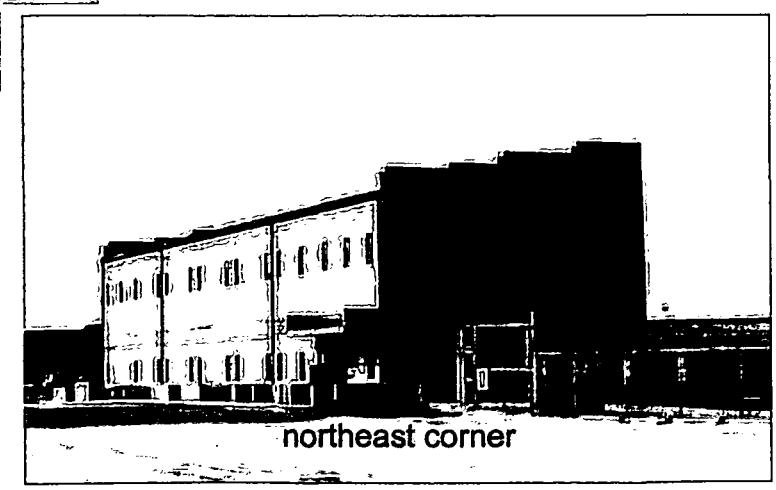
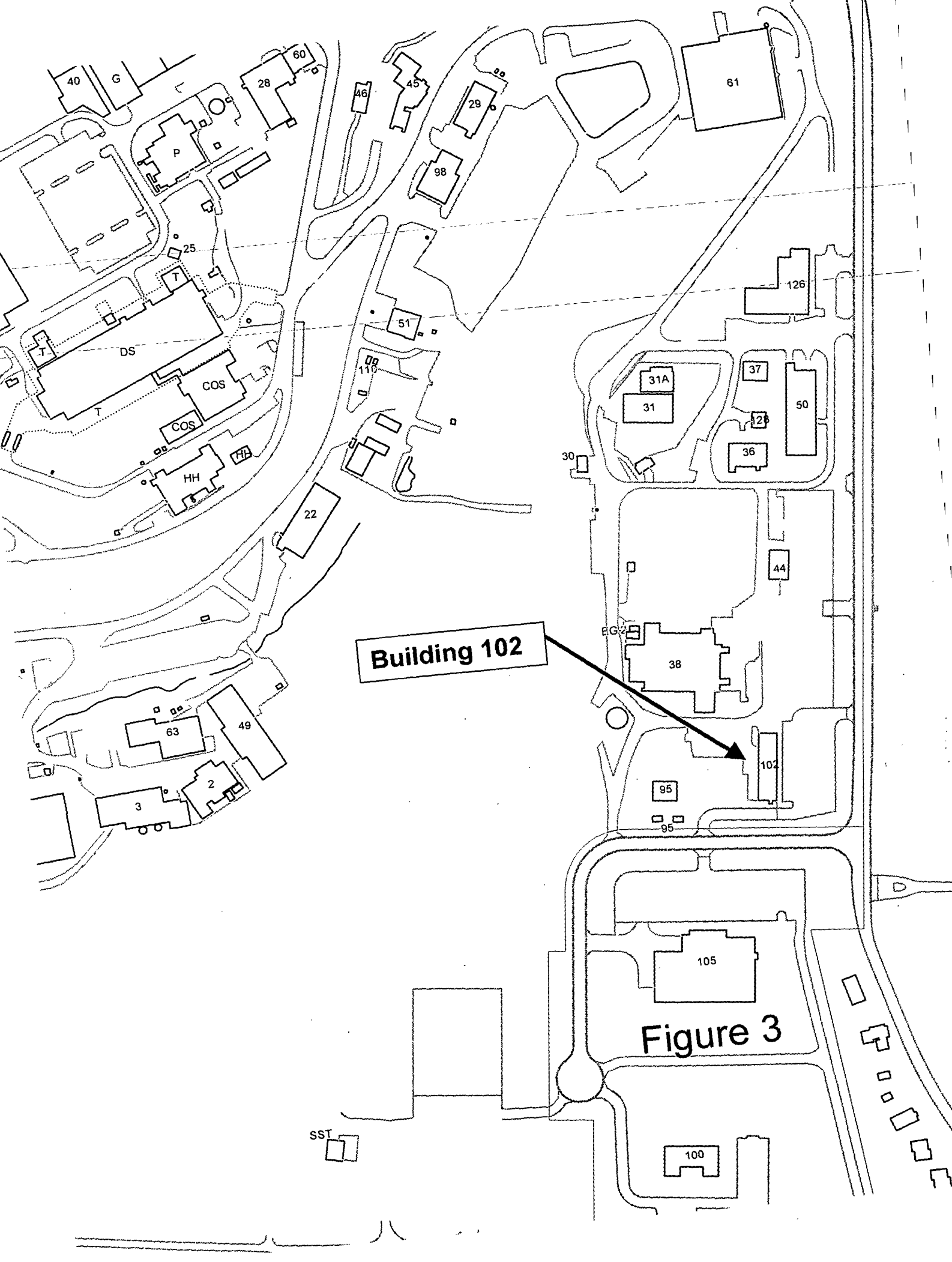


Figure 4: Building 102
Recent Exterior Photos

taken 22 March 2002




Building 102
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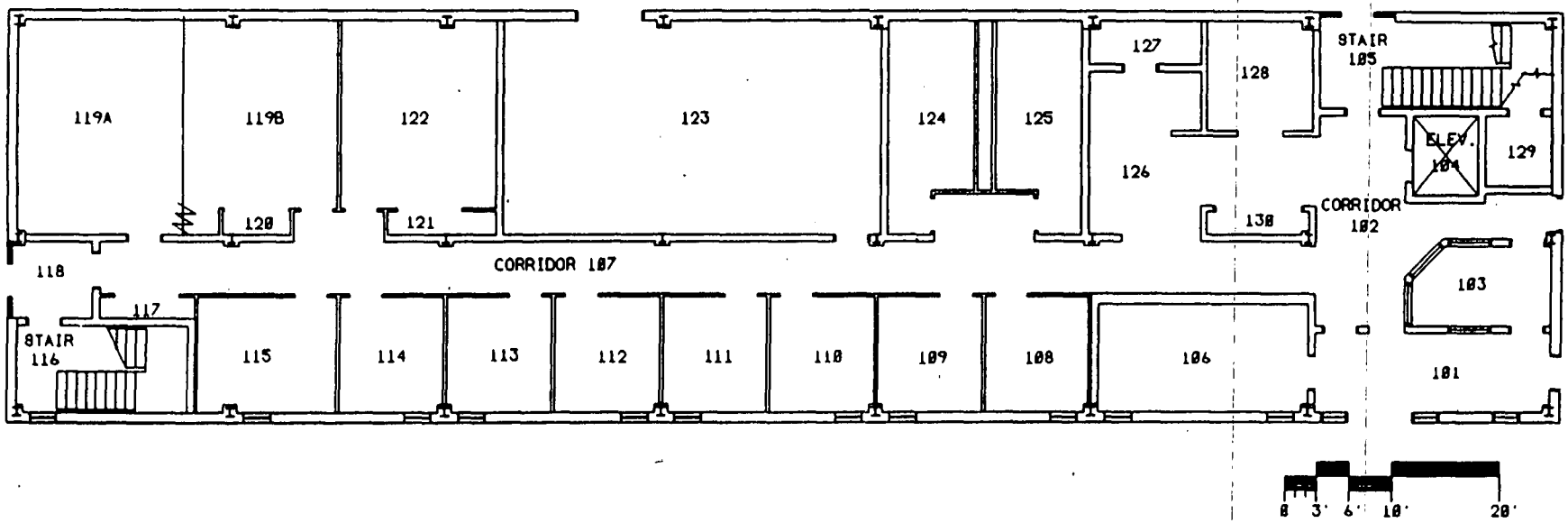
SST
100

Figure 3

Appendix D

Floor Plans

REV	DATE	REVISION	BY	CHKR	ENG	LEAD	APVD	A
0	12/12/91	ASBUILT ISSUE	DCW				DVD	



BLDG #102
FIRST FLOOR
BLDG CODE:3102

APPROVALS: DATE:
SAFETY COMMITTEE REQUIRED:
___ NONE ___ TRUEDOC ___ TEDOC ___ EHDOC
TECH. REP. ___
GR. MGR. ___
TRUEDOC ___
TEDOC ___
EHDOC ___

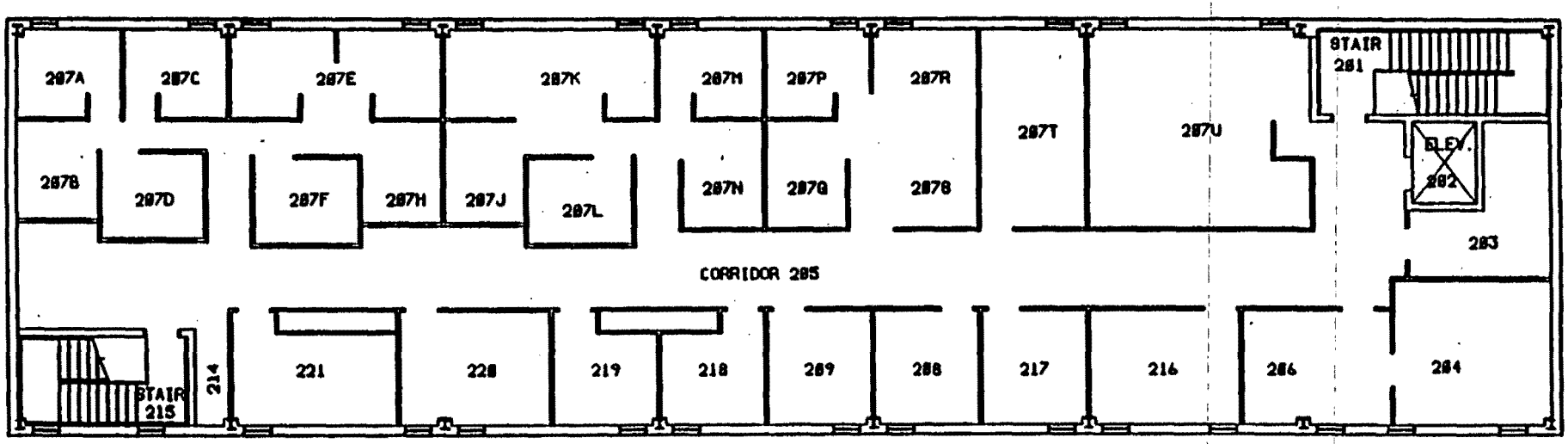
DESIGN ENG | PROJ MGR
SPECIS | ENG SUPV
LP & DC | PROJ REV
ENG MGR
APVD | DATE

SHEET	1	2	3	4	5	6
ISSUE	0	0				

PART CLASSIFICATION

TITLE (U) TITLE CLASSIFICATION
BLDG #102
FLOOR PLANS

DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE: C
DRAWING NUMBER: FSC911293
JOB NUMBER: 12335
DWG TYPE: SFP
PROJ: BLDG #102
CODE: 14065
SCALE: AS NOTED
SHEET 1 OF 2
STATUS: MD-REL-12/12/91
ORIGIN: MD-BR3-V3.0



