

The logo for Midwest Environmental Consulting Services, Inc. features a blue triangle pointing to the left, with the company name written in bold blue text across it.

**Midwest
Environmental
Consulting Services, Inc.**

**COMPREHENSIVE
ASBESTOS SURVEY**

Performed for:

CITY OF LAKE FOREST

110 East Laurel Avenue
Lake Forest, IL 60045

Project Location:

***LAKE FOREST
MUNICIPAL FACILITY***

*110 East Laurel Avenue
Lake Forest, IL 60045*

Inspection Date: October 15-17, 2008

Report Date: November 14, 2008

MEC PROJECT #: 08-09-443-INSP

CITY OF LAKE FOREST
Lake Forest Municipal Facility
110 East Laurel Avenue
Lake Forest, IL 60045

Table of Contents
MEC Project #08-09-443-INSP

<i>Narrative</i>	<i>Section One</i>
<i>Asbestos Bulk Sample Field Summary</i>	<i>Section Two</i>
<i>Drawings of Homogeneous Sampling Areas</i>	<i>Section Three</i>
<i>Photographs of Homogeneous Sampling Areas</i>	<i>Section Four</i>
<i>Final Analytical Report</i>	<i>Section Five</i>
<i>Accreditations</i>	<i>Section Six</i>

SECTION 1:
NARRATIVE

Section 1:

Introduction:

Midwest Environmental Consulting Services, Inc., (MEC) was retained by the City of Lake Forest to conduct a comprehensive asbestos inspection and bulk sampling of suspect asbestos-containing materials (ACM) at the City of Lake Forest Municipal facility located at 110 East Laurel Avenue, Lake Forest, Illinois, 60045. The asbestos inspection was performed on October 15-17, 2008. Nine garages and storage buildings were included in this inspection. Building H, which is a modular structure was not inspected as it is a portable structure and can be moved intact. This comprehensive inspection was intended to address the potential existence of ACM on the interior and exterior prior to planned demolition.

Section 2:

Protocol:

The bulk sampling strategy is based upon the protocol of homogeneous areas established by the United States Environmental Protection Agency (US EPA). A homogeneous sampling area (HSA) is defined as an area of material that is uniform in color, texture, construction, general appearance, and date of installation.

Bulk samples of suspect ACM were analyzed by Polarized Light Microscopy (PLM) utilizing the EPA-600/M4-82-020 Method. Bulk samples were analyzed using Asbestos Hazard Emergency Response Act (AHERA) "positive stop" protocol, meaning each sample of each HSA group is analyzed until asbestos is found in the HSA or all samples in the group are analyzed and are negative for asbestos content.

Section 3:

Building Descriptions:

Building A – Building A is a one-story, U-shaped building that is used for storage and as a garage. The east side is used as storage. The north and west sides are used as garage space. The building is block and brick with a flat roof and a partial gabled roof.

Building B – Building B is a one-story, rectangular building that is used for storage. The building is wooden framed and sided with a gabled roof.

Building C – Building C is a one-story, rectangular building that is used for storage. The building is block with a flat roof.

Building E – Building E is a one-story, rectangular building that is used for storage. The building is wooden framed and sided with a gabled roof.

Building G – Building G is a one-story, rectangular, brick building used as an office for the public works department. It has a flat roof section and a gabled roof section.

Building I – Building I is a one-story, rectangular building that is used for storage. The building is block and brick with a flat roof.

Building J – Building J is a one-story, rectangular building that is used for vehicle maintenance and storage. The building is block and brick with a flat roof.

Building K – Building K is a one-story, rectangular building that is used for road salt storage. The building is block and brick with a flat roof.

Maintenance Garage – The maintenance garage was added to the main building in 1983. The maintenance garage is a one-story block and brick building resting on a slab on grade foundation. The maintenance garage is approximately 2,500 square feet in size.