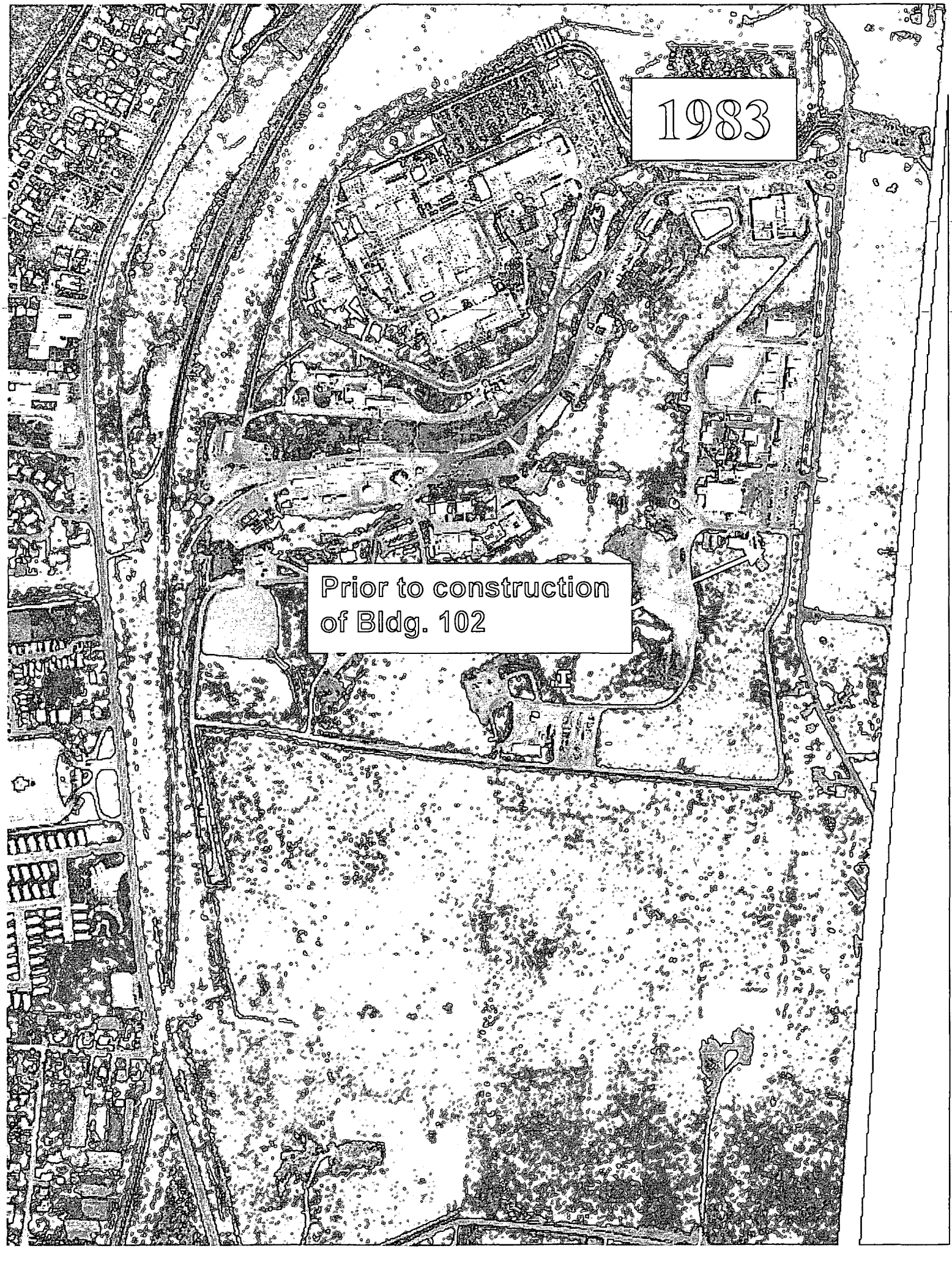
BLDG #102
SECOND FLOOR
BLDG CODE:3102

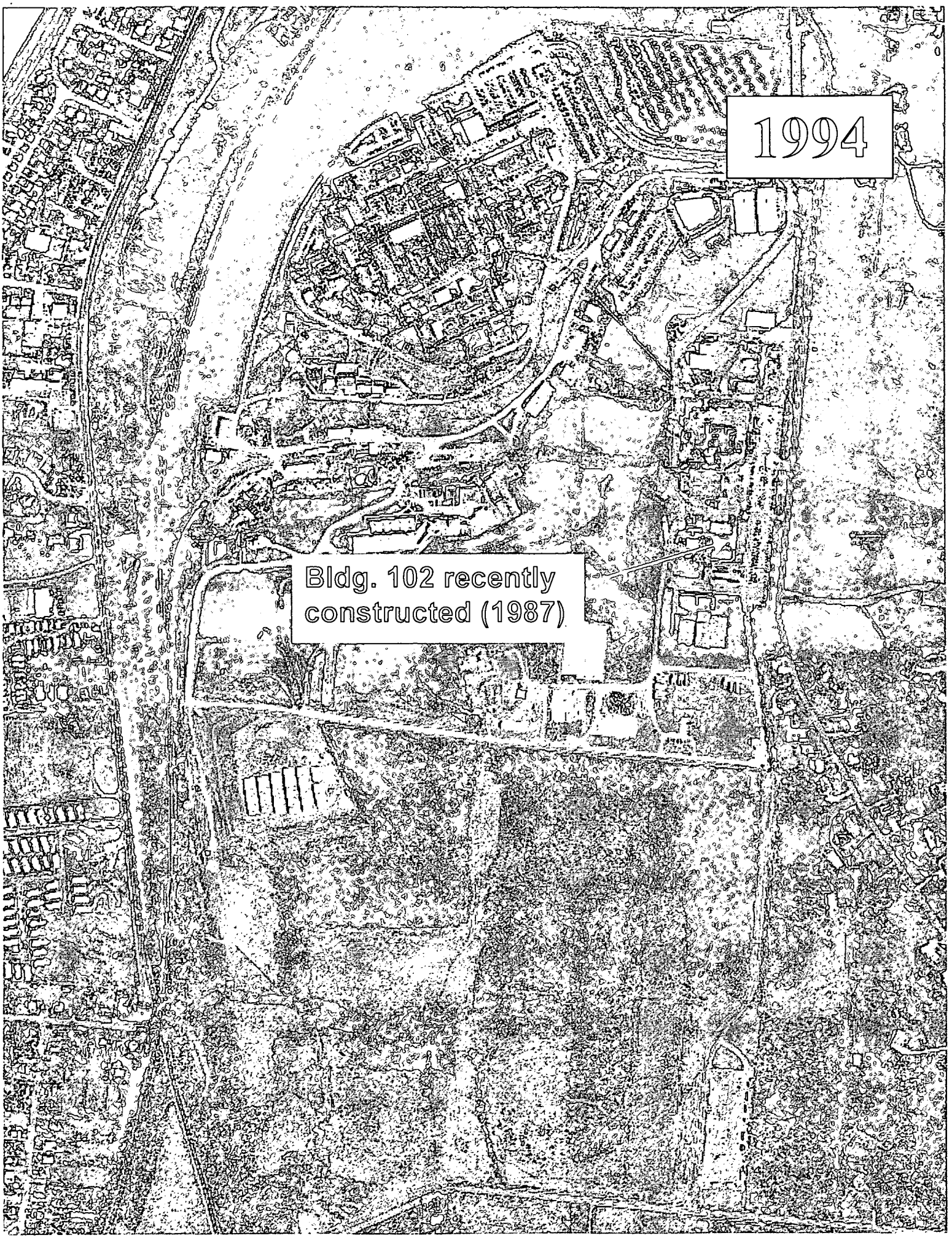
DRAWING NUMBER FSC911293	JOB NUMBER 12335
DRAWING CLASSIFICATION UNCLASSIFIED	
SIZE C	LINEC 14865 / SCALE AS NOTED
ISSUE 0	SHEET 2
STATUS MO-REL-12/12/91	

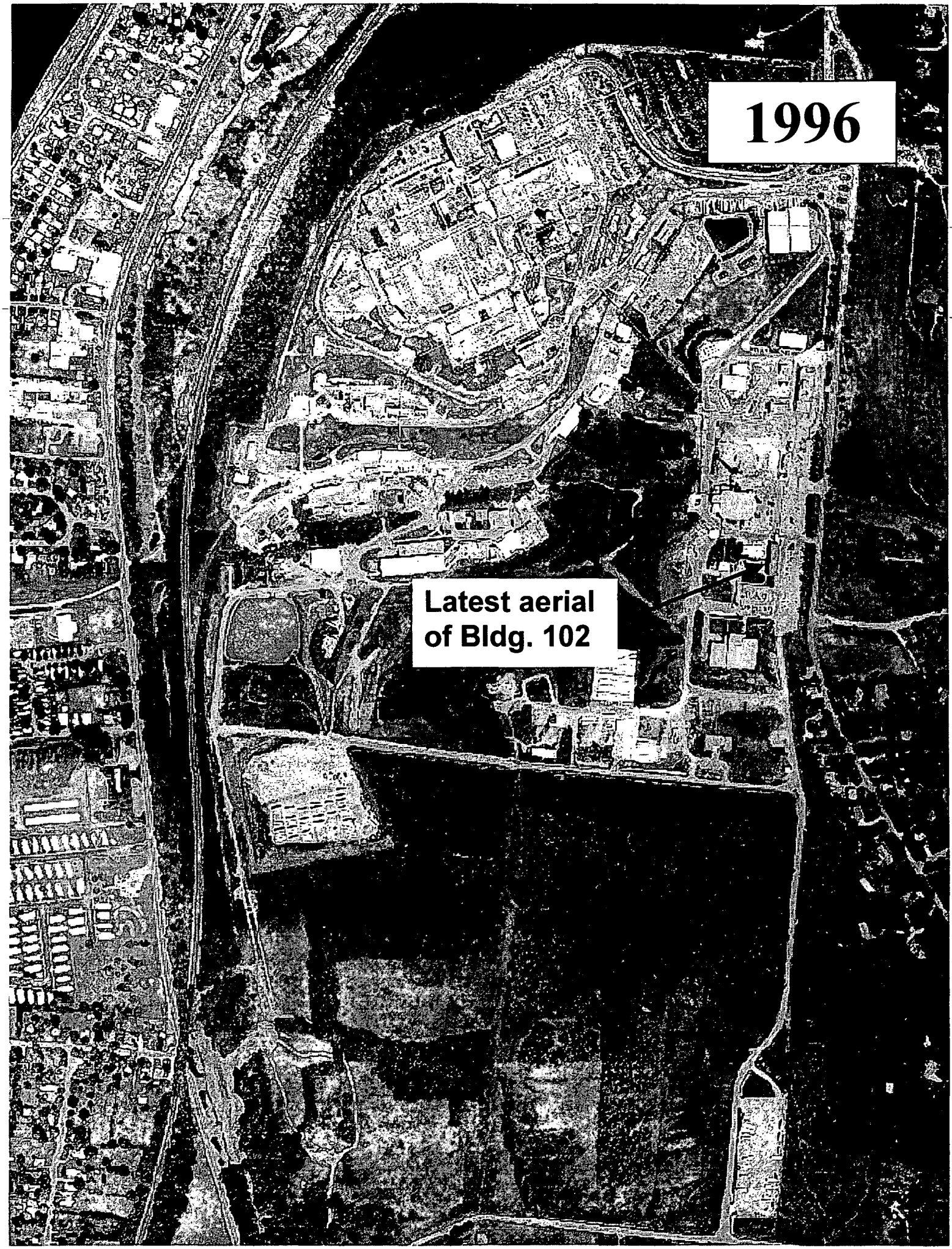
9.108-57

Appendix E

Aerial Photographs


1983
Prior to construction
of Bldg. 102


1994
Bldg. 102 recently constructed (1987)


1996
Latest aerial
of Bldg. 102

Appendix F

Environmental Appraisal Report of the Mound Plant (excerpt)

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.

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.

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 CHECKLIST

Building Name 102

Appraisers:

Name	Discipline
J Hausfeld	CWA
M Meeker	RCRA

Building Manager: Paul Molloy

Process Manager:

Date: 3/5/96

ENVIRONMENTAL APPRAISAL CHECKLIST

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RCRA Hazardous Waste	8
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TSCA—PCB	14
Low-level and Transuranic Waste	17
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Environmental Appraisal Checklist

Building Name: 102 Appraisers: JA MM 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?	(Y) / N	If the answer to any of these questions is yes, proceed with the following checklist.
Are there sinks, toilets and floor drains in the building?	(Y) / N	
Are chemicals being used in the building?	(Y) / N	
Is there a process which discharges to the storm or sanitary system?	Y / (N)	

CWA Checklist

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

9.108-9

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	

Environmental Appraisal Checklist

Building Name: 102 N/A

Appraisers:

Date:

CAA Checklist

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

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

Source:_____

9.108-11

Environmental Appraisal Checklist

Building Name: 162 Appraisers: JA 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: 162 Appraisers: [illegible] Date: 8/5

HM Checklist

Regulatory Guideline	Question	Response	Comments
29 CFR 1910.106(d)(7)	All flammable/combustible storage locations have at least one 12-B portable fire extinguisher located outside and within 10 ft. of a door opening into any room for storage. No smoking signs are posted.	Y / N	
29 CFR 1910.151	Eyewashes/showers shall be provided within the work area. Ensure unit is operational.	(Y) / N	
CGA P-1 3.3 & 3.3.10	All gas cylinders (full or empty) shall carry a legible label or marking identifying the contents.	(Y) / N	
CGA P-1 3.5.3	Full and empty containers should be stored separately with the storage layout planned so that containers comprising of old stock can be removed first with a minimum handling of other containers.	(Y) / N	
CGA P-1 3.5.8	All compressed gas containers in service or in storage shall be stored standing upright and the container shall be secured.	(Y) / N	
CGA P-1 4.2.2	Oxygen cylinders shall be separated from flammable gas containers or combustible materials a minimum of 20 ft. or a noncombustible barrier 5 ft. high.	Y / N	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	
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
	NA	NA		Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N
				Y / N	Y / N	Y / N	Y / N

Source: _____

Environmental Appraisal Checklist

Building Name: 102 Appraisers: JA MLL Date: 3/5

Safe Drinking Water Act (SDWA) Screening Checklist

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

SDWA Checklist

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

TABLE C—Water Fountain Survey

Building	Location	Model #	Comments / Date of Analysis for Lead
102	1ST FLOOR	OASIS EP8WM-EQ	S/N 8612089691
"	2ND FLOOR	OASIS EP8WM-EQ	S/N 8612189651
"	2 "	BISRHS-D101	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 charactarization by analysis or by process knowledge? Are lab results or documentation of process knowledge readily available? Note any uncharacterized material in comment section. Is it waste? If yes, proceed with next section.	Y / N analysis / process Y / N Y / N	
OAC 3745 52-11	Are any of the materials noted RCRA hazardous waste? If no, note and stop here. If yes, note the location of the management unit, and the method of management, and proceed with the appropriate section below.	Y / N	

Environmental Appraisal Checklist

Building Name: 107 Appraisers: JAI MM 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?	Y / N	
	Is it treated as such?	Y / N	
OAC 3475-52-34 (C)	Has any of the RCRA hazardous waste in this building been managed in Satellite Accumulation Areas? If no, proceed to the next section. If yes, answer the following.	Y / N	
	Are the containers marked with the words hazardous waste, or other words denoting the hazard?	Y / N	
	Are the containers in good condition?	Y / N	
	Are the waste compatible with the containers?	Y / N	
	Are containers managing ignitable hazardous waste stored at least 50 feet from the plant site boundary?	Y / N	
	Are containers kept closed and locked except during filling?	Y / N	
	Are containers moved within 3 days of being filled?	Y / N	

9.108-17

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

Environmental Appraisal Checklist

Building Name: 102 Appraisers: [illegible] 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 not. Go to the next section.	Y / N	
OAC 3745-56	Has any of the waste been managed in a Waste Pile? If yes, then note. Go to the next section.	Y / N	

General Comments:

Environmental . .ppraisal Checklist

Building Name: 102 Appraisers: [illegible] 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?	Y / N	
	If no for this building or area note this conclusion in the comment section.		Suspectes
	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	NA
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 (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: [illegible] 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	
40 CFR 761.65 (b) (8)	Are all PCB articles and containers labeled with the date they were placed in storage?	Y / N	
	Are labeled PCB articles and containers stored so that the labels can be referenced?	Y / N	
40 CFR 761.65 (a)	Are all PCB's and PCB contaminated items at concentrations above 50 PPM, that are stored for disposal, stored no longer than one year from the date they were placed in storage?	Y / N	
40 CFR 761.62 (b) (1) (i)	Do all PCB storage areas have an adequate roof and walls to prevent rainwater from reaching the stored items?	Y / N	
40 CFR 761.62 (b) (1) (iv)	Are storage are floors curbed and constructed of continuous smooth and impervious materials?	Y / N	
40 CFR 761.62 (b) (1) (i)	Are the curbs at least 6 inches high?	Y / N	
40 CFR 761.62 (b) (1) (iii)	No drains are allowed in storage areas. Are there drains in the storage areas?	Y / N	

9.108-23

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

GENERAL COMMENTS:

Building Name: 117 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.

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	

Building Name: 107 Appraisers: [illegible] Date: 3/5

Low-Level Waste and Transuranic Waste Checklist

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

9.108-27

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	

Building Name: 102 Appraisers: [illegible] 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

9.108-30

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?	Y / N	If yes, conduct the following survey.

Waste Minimiaztion/Pollution Prevention Activities Checklist

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

Environmental Appraisal Checklist

Building Name: 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 kjins?	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	

Environmental Appraisal Checklist

Building Name: 107 Appraisers: [illegible] 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	

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	
OILS			
	What kind of oils are used?		
	Hydraulic oil?	Y / N	
	Transformer oil?	Y / N	
	Metal working fluids?	Y / N	
	Spent lubricating oils?	Y / N	
	Can the process be modified or changed to use water-based fluids?	Y / N	
	Are these good housekeeping and operation practices used to minimize oil waste production?		
	Use oils not contaminated with other liquids?	Y / N	
	Oil spills prevented?	Y / N	
	Drip pans installed?	Y / N	
	Oil soaked rags laundered?	Y / N	
	Rags and absorbants used to their limit?	Y / N	

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Environmental Appraisal Checklist

Building Name: 103 Appraisers: JA MM 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: [illegible] Date: 3/5

Waste Minimization/Pollution Prevention Activities Checklist

Regulatory Guideline	Question	Response	Comments
	If there is a recycling program, what technique is used?	(Y) / 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?	_____ _____	

9.108-35

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Building Manager's Questionnaire

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

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

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

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-ft^2 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?

GPHS 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

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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: _____

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

9.108-41

Building Manager's Questionnaire

Building Name: 102 Building Manager: P.C. Mollov 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

9.108-43

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~~ N/A	~~1.0~~
~~EPO Kwick Resin~~	~~3.4~~
~~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.

9.108-45

Building Manager's Questionnaire

Building Name: 102 Building Manager: P.C. Mollov 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: _____

9.108-47

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.

9.108-48

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

9.108-49

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Appendix G

Radiological Information

Building 102 – RSDS Results

RSDS #	Building Section	Sample Location	All Samples Meet Surface Release Criteria
01-38-543	First and second floors	Corridor floors	Yes
01-OSA-068	First and second floors	Floors, walls, vents (return and supply vents), equipment	Yes*

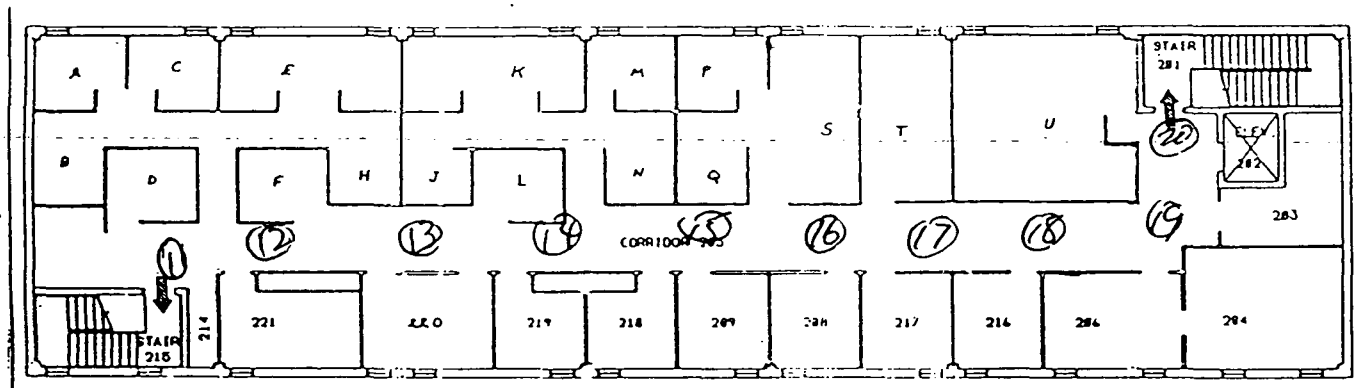
** Initial radiological surveys on three of the first floor air vent lint samples exceeded the guideline level of < 100 dpm/100cm^2 alpha, with a maximum result of 350 dpm/100cm^2. Because of the sample locations, the elevated readings were suspected to be caused by radon. Accordingly, samples were held overnight to allow for decay and reanalyzed. Next day readings were all below the 100 dpm/100cm^2 screening level, thus confirming that radon had caused the initial apparent exceedences.*

Results from all radiological surveys of Building 102 are below surface release criteria; there were no elevated readings. Survey areas included all areas of the building, as shown on the attached sketches for 01-OSA-068

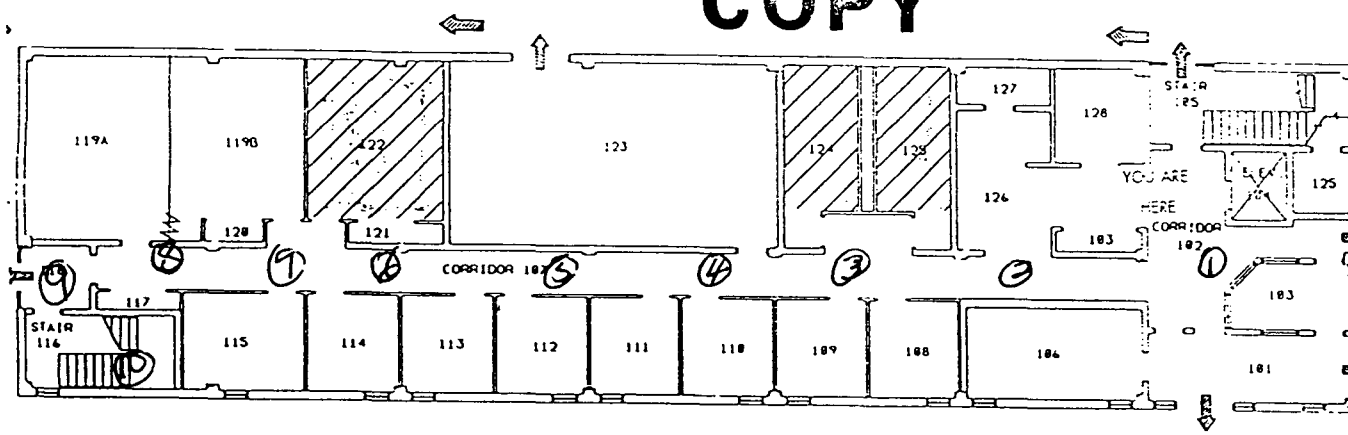
RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) 102 - All - Room	SURVEY NO. 01-38-543
PURPOSE: Annual Survey	RWP NO. N/A
	DATE: 9-6-01
	TIME: 0900

MAP/DRAWING



COPY



<100 DPM/100CM² - ALPHA <5000 DPM/100CM² - BETA

LEGEND:
= mrem/hr (γ) whole body
E = mrem/hr (β+n+γ) extremity on contact
= mrem/hr neutron
= air sample number
= swipe number
/α or /β = direct contamination measurement in dpm/100cm2

[redacted]

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
NE	5306/5318	10-3-01
	N/A	

HP# 5436	Date: 9-6-01
HP# 5268	Date: 9/6/01
HP# 8405	Date: 9/7/01

ML-9620 (4-98)

P1

01-38-543

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
Swipes (dpm/100cm2)				
Sample#	β/γ	Alpha	Tritium	Comments
1				FLOOR
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				FLOOR
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

SEE ATTACHED

N/A

Removable Contamination				
Swipes (dpm/100cm2)				
Sample#	β/γ	Alpha	Tritium	Comments
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
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68				
69				
70				

N/A

COMMENTS:

N/A

NOTES:

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

Smear Analysis

Unit Type: LB4100/W
Counting Unit ID: Green
Data file name: SMEAR074
Batch Ended: 9/6/01 14:44
Cal. Due Date: 4/25/03
Serial Number: 26966-3

Batch ID: 01-38-543 FRANCIS(20) BSB

Detector ID	Sample ID	Alpha Activity			Beta Activity		
		DPM	σ	flags	DPM	σ	flags
A1	1	0.00	1.87		0.21	1.68	
A2	2	0.00	1.77		0.00	1.13	
A3	3	0.00	2.04		0.00	1.25	
A4	4	3.23	2.67		2.34	2.34	
B1	5	1.55	2.00		0.00	1.25	
B2	6	0.00	1.93		0.29	1.68	
B3	7	0.00	2.00		0.08	1.79	
B4	8	0.00	1.92		1.33	2.02	
C1	9	0.00	2.09		2.98	2.48	
C2	10	0.00	1.80		0.00	1.15	
C3	11	0.00	2.03		0.00	1.24	
D1	12	1.45	2.00		0.00	1.24	
D2	13	1.53	2.11		3.91	2.76	
D3	14	0.00	2.10		0.00	1.29	
D4	15	1.45	2.07		1.43	2.10	
A1	16	0.00	1.86		0.00	1.19	
A2	17	0.00	1.77		0.00	1.13	
A3	18	0.00	2.05		0.44	1.76	
A4	19	0.00	1.92		2.69	2.34	
B1	20	0.00	2.02		1.53	2.15	

KRF
9-11-01

Protocol #: 1 Pw H3 405828 User : 526

Time: 2.00
Data Mode: DPM Nuclide: H3 QUENCH Quench Set: H3QUENCH
Background Subtract: 1st Vial

	LL	UL	LCR	2S%	BKG
Region A:	0.5 -	18.6	0	0.0	6.34
Region B:	2.0 -	18.6	0	0.0	6.03
Region C:	40.0 -	2000	0	0.0	11.00

Quench Indicator: tSIE/AEC
Ext Std Terminator: Count
01-38-543 FRANCIS(20) BSB
Luminescence Correction On
Coincidence Time(ns): 18
Delay Before Burst(ns): Normal
Protocol Data Filename: c:\data\PROT1.DAT
Count Data Filename: c:\data\SDATA1.DAT
Spectrum Data Drive & Path: c:\data