Section 4:

Scope of Work:

The inspection was to address the following objectives:

- Observe, assess, and collect bulk samples of friable and non-friable asbestos containing building materials within the specific scope of work.
- The inspection was intended to identify all homogeneous areas, and did not attempt to identify or address any other environmental health hazards.
- The scope of work did not include identifying all potential concerns or eliminate possible risks.

A total of thirty (30) HSA's were identified within the scope of work. Out of the thirty (30) HSA's, five (5) of the HSA's tested positive for asbestos content and three (3) HSA's were assumed to be asbestos-containing materials:

Asbestos-Containing Materials:

- **MRB – Building A – Silver Roofing Patch**
- **MMA – Building C – White Door Caulking**
- **MRA – Building C – Black Roofing Field**
- **MRA – Building G – Black Roofing Field – Flat Roof**
- **MFB – Building G – Leveler/Black Mastic**

Assumed Asbestos-Containing Materials:

- **MRA – Roofing – Building I**
- **MRA – Roofing – Building J**
- **MRA – Roofing – Building K**

Section 5:

Executive Summary:

Standard practice requires that the owner provide Certified-As-Built drawings for review by the inspector. At the time of the inspection, these drawings were not available. Therefore, the accuracy of the inspection can only be based on the materials that were accessible or known about prior to the inspection. If a suspect material is identified during renovation or demolition, all work shall stop immediately until the materials can be sampled for asbestos content.

MEC was unable to perform destructive sampling of wet walls to quantify thermal systems pipe and fitting insulation. Prior to demolition, further investigation of these areas should be performed.

During demolition, it is recommended that a project design, project oversight, and air monitoring be in place prior to any asbestos abatement work being conducted. An Illinois Department of Public Health licensed asbestos abatement contractor must be in place prior to any asbestos abatement activities.

Prior to any planned demolition taking place, Midwest Environmental Consulting Services, Inc., strongly recommends that either the client contact Midwest Environmental Consulting Services, Inc., or the Illinois Department of Public Health in regards to current rules and regulations.

Although Midwest Environmental Consulting Services, Inc., has attempted to identify all suspect asbestos materials located on the inside of the building; some materials may have been inaccessible. Midwest Environmental Consulting Services, Inc. makes no warranty, expressed or implied.

Respectfully Submitted,

Midwest Environmental Consulting Services, Inc.



Steven Charron
Building Inspector
(IDPH #100-04843)

SECTION 2:

ACM TABLE

Midwest Environmental Consulting Services, Inc.
 4 Bonnie Lane
 Yorkville, IL 60560
 630-553-3989

Project Date: 10/16/08

Asbestos Bulk Sample Field Summary

Client: City of Lake Forest Location: Lake Forest Municipal Facility Project #: 08-09-443-INSP
 Address: 110 E. Laurel Avenue, Lake Forest, IL Inspector: Steven Charron #100-04843

HSA #	Material Description	Location	Approx. Quantity	ACM Yes/No	Comments
MMA	Plaster Board	Building A – North and West Ceilings	800 S.F.	No	
MDA	Drywall Backer Board	Building A – North and West Ceilings	800 S.F.	No	
MRA	Roofing Field – Black	Building A – North and West Roofs	1,550 S.F.	No	
MRB	Roofing Patch – Silver	Building A – North and West Roofs	200 S.F.	Yes	
MRC	Roofing Shingles – White	Building A – East Roof	1,600 S.F.	No	
MRD	Roofing Felt Paper	Building A – East Roof	1,600 S.F.	No	
MMB	Caulking – White	Building A – Windows	10 Windows	No	
MMC	Floor Tile Mastic – Black	Building A – East Floor	1,000 S.F.	No	
MDB	Drywall/Tape/Joint Compound	Building A – Walls/Ceilings	1,000 S.F.	No	
MMD	Wall Panel – Orange/Silver	Building A – Interior Walls	200 S.F.	No	
MRA	Roofing Shingles – White	Building B – Roof	2,000 S.F.	No	