S#	TIME	CPMA	CPMB	LUM	FLAG	tSIE	DPM1	2Sigma	CPMC
-1	10.00	6.34	6.03	0	B	599.85		0.00	11.00
0	2.00	883.27	831.05	0		528.60	1843.55	165.51	0.00
1	2.00	1.66	1.71	0		592.17	3.28	8.49	0.00
2	2.00	0.00	0.00	0		622.52	0.00	0.00	0.00
3	2.00	2.16	2.26	0		565.99	4.36	8.92	0.00
4	2.00	0.00	0.00	0		592.60	0.00	0.00	1.00
5	2.00	0.00	0.00	0		593.07	0.00	0.00	0.00
6	2.00	0.00	0.00	0		598.29	0.00	0.00	0.00
7	2.00	0.00	0.00	0		603.30	0.00	0.00	0.00
8	2.00	0.00	0.00	0		582.11	0.00	0.00	1.50
9	2.00	0.16	0.00	0		636.95	0.31	7.48	0.00
10	2.00	1.66	1.66	0		620.62	3.20	8.29	0.00
11	2.00	0.16	0.47	0		621.62	0.31	7.58	0.00
12	2.00	1.11	0.14	0		606.15	2.17	8.14	4.50
13	2.00	0.00	0.00	0		621.56	0.00	0.00	0.00
14	2.00	0.16	0.47	0		627.69	0.31	7.54	0.00
15	2.00	1.57	1.88	0		603.78	3.07	8.37	0.00
16	2.00	2.16	2.19	0		602.89	4.22	8.64	1.50
17	2.00	0.02	0.05	0		600.52	0.04	7.65	0.00
18	2.00	1.16	1.18	0		608.05	2.26	8.15	0.00
19	2.00	4.55	4.01	0		605.74	8.87	9.63	0.00
20	2.00	5.66	5.21	0		594.14	11.15	10.18	1.00

page 4 of 4
KRF
9-11-01

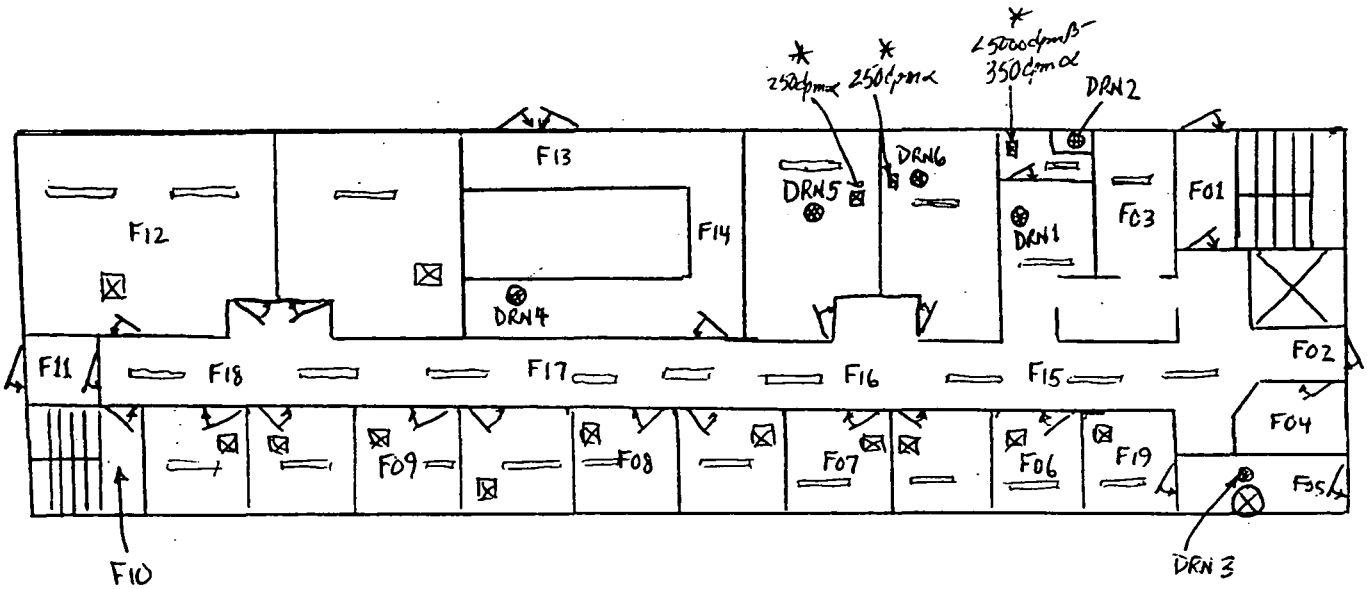
RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) Bldg 102 1st Floor	SURVEY NO. 01-OSA-068
PURPOSE: Transition Survey.	RWP NO. N/A
	DATE: 11/14/01
	TIME: 1530

MAP/DRAWING

COPY

1ST FLOOR



▭ - Supply vents
⊠ - Return vents
F - Floor M-2350 location
D - Drain M-2350 location

All supply vents direct and large area wipes were <100dpm α; <5000dpm β
All return air vents were also <100dpm α; <5000 dpm β⁻ unless otherwise noted.
* Lint samples were taken at the 3 return ~~area~~ air vents shown >100, and held overnight for decay. Initial reading was maximum of 225dpm α. Next day readings all <100dpm. Conclude indications caused by Radon progeny.

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

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
NE ELECTRA	5603/5604	1/31/02
M2350/43-20	5671/5148	9-21-02
M2350/43-37	5671/5675	9-21-02
	A	
	N	

[redacted]

HP # 7707 6178	Date: 11-15-01
[redacted]	
HP # N/A	Date: N/A
HP # 8405	Date: 11/20/01

MIL-9620 (2-98)

Survey No. 01-OSA-068

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments

N/A

COMMENTS:

NOTES:

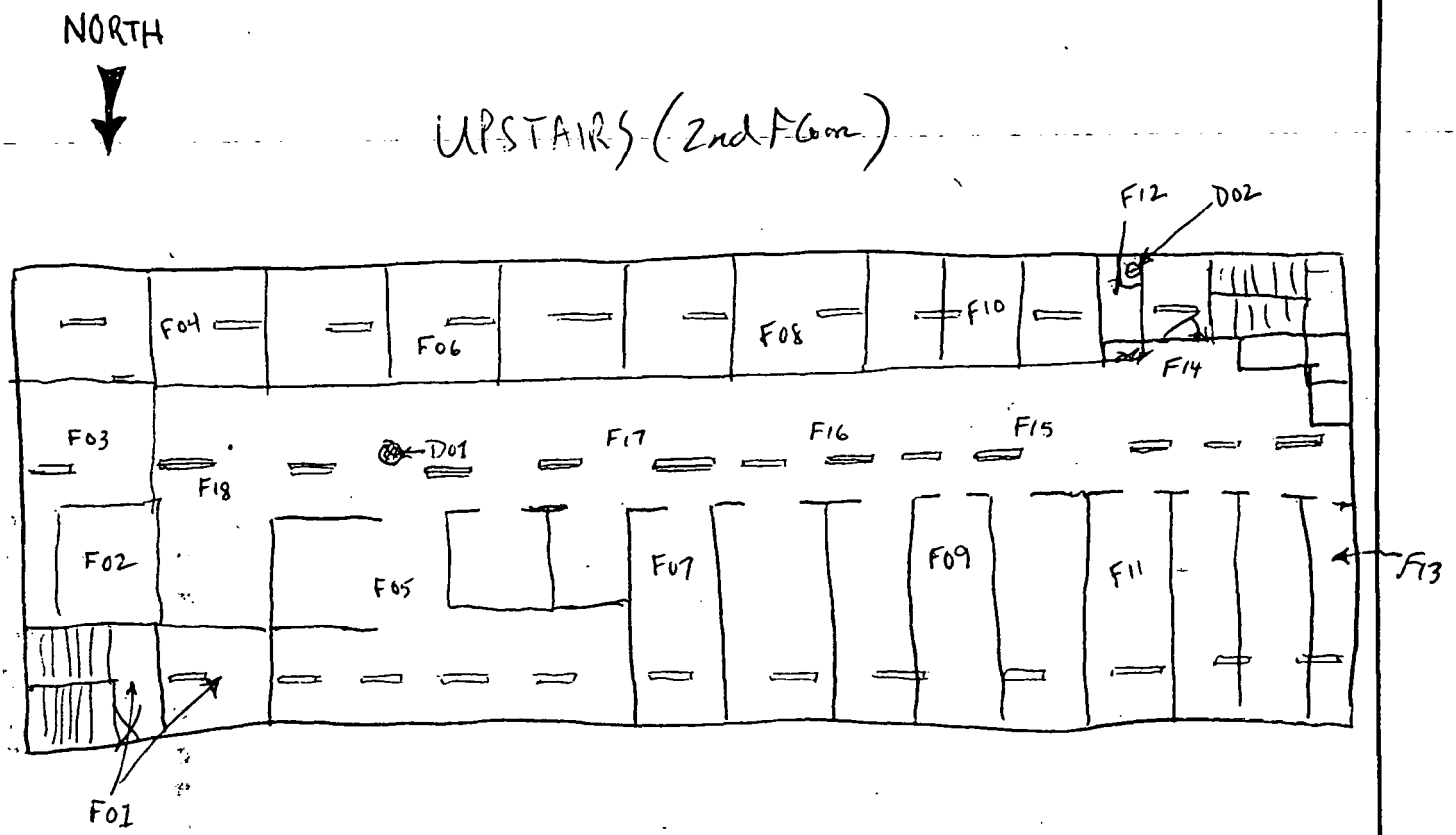
1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO Count Room analysis for β/γ, alpha or tritium, leave column blank. Mark column N/A if not needed. If count room printout of results are attached, write "see attached" in column.
3. Annotate special sample type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

ML-9620A (4-98)

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) Building 102	SURVEY NO. 01-OSA-068
PURPOSE: TRANSITION SURVEY	RWP NO. N/A
	DATE: 11/13,14/01
	TIME: 1530

MAP/DRAWING



= VENT All vents direct readings <100dpm/100cm² α ; <5000dpm/100cm² β-
All vents large area wipes < 100 dpm/wipe α ; <5000dpm/wipe β-

Floors, walls, desks large area mosslinn <100dpm/wipe α ; <5000dpm/wipe β-

No return air vents found on 2nd floor.

F = Floor M-2350 location

D = Drain M-2350 location

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

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date		HP #	Date:
NE ELECTRA	5603/5604	1/31/02	[redacted]	7707 6178	11-15-01
M-2350/43-20	5671 / 5148	9-21-02		N/A	N/A
M-2350/43-37	5671 / 5675	9-21-02			
	N A			HP # 8405	11/20/01

ML-9620 (2-98)

Survey No. 01-OSA-068

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments

COMMENTS:

NOTES:

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

ML-9620A (4-98)

BLDG 102 1st Floor M-2350 SURVEY

RSDS# 01-OSA-068 RCT: [illegible] RCT: DJA

43-20 BKG:	0	EFF:	0.193	PROBE AREA:	181	cm	Surface Eff:	0.5	
43-37 BKG:	0	EFF:	0.183	PROBE AREA:	584	cm	Surface Eff:	0.5	

LOCATION	2350#	RCT ID	PROBE	DET #	ITEM #	DATE	TIME	CNTS	CT TIME	dpm/100cm2
SRCBKG	5671	6178	5675	4	0	11/13/01	8:11	22	300	8
SRCCHECK	5671	6178	5675	4	1	11/13/01	8:19	2293	60	4291
SRCCHECK	5671	6178	5675	4	2	11/13/01	8:21	2323	60	4347
SRCCHECK	5671	6178	5675	4	3	11/13/01	8:23	2201	60	4119
SRCCHECK	5671	6178	5675	4	4	11/13/01	8:24	2230	60	4173
SRCCHECK	5671	6178	5675	4	5	11/13/01	8:26	2186	60	4091
SRCCHECK	5671	6178	5675	4	6	11/13/01	8:27	2224	60	4162
SRCBKG	5671	6178	5148	3	7	11/13/01	8:33	4	300	5
SRCCHECK	5671	6178	5148	3	8	11/13/01	8:37	2120	60	12138
SRCCHECK	5671	6178	5148	3	9	11/13/01	8:39	2071	60	11857
SRCCHECK	5671	6178	5148	3	10	11/13/01	8:40	1992	60	11405
SRCCHECK	5671	6178	5148	3	11	11/13/01	8:41	2041	60	11685
DOWND01	5671	6178	5675	4	15	11/13/01	10:11	3	15	22
DOWND02	5671	6178	5148	3	16	11/13/01	10:14	0	38	0
DOWND03	5671	6178	5675	4	19	11/13/01	10:20	8	15	60
DOWND04	5671	6178	5675	4	29	11/13/01	10:41	5	15	37
DOWND05	5671	6178	5675	4	30	11/13/01	10:43	4	15	30
DOWND06	5671	6178	5675	4	31	11/13/01	10:44	4	15	30
DOWNF01	5671	6178	5675	4	12	11/13/01	10:08	3	15	22
DOWNF02	5671	6178	5675	4	13	11/13/01	10:09	2	15	15
DOWNF03	5671	6178	5675	4	14	11/13/01	10:10	0	15	0
DOWNF04	5671	6178	5675	4	17	11/13/01	10:18	1	15	7
DOWNF05	5671	6178	5675	4	18	11/13/01	10:19	9	15	67
DOWNF06	5671	6178	5675	4	20	11/13/01	10:27	1	15	7
DOWNF07	5671	6178	5675	4	21	11/13/01	10:28	3	15	22
DOWNF08	5671	6178	5675	4	22	11/13/01	10:28	3	15	22
DOWNF09	5671	6178	5675	4	23	11/13/01	10:29	6	15	45
DOWNF10	5671	6178	5675	4	24	11/13/01	10:30	3	15	22
DOWNF11	5671	6178	5675	4	25	11/13/01	10:31	5	15	37
DOWNF12	5671	6178	5675	4	26	11/13/01	10:35	0	15	0
DOWNF13	5671	6178	5675	4	27	11/13/01	10:39	9	15	67
DOWNF14	5671	6178	5675	4	28	11/13/01	10:40	8	15	60
DOWNF15	5671	6178	5675	4	32	11/13/01	10:45	5	15	37
DOWNF16	5671	6178	5675	4	33	11/13/01	10:47	4	15	30
DOWNF17	5671	6178	5675	4	34	11/13/01	10:47	8	15	60
DOWNF18	5671	6178	5675	4	35	11/13/01	10:48	8	15	60
DOWNF19	5671	6178	5675	4	36	11/13/01	10:54	6	15	45

BLDG 102, Second Floor M-2350 SURVEY

RSDS# 01-05A-068 RCT: [illegible] RCT: [illegible]

43-20 BKG:	0	EFF:	0.193	PROBE AREA:	181	cm	Surface Eff:	0.5	
43-37 BKG:	0	EFF:	0.183	PROBE AREA:	584	cm	Surface Eff:	0.5	

LOCATION	2350#	RCT ID	PROBE	DET #	ITEM #	DATE	TIME	CNTS	CT TIME	dpm/100cm2
SRCBKG	5671	6178	5675	4	0	11/12/01	10:16	46	300	17
SRCCHECK	5671	6178	5675	4	1	11/12/01	10:32	2284	60	4274
SRCCHECK	5671	6178	5675	4	2	11/12/01	10:33	2215	60	4145
SRCCHECK	5671	6178	5675	4	3	11/12/01	10:41	2137	60	3999
SRCCHECK	5671	6178	5675	4	4	11/12/01	10:43	2315	60	4332
SRCCHECK	5671	6178	5675	4	5	11/12/01	10:45	2104	60	3937
SRCCHECK	5671	6178	5675	4	6	11/12/01	10:46	2220	60	4155
SRCBKG	5671	6178	5148	3	7	11/12/01	10:54	1	300	1
SRCCHECK	5671	6178	5148	3	8	11/12/01	11:02	2063	60	11811
SRCCHECK	5671	6178	5148	3	9	11/12/01	11:04	2040	60	11680
SRCCHECK	5671	6178	5148	3	10	11/12/01	11:05	1875	60	10735
SRCCHECK	5671	6178	5148	3	11	11/12/01	11:07	1943	60	11124
UPD01	5671	6178	5675	4	17	11/12/01	15:18	7	30	26
UPD02	5671	6178	5148	3	25	11/12/01	15:29	3	60	17
UPF01	5671	6178	5675	4	12	11/12/01	15:12	5	30	19
UPF02	5671	6178	5675	4	13	11/12/01	15:13	6	30	22
UPF03	5671	6178	5675	4	14	11/12/01	15:15	9	30	34
UPF04	5671	6178	5675	4	15	11/12/01	15:16	2	30	7
UPF05	5671	6178	5675	4	16	11/12/01	15:17	10	30	37
UPF06	5671	6178	5675	4	18	11/12/01	15:19	7	30	26
UPF07	5671	6178	5675	4	19	11/12/01	15:20	2	30	7
UPF08	5671	6178	5675	4	20	11/12/01	15:22	7	30	26
UPF09	5671	6178	5675	4	21	11/12/01	15:23	10	30	37
UPF10	5671	6178	5675	4	22	11/12/01	15:24	8	30	30
UPF11	5671	6178	5675	4	23	11/12/01	15:25	5	30	19
UPF12	5671	6178	5675	4	24	11/12/01	15:27	10	30	37
UPF13	5671	6178	5675	4	26	11/12/01	15:31	6	30	22
UPF14	5671	6178	5675	4	27	11/12/01	15:32	8	30	30
UPF15	5671	6178	5675	4	28	11/12/01	15:33	6	30	22
UPF16	5671	6178	5675	4	29	11/12/01	15:35	7	30	26
UPF17	5671	6178	5675	4	31	11/12/01	15:38	12	30	45
UPF18	5671	6178	5675	4	32	11/12/01	15:39	7	30	26

Appendix H

Radon Information

UNC Geotech

UNC Geotech
2597 B 3/4 Road
P.O. Box 14000
Grand Junction, Colorado 81502-5504
303/242-8621

April 12, 1990

Dennis Murphy
EG&G Mound Applied Technonogies
P.O. Box 3000
Mound Road
Miamisburg, OH 45343-3000

Dear Mr. Murphy:

I have enclosed the results ~~of the radon~~ measurements made at your site as part of the DOE Indoor Radon Study. A copy of these results can be provided in electronic ~~format if desired~~. The results will be forwarded to the study sponsor, the DOE Office of Projects and Facilities Management, by the end of April.

Please contact me at FTS 326-6293 or commercial (303) 248-6293 if you have any questions.

Sincerely yours,

Mark D. Pearson

Mark D. Pearson
Project Manager
UNC Geotech

cc: DOE Points of Contact

			pCi/l	pCi/l	Manid	Dupid	Date	Date	Comments
21		ABOVE AIR SAMPLER	161.1	125.0	1678055	1666782	12/14/89	2/16/90	MET - OLD THORIUM STORAGE
21		ABOVE AIR SAMPLERS	116.7		1660500		12/14/89	2/16/90	MET - OLD THORIUM STORAGE
	SM	19 NIO EAST WALL	4.0		1661547		12/12/89	2/19/90	HISTORY OF ELEVATED READINGS
40		114 B CLOSET ON SPRINKLER PIPE	3.2		1671292		12/12/89	2/19/90	
19		ROOM 1	2.6		1678051		12/13/89	2/19/90	
	OLD SO BLDG	BASEMENT RIGHT CABINET	2.4		1661595		12/14/89	2/19/90	
55		1 BELOW THERMOSTAT ON E WALL	2.1		1661515		12/18/89	2/19/90	
57		ROOM 1	1.8		1661565		12/12/89	2/19/90	
87		143	1.5		1661563		12/13/89	2/19/90	
898	FIRE STATION	ROOM 602 EQUIPMENT ROOM NITH SUMP	1.4		1654450		12/12/89	2/19/90	
24		ROOM 1 PLANT NORTH WALL	1.3		1672087		12/12/89	2/19/90	
	PAINT SHOP	PS 4	1.2		1661518		12/12/89	2/16/90	
38		ROOM 3 EAST	1.1		1671262		12/12/89	2/16/90	
100		103 MIDDLE OF NORTH WALL	1.0		1678060		12/12/89	2/19/90	
37		6 NORTH WALL	1.0		1678046		12/12/89	2/19/90	
34		34 A WEST WALL	.9	.6	1672062	1672042	12/12/89	2/19/90	MET
102		123	.9		1661577		12/14/89	2/19/90	
61		RM 221 MIDDLE OF NORTH WALL	.9		1661505		12/13/89	2/19/90	
67		101 N	.9		1678029		12/12/89	2/19/90	
G-13	LOG	G-514 WEST WALL	.9		1661544		12/12/89	2/16/90	
	T	CORRIDOR 28	.9		1678039		1/15/90	2/19/90	
	T	153	.9		1678067		1/15/90	2/19/90	
	T	78	.9		1678077		1/15/90	2/19/90	
	T	30	.9		1661586		1/15/90	2/19/90	
105	PARTS WACHINING BUILDING	STAIRWELL NEXT TO ROOM 127	.8		1661564		12/12/89	2/19/90	
25	ARAC	3 ON BOOK CASE MIDDLE	.8		1671314		12/16/89	2/19/90	
60		1 ON DOOR TO ROOM 3	.8		1678049		12/12/89	2/19/90	
	A	153C CENTER CUBICLE WEST WALL	.8		1672056		12/14/89	2/16/90	
	C BUILDING OLD CAFETERIA	NORTHEAST SECTION INTERNAL WALL RM2	.8		1672052		12/12/89	2/16/90	
	R BUILDING	68 NORTH WALL	.8		1678058		12/13/89	2/16/90	
	SM	8 WEST WALL AT OLD RECOVERY	.8		1672057		12/11/89	2/16/90	
	WO BLDG	WO 8	.8		1678045		12/18/89	2/16/90	
87		124	.8		1678032		12/12/89	2/19/90	
60		ROOM 116 ON NORHT WALL RIGHT OF CEN	.7	.6	1661524	1661535	12/12/89	2/19/90	
89		101 NEAR BACK CORNER BY ROOF DRAIN	.7	.5	1666783	1666532	12/15/89	2/19/90	
22		RM 1 EAST CORRIDOR ON STORAGE RACK	.7		1678070		12/12/89	2/19/90	
56	FIRE PUMP HOUSE	ROOM 1 THERE IS ONLY 1 ROOM	.7		1678066		12/12/89	2/19/90	
	E ANNEX	E 225 EAST WALL	.7		1661552		12/19/89	2/16/90	
	POWER HOUSE PH-1	REPAIR SHOP NORTH EAST CORNER	.7		1678040		12/12/89	2/19/90	
	M BLDG	M-135	.7		1661553		12/12/89	2/16/90	
26		ROOM 84 SOUTH WEST WALL	.6	.3	1672040	1667158	12/13/89	2/16/90	
69		RM 7 ON NORTH WALL	.6	.4	1672044	1672077	12/12/89	2/19/90	
26		ROOM 84 SOUTH WEST WALL	.6		1671278		12/13/89	2/16/90	
35		RM 7	.6		1654458		12/14/89	2/19/90	
38	PP BLDG	PP CORR 136	.6		1678016		12/14/89	2/19/90	
72		ON OVERHEAD DOOR BEAM	.6		1672069		1/03/90	2/19/90	
93		HALLWAY 107 (MIDWAY)	.6		1661628		12/13/89	2/20/90	
98	FIRE STATION	ROOM 114 DORM	.6		1661507		12/12/89	2/19/90	
	COS	NW STAIRWELL AT BASEMENT LEVEL	.6		1672086		12/14/89	2/19/90	
	OSW	120 C	.6		1661573		12/12/89	2/16/90	
	SM	150 WEST END GAS BOX	.6		1678042		12/11/89	2/16/90	
	A	34 EAST WALL	.5	.7	1672075	1672051	12/14/89	2/16/90	
47		102 MIDDLE OF EAST WALL	.5	.5	1650114	1666819	12/12/89	2/16/90	