Inspection performed for:
CITY OF LAKE FOREST
 110 East Laurel Avenue
 Lake Forest, Illinois 60045
 MEC Project #08-09-443-INSP

Midwest Environmental Consulting Services, Inc.
 4 Bonnie Lane
 Yorkville, IL 60560
 630-553-3989

Project Date: 10/16/08

Asbestos Bulk Sample Field Summary

Client: City of Lake Forest Location: Lake Forest Municipal Facility Project #: 08-09-443-INSP
 Address: 110 E. Laurel Avenue, Lake Forest, IL Inspector: Steven Charron #100-04843

HSA #	Material Description	Location	Approx. Quantity	ACM Yes/No	Comments
MMA	Roofing Felt Paper – Black	Building B – Roof	2,000 S.F.	No	
MMA	Caulking – White	Building C – Doors	2 Doors	Yes	
MRA	Roofing Field – Black	Building C – Roof	2,000 S.F.	Yes	
MRA	Roofing Field – Black	Building E – Roof	1,000 S.F.	No	
MRB	Roofing Felt Paper – Black	Building E – Roof	1,000 S.F.	No	
MRC	Roofing Tar – Black	Building E – Roof	1,000 S.F.	No	
MMA	Caulking – White	Building G – Doors/Windows	5 Doors/ Windows	No	
MRA	Roofing Field – Black	Building G – Flat Roof	144 S.F.	Yes	
MDA	Drywall/Tape/Joint Compound	Building G – Walls/Ceilings	Unknown	No	
MFA	Linoleum – Tan	Building G – Bathroom	50 S.F.	No	
MFB	Leveler/Mastic – Black	Building G – Floor	480 S.F.	Yes	

Inspection performed for:
CITY OF LAKE FOREST
 110 East Laurel Avenue
 Lake Forest, Illinois 60045
 MEC Project #08-09-443-INSP

Midwest Environmental Consulting Services, Inc.
 4 Bonnie Lane
 Yorkville, IL 60560
 630-553-3989

Project Date: 10/16/08

Asbestos Bulk Sample Field Summary

Client: City of Lake Forest Location: Lake Forest Municipal Facility Project #: 08-09-443-INSP
 Address: 110 E. Laurel Avenue, Lake Forest, IL Inspector: Steven Charron #100-04843

HSA #	Material Description	Location	Approx. Quantity	ACM Yes/No	Comments
MMA	Caulking – White	Building I – Doors	410 L.F.	No	
MRA	Roofing Field – Black	Building I – Roof	3,000 S.F.	Yes	Assumed ACM. No photo available.
MCA	2x4 Lay-in Ceiling Tiles – White with Fissures	Building J – Bathrooms/Lunchroom	200 S.F.	No	
MMA	Caulking – White	Building J – Doors	500 L.F.	No	
MRA	Roofing Field – Black	Building J – Roof	4,000 S.F.	Yes	Assumed ACM. No photo available.
MMA	Caulking – White	Building K – Doors	140 L.F.	No	
MRA	Roofing Field – Black	Building K – Roof	4,200 S.F.	Yes	Assumed ACM. No photo available.
MMA	Caulking – White	Maintenance Garage – Doors	250 L.F.	No	

Inspection performed for:
CITY OF LAKE FOREST
 110 East Laurel Avenue
 Lake Forest, Illinois 60045
 MEC Project #08-09-443-INSP

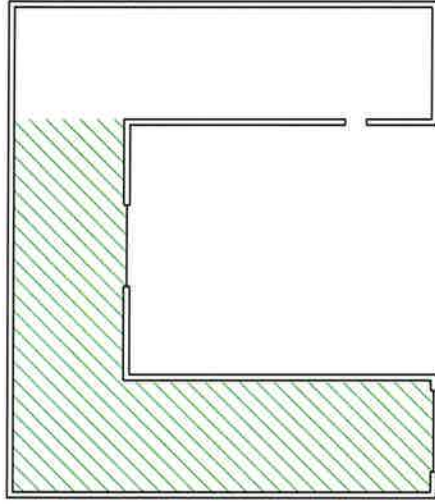
SECTION 3:

DRAWINGS OF HOMOGENEOUS AREAS

HOMO:
 DESCRIPTION:
 QUANTITY:
 ACW:

MMA
 Plaster Board
 800 S.F.
 No

COMMENTS:



NORTH



1ST FLOOR - BUILDING "A"

REVISIONS			
NO.	DATE	Rev. By	File Name: 08-09-443
			Date: 10-27-08
			Drawn By: JQ Scale: NTS

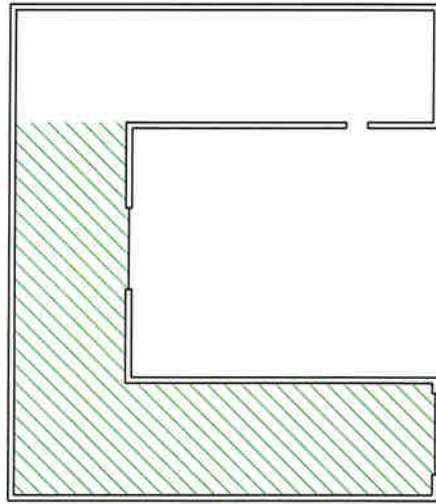
Consultant:
 Midwest Environmental
 Consulting Services, Inc.
 4 Bonnie Lane
 Yorkville IL 60560
 Ph 630 553.3988

Project:
 Nine Remaining Buildings
 110 East Laurel
 Lake Forest, IL 60045

City of Lake Forest
 110 East Laurel
 Lake Forest, IL 60045

HOMO:
 DESCRIPTION:
 QUANTITY:
 ACFT:

COMMENTS:



1ST FLOOR - BUILDING "A"

REVISIONS			
NO.	DATE	Rev. By	File Name: 08-09-443
			Date: 10-27-08
			Drawn By JQ Scale: NTS

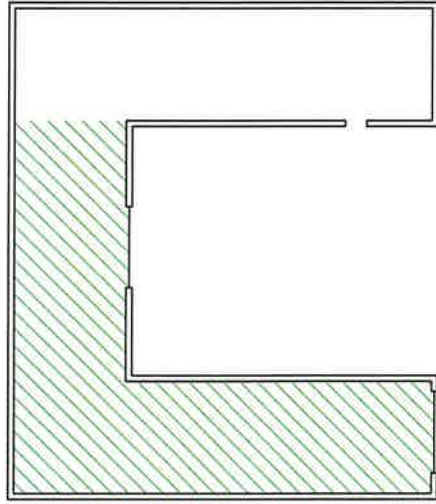
Consultant:
 Midwest Environmental
 Consulting Services, Inc.
 4 Bonnie Lane
 Yorkville, IL 60560
 Ph. 630.553.3989

Project:
 Nine Remaining Buildings
 110 East Laurel
 Lake Forest, IL 60045

City of Lake Forest
 110 East Laurel
 Lake Forest, IL 60045

HOMO:
DESCRIPTION: MRA
QUANTITY: Roofing Field - Black
ACM: 1,550 S.F.
 No

COMMENTS:



ROOF - BUILDING "A"

REVISIONS			
NO.	DATE	Rev. By	File Name: 08-09-443
			Date: 10-27-08
			Drawn By: JDC
			Scale: NTS

City of Lake Forest 110 East Laurel Lake Forest, IL 60045	Project: Nine Remaining Buildings 110 East Laurel Lake Forest, IL 60045	Consultant: Midwest Environmental Consulting Services, Inc. 4 Bonnie Lane Yorkville, IL 60560 Ph. 630.553.3989
--	---	--