Bldg	Bldg Description	Room	Avg Radon pCi/l	Duplicate Radon pCi/l	Monid	Dupid	Monitor Install Date	Monitor Retrieve Date	Comments
	R BUILDING	143 NEXT TO NORTH WALL	.5	.5	1660533	1660816	12/13/89	2/16/90	
101		ROOM 5 ON SOUTH WEST WALL IN OFFSET	.5		1671288		12/12/89	2/19/90	
	"B" 175	175 WEST WALL	.5		1678040		12/12/89	2/16/90	
36		ELECTRICAL PANEL RM IN ELECTRONICS	.5		1678062		12/12/89	2/19/90	
40		100	.5		1654480		12/13/89	2/16/90	
43		1 EAST WALL OVER WATER DISPENSER	.5		1678076		12/12/89	2/20/90	
44		ON BULLETIN BOARD	.5		1678047		12/12/89	2/16/90	
47		102 MIDDLE OF EAST WALL	.5		1678050		12/12/89	2/16/90	
50		CELL 113	.5		1661502		12/13/89	2/19/90	
79		CENTRAL HALLWAY WEST OF DOOR TO RM7	.5		1661645		12/18/89	2/16/90	
89		101 NEAR BACK CORNER BY ROOF DRAIN	.5		1678079		12/15/89	2/16/90	
91		1ST FLOOR	.5		1661525		12/15/89	2/16/90	
91		2ND FLOOR OUTSIDE RM215	.5		1661593		12/15/89	2/16/90	
92		HALLWAY RIGHT OFF ROOM 8	.5		1661549		12/12/89	2/19/90	
94		BAY 2 NORTH WALL	.5		1654477		12/12/89	2/19/90	
	A	215 WEST WALL	.5		1661572		12/14/89	2/16/90	
	A	1080 WEST WALL	.5		1661580		12/14/89	2/16/90	
	COS	110 N WALL NEAR PUNCH PRESS	.5		1654456		12/12/89	2/19/90	
	COS	310 WALL CABINET TO RIGHT OF SINK	.5		1661590		12/12/89	2/19/90	
	E BUILDING	159 WEST WALL	.5		1678033		12/14/89	2/16/90	
	E BUILDING	103 WEST WALL	.6		1678072		12/14/89	2/16/90	
	E ANNEX	E 212 NORTH WALL	.5		1661587		12/18/89	2/16/90	
	GH BUILDING	ROOM 2	.6		1678065		12/12/89	2/16/90	
	GP 81	1A MIDDLE OF WEST WALL	.6		1678054		12/12/89	2/19/90	
	H BLDG	ROOM 127	.6		1661571		12/12/89	2/16/90	
	HH	HH-8	.6		1671269		12/18/89	2/19/90	
	I BUILDING	BASEMENT LEFT CRAWL SPACE DOOR	.5		1671260		12/12/89	2/19/90	
	N BUILDING	N 108	.5		1678056		12/15/89	2/19/90	
	OSE	CORRIDOR 437	.5		1661536		12/15/89	2/16/90	
	OSE	CORRIDOR 301 ACROSS FROM WATER FOUN	.5		1672084		12/15/89	2/16/90	
	OSW	4HT FLOOR	.5		1678028		12/12/89	2/16/90	
	OSE	CORR 212 SOUTH WALL NEAR 218 DOOR	.5		1678036		12/15/89	2/16/90	
	OSW	319	.5		1678069		12/13/89	2/16/90	
	OSW	2ND FLOOR	.5		1661611		12/12/89	2/16/90	
	POWER HOUSE PH-1	STATIONARY BOARD CORNER	.5		1678073		12/12/89	2/19/90	
	R BUILDING	145 WEST WALL ABOVE BALANCE	.5		1654538		12/14/89	2/16/90	
	SW/R TRITIUM COMPLEX	128 OVER LARGE METAL FLOOR DISC	.5		1678019		12/12/89	2/16/90	
	W BLDG	W135 WEST CENTRAL WALL	.5		1671293		12/12/89	2/16/90	
	WO BLDG	WOA 110	.5		1671301		12/18/89	2/16/90	
	"B" 124	EAST WALL	.5		1667189		12/12/89	2/16/90	
	OSE	113 BULLETIN BOARD OPPOSITE ELEVATO	.5		1678027		12/15/89	2/16/90	
TF-2		114 EAST WALL CENTER OF ROOM	.4		1678064		12/12/89	2/19/90	
	HH	HH-24	.4		1667187		12/14/89	2/19/90	
	OS BUILDING	CORRIDOR 7 NEXT TO ROOM 216	.4		1661614		12/13/89	2/19/90	
	GP 81	1A MIDDLE OF WEST WALL	.4	.5	1672135	1661542	12/12/89	2/19/90	
105	PARTS MACHINING BUILDING	136 QC OFFICE	.4		1678017		12/12/89	2/19/90	
27		CELL 8 - WALL	.4		1661583		12/12/89	2/19/90	
28	CERAMIC PRODUCTION	101	.4		1672061		12/12/89	2/19/90	
29		HALLWAY	.4		1672105		12/14/89	2/19/90	
	TEST FIRE BUILDING 3	3-315	.4		1672036		12/12/89	2/19/90	
38	PP BLDG	PP CORR 16/BAY 2 WALL	.4		1661570		12/14/89	2/19/90	
39		BREAK RM	.4		1678058		12/14/89	2/19/90	
42		101 B EAST WALL	.4		1678031		12/13/89	2/19/90	

Area	Bldg	Bldg Description	Room	Avg Radon pCi/l	Duplicate Radon pCi/l	Monid	Dupid	Monitor Install Date	Monitor Retrieve Date	Comments
	45		WORK STATION AREA	.4		1681568		12/14/89	2/19/90	
	46		81 EAST WALL	.4		1672070		12/12/89	2/19/90	
	49		WALL OUTSIDE RM 125	.4		1670020		12/14/89	2/19/90	
	51		107 TOP OF FUME HOOD	.4		1681575		12/12/89	2/19/90	
	63		ROOM 134	.4		1672059		12/13/89	2/20/90	
	63W		RM 4	.4		1670070		12/14/89	2/19/90	
	65		ROOM 10 CONFERANCE ROOM	.4		1671204		12/14/89	2/19/90	
	66		OFFICE AREA	.4		1681554		12/12/89	2/19/90	
	68		EAST WALL CENTER BEAM	.4		1681555		12/14/89	2/19/90	
	69		RM 10A	.4		1681576		12/12/89	2/19/90	
	70		170 MEETING ROOM CENTER WALL	.4		1670041		12/12/89	2/19/90	
	88		ROOM 116	.4		1671295		12/12/89	2/19/90	
	95	SH/PP	95- BLD-ROOM41	.4		1661531		12/12/89	2/20/90	
		DS BUILDING	CORRIDOR 2 - 6 FT. ABOVE FLOOR	.4		1670071		12/13/89	2/19/90	
		I	I HALLWAY	.4		1667194		12/12/89	2/19/90	
		N BUILDING	N 21 WEST WALL	.4		1670057		12/15/89	2/20/90	
		POWER HOUSE PH-1	OFFICE SUPERVISOR	.4		1670036		12/12/89	2/19/90	
		R BUILDING	12 SOUTH WALL	.4		1681566		12/13/89	2/19/90	
	34		BURN ROOM			1654481		12/12/89		BURNT (NOT AVAILABLE)
	61		RM 151			1681567		12/13/89		MISSING

Appendix I

Asbestos Information

From: Christopher Ahlquist
To: Darnell, Val
Date: 4/24/02 5:05PM
Subject: Building 102 - Asbestos & Lead

Val -

On April 1, 2002 I conducted a walk-through survey of Building 102 for the purpose of identifying any existent asbestos and lead hazards. I am an Ohio Department of Health Certified Asbestos Hazard Evaluation Specialist and Licensed Lead Risk Assessor as required by State regulations.

Asbestos

No previous asbestos surveys or sampling data could be found for this building. The materials potentially suspect for containing asbestos in accordance with EPA protocol were the drywall, the ceiling tiles, the floor tile, and the insulation finishing mastic which were present. The drywall systems, the floor tile, and the finishing mastic were noted to be nonfriable and in good condition and did not present a hazard in their current condition. The ceiling tiles were friable and in good condition throughout and would not present a hazard unless disturbed. Given the age of construction, it is unlikely that any of these materials would contain asbestos. No action is necessary unless the materials are to be disturbed.

Lead

No previous lead surveys or sampling data could be found for this building. All of the observed paint coatings were intact and undisturbed. No lead paint hazards currently exist within the building, and no further action would be necessary unless any of the paint coatings were to be disturbed.

Please let me know if I can be of any further assistance.

Respectfully,

Chris Ahlquist
Industrial Hygienist
SMPP/TFV Project Team

CC: Hanson, W. Doug

Appendix J

Lead Information

From: Christopher Ahlquist
To: Darnell, Val
Date: 4/24/02 5:05PM
Subject: Building 102 - Asbestos & Lead

Val -

On April 1, 2002 I conducted a walk-through survey of Building 102 for the purpose of identifying any existent asbestos and lead hazards. I am an Ohio Department of Health Certified Asbestos Hazard Evaluation Specialist and Licensed Lead Risk Assessor as required by State regulations.

Asbestos

No previous asbestos surveys or sampling data could be found for this building. The materials potentially suspect for containing asbestos in accordance with EPA protocol were the drywall, the ceiling tiles, the floor tile, and the insulation finishing mastic which were present. The drywall systems, the floor tile, and the finishing mastic were noted to be nonfriable and in good condition and did not present a hazard in their current condition. The ceiling tiles were friable and in good condition throughout and would not present a hazard unless disturbed. Given the age of construction, it is unlikely that any of these materials would contain asbestos. No action is necessary unless the materials are to be disturbed.

Lead

No previous lead surveys or sampling data could be found for this building. All of the observed paint coatings were intact and undisturbed. No lead paint hazards currently exist within the building, and no further action would be necessary unless any of the paint coatings were to be disturbed.

Please let me know if I can be of any further assistance.

Respectfully,

Chris Ahlquist
Industrial Hygienist
SMPP/TFV Project Team

CC: Hanson, W. Doug

Appendix K

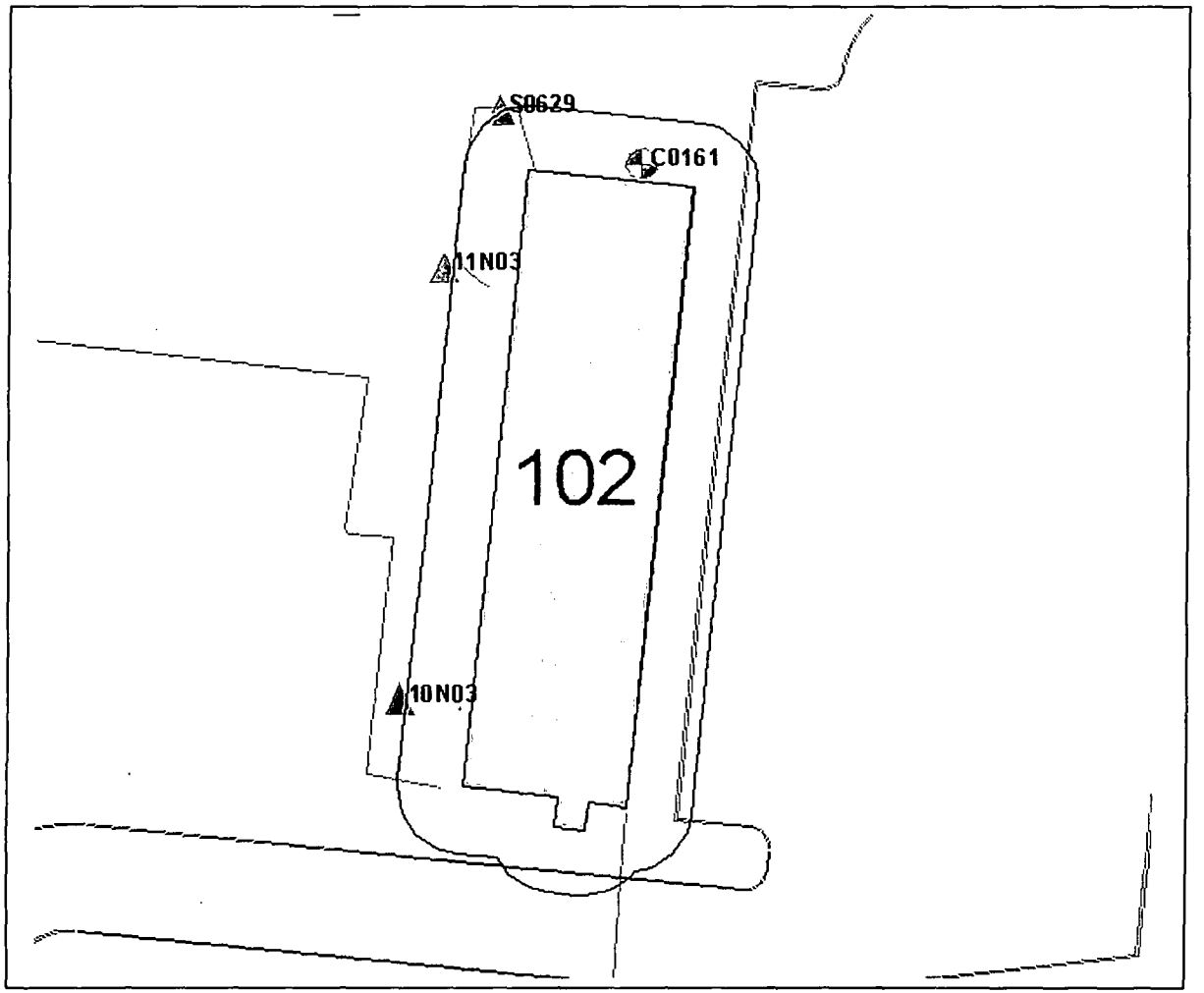
Chemical Information

Only small amounts of janitorial chemicals are currently in the building.

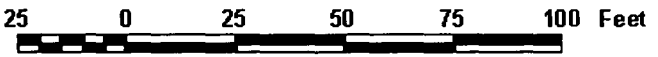
Appendix L

Soil Sampling, Vicinity

Bldg 102 Sample Locations within 15 feet



Bldg 102 Hits 15ft
Bldg 102 Hits 15ft Outline
Building Label
Text Bldg ID
Building Outline
Hidden Building Outline
Building Outline
Building
Color Fill
Transportation Text
TextInformation
Roads
Paved Drives/Parking
Unpaved Drives/Parking



Building 102 Detects

Location	Sample	Collection_	Value_name	Measured_value	Value	Detectio	Chem_cla	Start	End	Lab	Dat	Proje	Media	Comments
S0629	4121	19831001	Plutonium-238	0.4200	PCI/G	0.0100	RAD	0.0	0.0			RSS	Soil	2-Exceeds background value.
C0161	8266	19841001	Plutonium-238	0.0400	PCI/G	0.0100	RAD	6.0	6.0			RSS	Soil	
10N03	10N03	19940922	Total Aromatic Hydrocarbons	1585590.0000	IC*		GENERA	0.0	1.5			2680	Soil	
11N03	11N03	19940922	Total Aromatic Hydrocarbons	1313093.0000	IC*		GENERA	0.0	1.5			2680	Soil	
11N03	11N03	19940922	Total C5 TO C11 Petroleum Hydrocarbo	9495872.0000	IC*		GENERA	0.0	1.5			2680	Soil	
10N03	10N03	19940922	Total C5 TO C11 Petroleum Hydrocarbo	2684402.0000	IC*		GENERA	0.0	1.5			2680	Soil	
11N03	11N03	19940922	Total Semivolatile Hydrocarbons	380022.0000	IC*		GENERA	0.0	1.5			2680	Soil	
10N03	10N03	19940922	Total Semivolatile Hydrocarbons	10253.0000	IC*		GENERA	0.0	1.5			2680	Soil	

*: IC data results are qualitative only and no comparison criteria exists.

Lab and data qualifiers are defined on the pages immediately following the non-detects table in this appendix.

Comparison values for results with comments are provided on the "Comparisons for Soil Analytical Results" table at the end of this appendix.

Building 102 Non-Detects

Location	Sample_i	Collection_date	Value_name	Measured_	Value_uni	Detection	Chem_	Start_	End_	Lab_quali	Dat	Project_code	Media
C0161	8267	19841001	Plutonium-238	0.0100	PCI/G	0.0100	RAD	9.0	9.0	U		RSS	Soil
S0629	4121	19831001	Thorium-232	2.0000	PCI/G	2.0000	RAD	0.0	0.0	U		RSS	Soil
C0161	8266	19841001	Thorium-232	2.0000	PCI/G	2.0000	RAD	6.0	6.0	U		RSS	Soil
C0161	8267	19841001	Thorium-232	2.0000	PCI/G	2.0000	RAD	9.0	9.0	U		RSS	Soil

LABORATORY DATA QUALIFIERS (LABQUAL)

The following qualifiers will be applied to the organic analysis results by the laboratory in accordance with CLP SOW direction:

ORGANICS

U	Indicates compound was analyzed for but not detected. The associated sample quantitation limit will be the CRQL, corrected for dilution and for percent moisture.
J	Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) assuming a 1:1 response, 2) when the qualitative data indicated the presence of a compound that meets the volatile, semivolatile, and pesticide/Aroclor identification criteria, and the result is less than the CRQL but greater than zero.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where identification is based on a mass spectral library search.
P	Used for pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.
C	Applies to pesticide results where the identification has been confirmed by GC/MS.
B	Used when the analyte is found in the associated blank as well as in the sample. This flag must be used for a TIC as well as for a positively identified target compound.
E	Identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
D	Identifies all compounds identified in an analysis at a secondary dilution factor.
A	Indicates that a TIC is a suspected aldol-condensation product.

INORGANICS

B	Indicates that the reported value was obtained from a reading that was less than the CRDL but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates that the analyte was analyzed for but not detected.
E	Indicates the reported value is estimated because of the presence of interferences.
M	Duplicate injection precision was not met.
N	Spiked sample recovery not within control limits.
S	Reported value was determined by the Method of Standard Additions (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits, while sample absorbency is less than 50% of spike absorbency.
*	Duplicate analysis not within control limits.
+	Correlation coefficient for the MSA is less than 0.995.

DATA QUALIFIER CODES (DATAQUAL)

ORGANICS AND INORGANICS

U	The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.
J	The associated numerical value is an estimated quantity.
R	The data are unusable (compound may or may not be present). Resampling and reanalysis is necessary for verification.
N	Presumptive evidence of the presence of the material.
NJ	Presumptive evidence of the presence of the material at an estimated quantity.
UJ	The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

SUB-QUALIFIER CODES

ORGANICS

D	Duplicates
B	Qualified due to blank
C	Qualified due to calibration
H	Holding time exceeded
K	Qualified due to surrogate recovery
L	Qualified due to Laboratory Control Sample
S	Qualified due to matrix spike recovery
I	Qualified due to internal standard
N	Tentative identification (only for TICs)
P	Pesticide/PCB results have >25 percent difference on two different columns
+	Positive bias (added after subqualifier)
-	Negative bias (added after subqualifier)

INORGANICS

D	Duplicates
B	Qualified due to blank
C	Qualified due to calibration
H	Holding time exceeded
L	Qualified due to Laboratory Control Sample
S	Qualified due to matrix spike recovery
I	Qualified due to interference
+	Positive bias (added after subqualifier)
-	Negative bias (added after subqualifier)
Examples of final qualification might be J-C, UJ-S(+), UJ-BC(-), etc.	

The subqualifiers have been included to clarify any reports you may use. The subqualifiers have been captured when it was included in the electronic data submitted by the contractor. Most of the data in MEIMS does not include them.

The above data was extracted from the OU9 Site Wide Quality Assurance Project Plan, pages 9-16 and Appendix H page 3-1. It was updated from the Methods Compendium.

Comparisons for Soil Analytical Results

10-6 Risk-Based Guideline Values			
107-06-2	1,2-Dichloroethane	3.20E+00	MG/KG
118-96-7	2,4,6-Trinitrotoluene	1.91E+02	MG/KG
72-55-9	4,4'-DDE	9.00E+00	MG/KG
50-29-3	4,4'-DDT	9.00E+00	MG/KG
309-00-2	Aldrin	1.80E-01	MG/KG
5103-71-9	Alpha Chlordane	8.50E+00	MG/KG
12672-29-6	Aroclor-1248	3.85E-01	MG/KG
11096-82-5	Aroclor-1260	3.85E-01	MG/KG
7440-38-2	Arsenic	1.20E+03	MG/KG
71-43-2	Benzene	8.90E+00	MG/KG
56-55-3	Benzo(a)anthracene	4.10E+00	MG/KG
50-32-8	Benzo(a)pyrene	4.10E-01	MG/KG
205-99-2	Benzo(b)fluoranthene	4.10E+00	MG/KG
207-08-9	Benzo(k)fluoranthene	4.10E+01	MG/KG
7440-41-7	Beryllium	7.00E-01	MG/KG
319-85-7	Beta-BHC	1.65E+00	MG/KG
117-81-7	Bis(2-ethylhexyl)phthalate	2.15E+02	MG/KG
75-27-4	Bromodichloromethane	4.80E+01	MG/KG
75-25-2	Bromoform	3.75E+02	MG/KG
7440-43-9	Cadmium	1.00E+04	MG/KG
56-23-5	Carbon Tetrachloride	4.60E+00	MG/KG
67-66-3	Chloroform	3.10E+00	MG/KG
7440-47-3	Chromium	1.50E+03	MG/KG
218-01-9	Chrysene	4.10E+02	MG/KG
53-70-3	Dibenz(a,h)anthracene	4.10E-01	MG/KG
124-48-1	Dibromochloromethane	3.55E+01	MG/KG
75-09-2	Dichloromethane	3.95E+02	MG/KG
60-57-1	Dieldrin	1.85E-01	MG/KG
5103-74-2	Gamma Chlordane	8.50E+00	MG/KG
58-89-9	Gamma-BHC (Lindane)	2.30E+00	MG/KG
76-44-8	Heptachlor	0.66	MG/KG
1024-57-3	Heptachlor Epoxide	0.33	MG/KG
193-39-5	Indeno(1,2,3-cd)pyrene	4.10E+00	MG/KG
78-59-1	Isophorone	3.15E+03	MG/KG
86-30-6	N-Nitrosodiphenylamine	6.00E+02	MG/KG
87-86-5	Pentachlorophenol	2.50E+01	MG/KG
121-82-4	RDX	2.70E+01	MG/KG
79-01-6	Trichloroethene	4.10E+01	MG/KG
7440-41-7	1,1,1,2-Tetrachloroethane	1.10E-02	MG/L
7440-38-2	1,1,2,2-Tetrachloroethane	1.40E-03	MG/L
7440-34-8	Actinium-227	4.50E-01	PCI/G
14596-10-2	Americium-241	6.30E+00	PCI/G
13982-38-2	Bismuth-207	1.60E-01	PCI/G
10045-97-3	Cesium-137	3.40E-01	PCI/G
10198-40-0	Cobalt-60	7.00E-02	PCI/G
14255-04-0	Lead-210	6.20E-01	PCI/G

13981-16-3	Plutonium-238	6.10E+00	PCI/G
15117-48-3	Plutonium-239	5.50E+00	PCI/G
PU239/240	Plutonium-240	5.50E+00	PCI/G
13966-00-2	Potassium-40	1.42E+00	PCI/G
14331-85-2	Protactinium-231	3.90E-01	PCI/G
13982-63-3	Radium-226	9.00E-02	PCI/G
10098-97-2	Strontium-90	9.40E+00	PCI/G
14274-82-9	Thorium-228	1.10E-01	PCI/G
14269-63-7	Thorium-230	9.00E-02	PCI/G
7440-29-1	Thorium-232	7.00E-02	PCI/G
10028-17-8	Tritium	2.35E+04	PCI/G
13968-55-3	Uranium-233	9.68E-01	PCI/G
13966-29-5	Uranium-234	1.05E+01	PCI/G
15117-96-1	Uranium-235	1.60E+00	PCI/G
24678-82-8	Uranium-238	1.00E-01	PCI/G
14596-10-2	Americium-241	4.90E-01	PCI/L
14331-79-4	Bismuth-210	2.20E+01	PCI/L
15262-20-1	Radium-228	3.30E-01	PCI/L
13967-73-2	Strontium-85	1.10E+02	PCI/L
10098-97-2	Strontium-90	3.90E+00	PCI/L
15623-47-9	Thorium-227	4.00E+00	PCI/L
14274-82-9	Thorium-228	6.90E-01	PCI/L
14269-63-7	Thorium-230	1.20E-01	PCI/L
7440-29-1	Thorium-232	3.10E-01	PCI/L
24678-82-8	Uranium-238+D	2.02E-01	PCI/L
	OU9 Soil Background Values		
72-54-8	4,4'-DDD	4.2	MG/KG
72-55-9	4,4'-DDE	4.3	MG/KG
50-29-3	4,4'-DDT	13	MG/KG
309-00-2	Aldrin	ND	MG/KG
5103-71-9	Alpha Chlordane	ND	MG/KG
319-84-6	Alpha-BHC	ND	MG/KG
7429-90-5	Aluminum	19000	MG/KG
14596-10-2	Americium-241	ND	MG/KG
12672-29-6	Aroclor-1248	ND	MG/KG
11097-69-1	Aroclor-1254	58	MG/KG
11096-82-5	Aroclor-1260	ND	MG/KG
7440-38-2	Arsenic	8.6	MG/KG
7440-39-3	Barium	180	MG/KG
7440-41-7	Beryllium	1.3	MG/KG
319-85-7	Beta-BHC	ND	MG/KG
7440-69-9	Bismuth	ND	MG/KG
13982-38-2	Bismuth-207	ND	MG/KG
13982-38-2	Bismuth-207	ND	MG/KG
14331-79-4	Bismuth-210m	ND	MG/KG
7440-43-9	Cadmium	2.1	MG/KG
7440-70-2	Calcium	310000	MG/KG
7440-47-3	Chromium	20	MG/KG

7440-48-4	Cobalt	19	MG/KG
7440-50-8	Copper	26	MG/KG
57-12-5	Cyanide	ND	MG/KG
60-57-1	Dieldrin	ND	MG/KG
959-98-8	Endosulfan I	ND	MG/KG
1031-07-8	Endosulfan Sulfate	ND	MG/KG
72-20-8	Endrin	ND	MG/KG
7421-93-4	Endrin Aldehyde	ND	MG/KG
53494-70-5	Endrin Ketone	ND	MG/KG
5103-74-2	Gamma Chlordane	ND	MG/KG
58-89-9	Gamma-BHC (Lindane)	ND	MG/KG
76-44-8	Heptachlor	ND	MG/KG
1024-57-3	Heptachlor Epoxide	ND	MG/KG
77-47-4	Hexachlorocyclopentadiene	ND	MG/KG
7439-89-6	Iron	35000	MG/KG
7439-92-1	Lead	48	MG/KG
7439-93-2	Lithium	26	MG/KG
7439-95-4	Magnesium	40000	MG/KG
7439-96-5	Manganese	1400	MG/KG
7439-97-6	Mercury	ND	MG/KG
72-43-5	Methoxychlor	30	MG/KG
7439-98-7	Molybdenum	27	MG/KG
7440-02-0	Nickel	32	MG/KG
7440-09-7	Potassium	1900	MG/KG
7782-49-2	Selenium	ND	MG/KG
7440-22-4	Silver	1.7	MG/KG
7440-23-5	Sodium	240	MG/KG
7440-28-0	Thallium	0.46	MG/KG
7440-31-5	Tin	20	MG/KG
7440-62-2	Vanadium	25	MG/KG
7440-66-6	Zinc	140	MG/KG
7440-34-8	Actinium-227	1.10E-01	PCI/G
10045-97-3	Cesium-137	0.42	PCI/G
14255-04-0	Lead-210	1.20E+00	PCI/G
13981-16-3	Plutonium-238	0.13	PCI/G
15117-48-3	Plutonium-239	1.80E-01	PCI/G
PU239/240	Plutonium-240	1.80E-01	PCI/G
13966-00-2	Potassium-40	37	PCI/G
14331-85-2	Protactinium-231	1.10E-01	PCI/G
13982-63-3	Radium-226	2	PCI/G
10098-97-2	Strontium-90	0.72	PCI/G
14274-82-9	Thorium-228	1.5	PCI/G
14269-63-7	Thorium-230	1.9	PCI/G
7440-29-1	Thorium-232	1.4	PCI/G
10028-17-8	Tritium	1.6	PCI/G
13966-29-5	Uranium-234	1.1	PCI/G
15117-96-1	Uranium-235	0.11	PCI/G
24678-82-8	Uranium-238	1.2	PCI/G

Core Team Determined Screening Levels			
7439-92-1	Lead	400	MG/KG
7440-34-8	Actinium-227	5.60E-01	PCI/G
14596-10-2	Americium-241	6.3	PCI/G
13982-38-2	Bismuth-207	0.175	PCI/G
10045-97-3	Cesium-137	0.76	PCI/G
10198-40-0	Cobalt-60	7.00E-02	PCI/G
14255-04-0	Lead-210	1.80E+00	PCI/G
13981-16-3	Plutonium-238	55	PCI/G
14331-85-2	Protactinium-231	4.00E+00	PCI/G
13982-63-3	Radium-226	2.1	PCI/G
14274-82-9	Thorium-228	1.61	PCI/G
14269-63-7	Thorium-230	2	PCI/G
7440-29-1	Thorium-232	1.47	PCI/G
15117-96-1	Uranium-235	1.7	PCI/G
24678-82-8	Uranium-238+D	1.3	PCI/G
	Maximum Contaminant Level for Drinking Water		
71-55-6	1,1,1-Trichloroethane	0.2	MG/L
79-00-5	1,1,2-Trichloroethane	0.005	MG/L
75-35-4	1,1-Dichloroethene	0.007	MG/L
120-82-1	1,2,4-Trichlorobenzene	0.07	MG/L
156-59-2	1,2-cis-Dichloroethene	0.07	MG/L
106-93-4	1,2-Dibromoethane	0.00005	MG/L
95-50-1	1,2-Dichlorobenzene	0.6	MG/L
107-06-2	1,2-Dichloroethane	0.005	MG/L
78-87-5	1,2-Dichloropropane	0.005	MG/L
156-60-5	1,2-trans-Dichloroethene	0.01	MG/L
106-46-7	1,4-Dichlorobenzene	0.075	MG/L
95-95-4	2,4,5-Trichlorophenol	0.05	MG/L
94-75-7	2,4-D	0.07	MG/L
7440-36-0	Antimony	0.0006	MG/L
7440-38-2	Arsenic	0.05	MG/L
7440-39-3	Barium	2	MG/L
71-43-2	Benzene	0.005	MG/L
50-32-8	Benzo(a)pyrene	0.002	MG/L
7440-41-7	Beryllium	0.004	MG/L
117-81-7	bis(2-ethylhexyl)phthalate	0.006	MG/L
75-27-4	Bromodichloromethane	0.008	MG/L
75-25-2	Bromoform	0.008	MG/L
7440-43-9	Cadmium	0.005	MG/L
56-23-5	Carbon Tetrachloride	0.005	MG/L
57-74-9	Chlordane	0.002	MG/L
108-90-7	Chlorobenzene	0.1	MG/L
67-66-3	Chloroform	0.008	MG/L
7440-47-3	Chromium	0.1	MG/L
7440-50-8	Copper	1.3	MG/L
57-12-5	Cyanide	0.2	MG/L
96-12-8	Dibromochloropropane	0.0002	MG/L

75-09-2	Dichloromethane (Methylene Chloride)	0.005	MG/L
88-85-7	Dinoseb	0.007	MG/L
1746-01-6	Dioxin	0.00000003	MG/L
72-20-8	Endrin	0.002	MG/L
100-41-4	Ethylbenzene	0.07	MG/L
16984-48-8	Flouride	4	MG/L
58-89-9	Gamma-BHC (Lindane)	0.0002	MG/L
76-44-8	Heptachlor	0.0004	MG/L
1024-57-3	Heptachlor Epoxide	0.0002	MG/L
118-74-1	Hexachlorobenzene	0.001	MG/L
77-47-4	Hexachlorocyclopentadiene	0.05	MG/L
7439-92-1	Lead	0.015	MG/L
7439-97-6	Mercury	0.002	MG/L
72-43-5	Methoxychlor	0.04	MG/L
7440-02-0	Nickel	0.1	MG/L
NO3	Nitrate	10	MG/L
14797-65-0	Nitrite	1	MG/L
87-86-5	Pentachlorophenol	0.001	MG/L
7782-49-2	Selenium	0.05	MG/L
100-42-5	Styrene	0.1	MG/L
127-18-4	Tetrachloroethene	0.005	MG/L
7440-28-0	Thallium	0.002	MG/L
108-88-3	Toluene	1	MG/L
8001-35-2	Toxaphene	0.003	MG/L
79-01-6	Trichloroethene	0.005	MG/L
75-01-4	Vinyl Chloride	0.002	MG/L
1330-20-7	Xylenes, Total	10	MG/L
7440-34-8	Actinium-227	0.4	PCI/L
14596-10-2	Americium-241	1.2	PCI/L
13982-38-2	Bismuth-207	1200	PCI/L
10045-97-3	Cesium-137	120	PCI/L
10198-40-0	Cobalt-60	400	PCI/L
13981-16-3	Plutonium-238	1.6	PCI/L
13982-63-3	Radium-226	4	PCI/L
10098-97-2	Strontium-90	40	PCI/L
14274-82-9	Thorium-228	16	PCI/L
14269-63-7	Thorium-230	12	PCI/L
7440-29-1	Thorium-232	2	PCI/L
10028-17-8	Tritium	20000	PCI/L
13968-55-3	Uranium-233	20	PCI/L
13966-29-5	Uranium-234	20	PCI/L
15117-96-1	Uranium-235	24	PCI/L
24678-82-8	Uranium-238	24	PCI/L
Guideline Values based on the Hazard Index			
76-13-1	1,1,2-Trichloro-1,2,2triflouroethane	7.00E+04	MG/KG
75-34-3	1,1-Dichloroethane	7.80E+00	MG/KG
120-82-1	1,2,4-Trichlorobenzene	2.04E+04	MG/KG
156-59-2	1,2-cis-Dichloroethene	2.13E+03	MG/KG

156-60-5	1,2-trans-Dichloroethene	4.30E+03	MG/KG
99-65-0	1,3-Dinitrobenzene	2.00E+02	MG/KG
118-96-7	2,4,6-Trinitrotoluene	1.00E+03	MG/KG
78-93-3	2-Butanone	9.30E+03	MG/KG
95-57-8	2-Chlorophenol	1.06E+03	MG/KG
108-10-1	2-Methyl-4-pentanone	7.00E+02	MG/KG
50-29-3	4,4'-DDT	1.10E+02	MG/KG
106-44-5	4-Methylphenol	1.10E+03	MG/KG
67-64-1	Acetone	2.10E+04	MG/KG
309-00-2	Aldrin	6.4	MG/KG
5103-71-9	Alpha Chlordane	110	MG/KG
7429-90-5	Aluminum	210000	MG/KG
120-12-7	Anthracene	6.40E+04	MG/KG
7440-36-0	Antimony	8.50E+01	MG/KG
11097-69-1	Aroclor-1254	4.30E+00	MG/KG
7440-38-2	Arsenic	6.40E+01	MG/KG
7440-39-3	Barium	1.50E+04	MG/KG
65-85-0	Benzoic Acid	8.50E+05	MG/KG
7440-41-7	Beryllium	1.10E+03	MG/KG
117-81-7	Bis(2-ethylhexyl)phthalate	4.30E+03	MG/KG
75-27-4	Bromodichloromethane	4.30E+03	MG/KG
75-25-2	Bromoform	4.30E+03	MG/KG
85-68-7	Butyl Benzyl Phthalate	4.30E+04	MG/KG
7440-43-9	Cadmium	2.10E+02	MG/KG
75-15-0	Carbon Disulfide	2.80E+02	MG/KG
56-23-5	Carbon Tetrachloride	1.50E+02	MG/KG
75-00-3	Chloroethane	1.60E+02	MG/KG
67-66-3	Chloroform	2.10E+03	MG/KG
7440-47-3	Chromium	1.10E+03	MG/KG
18540-29-9	Chromium-VI	6.39E+02	MG/KG
7440-50-8	Copper	7.90E+03	MG/KG
57-12-5	Cyanide	4.30E+03	MG/KG
53-70-3	Dibenz(a,h)anthracene	4.08E-02	MG/KG
124-48-1	Dibromochloromethane	4.30E+03	MG/KG
75-09-2	Dichloromethane	1.00E+03	MG/KG
60-57-1	Dieldrin	1.10E+01	MG/KG
84-74-2	Di-n-butyl Phthalate	2.10E+04	MG/KG
117-84-0	Di-n-octyl Phthalate	4.30E+03	MG/KG
959-98-8	Endosulfan I	1300	MG/KG
33213-65-9	Endosulfan II	1300	MG/KG
100-41-4	Ethylbenzene	4.80E-01	MG/KG
86-73-7	Flourene	8.50E+03	MG/KG
206-44-0	Fluoranthene	8.50E+03	MG/KG
5103-74-2	Gamma Chlordane	110	MG/KG
58-89-9	Gamma-BHC (Lindane)	64	MG/KG
76-44-8	Heptachlor	110	MG/KG
1024-57-3	Heptachlor Epoxide	2.8	MG/KG
110-54-3	Hexane	9.10E+01	MG/KG
193-39-5	Indeno(1,2,3-cd)pyrene	4.08E-01	MG/KG

78-59-1	Isophorone	4.30E+04	MG/KG
7439-96-5	Manganese	2.70E+04	MG/KG
7439-97-6	Mercury	6.40E+01	MG/KG
72-43-5	Methoxychlor	1100	MG/KG
7440-02-0	Nickel	4.30E+03	MG/KG
87-86-5	Pentachlorophenol	6.40E+03	MG/KG
108-95-2	Phenol	1.30E+05	MG/KG
129-00-0	Pyrene	6.40E+03	MG/KG
7782-49-2	Selenium	1100	MG/KG
7440-22-4	Silver	1.10E+03	MG/KG
127-18-4	Tetrachloroethene	2.10E+03	MG/KG
7440-28-0	Thallium	17	MG/KG
7440-31-5	Tin	130000	MG/KG
108-88-3	Toluene	2.50E+02	MG/KG
75-69-4	Trichlorofluoromethane	7.30E+02	MG/KG
7440-62-2	Vanadium	1.50E+03	MG/KG
1330-20-7	Xylenes, Total	4.30E+05	MG/KG
7440-66-6	Zinc	6.40E+04	MG/KG
7440-41-7	1,1,1,2-Tetrachloroethane	2.90E-01	MG/L
7440-38-2	1,1,2,2-Tetrachloroethane	2.50E-01	MG/L
71-55-6	1,1,1-Trichloroethane	1.80E+00	MG/L
76-13-1	1,1,2-Trichloro-1,2,2triflouroethane	2.50E+03	MG/L
7429-90-5	Aluminum	100	MG/L
7440-42-8	Boron	9.00E+00	MG/L
18540-29-9	Chromium-VI	3.00E-01	MG/L
7440-48-4	Cobalt	6	MG/L
7440-50-8	Copper	4.00E+00	MG/L
7439-98-7	Molybdenum	0.5	MG/L
7782-49-2	Selenium	0.5	MG/L
7440-28-0	Thallium	0.008	MG/L
7440-31-5	Tin	60	MG/L
2691-41-0	HMX	1.10E+04	UG/KG
121-82-4	RDX	6.40E+04	UG/KG
Note:			
Edited on 10/08/01			
01/29/02 Removed all color			
05/29/02 Added table and section headings			
06/10/02 updated data			

Appendix M

Occurrence Reports

No occurrence reports were issued for this facility.

Appendix N

PRS Information

MOUND PLANT
PRS 383
SOIL CONTAMINATION

RECOMMENDATION:

Potential Release Site (PRS) 383 was identified as an area of possible organic contamination during the 1992 soil gas PETREX survey.

Sampling in 1995 within 30 feet of this PRS site quantitatively determined that no volatile/semivolatile organic compounds, pesticides, PCBs, explosives, metals, or radionuclides exceeded the ALARA, regulatory or 10^{-6} Risk Based Guidelines.

Therefore, it is recommended that NO FURTHER ASSESSMENT is required.

CONCURRENCE:

DOE/MB: Arthur W. Kleinrath, Remedial Project Manager 3/31/97 (date)

USEPA: Timothy J. Fischer, Remedial Project Manager 3/31/97 (date)

OEPA: Brian K. Nickel, Project Manager 3/31/97 (date)

SUMMARY OF COMMENTS AND RESPONSES:

Comment period from 6/17/97 to 7/18/97

☒ No comments were received during the comment period.

☐ Comment responses can be found on page _____ of this package.

Appendix O

Work Plan

Not applicable for buildings to be transferred to MMCIC.