REBUILDING ROCKFORD 2012

Asbestos Reports - Full Version

<u>CITY OF ROCKFORD</u>	**BID ON:**	**West State Street Demolitions Package C - 2012**
PUCHASING DIVISION		
CITY HALL BUILDING	**BID NO.:**	**312-PW-032**
425 EAST STATE STREET	**BID DATE:**	**Wednesday, October 3, 2012**
ROCKFORD, IL 61104	**TIME:**	**11:00 AM**

NOTICE TO CONTRACTORS, INSTRUCTION TO BIDDERS, SPECIFICATIONS AND PROPOSAL

andersonenveng.com | 815.962.9000 124 N. Water St., Suite 206 | Rockford, IL 61107 | fax 815.962.7978

Anderson
environmental&engineering

April 23, 2012

City of Rockford
Attn: Ryan Lundberg
425 E. State Street
Rockford, IL 61107

Re: Preliminary Asbestos Inspection, 1137 West State Street, Rockford, Illinois
AEE Job #133.77

Dear Mr. Lundberg:

On April 10, 2012 a non-destructive NESHAP preliminary inspection was performed at 1137 West State Street, Rockford, Illinois. Certified Asbestos Inspector Jennifer Anderson (100-07971) performed the inspection in order to determine the presence of asbestos within the building materials. The inspection consisted of visual observation, non-destructive bulk sampling of building materials, and laboratory analysis of suspect asbestos containing building materials by a laboratory that successfully participates in the AIHA Proficiency Analytical Testing (PAT) program. Samples were submitted to Micro Analytical in Milwaukee, WI, for analysis by polarized light microscopy (PLM). The type and quantity (percentage) of asbestos are identified by polarized light microscopy (PLM) following preparation and identification protocols recommended by the National Institute for Occupation Safety and Health (NIOSH) and the National Voluntary Laboratory Accreditation Program (NVLAP).

FRIABLE ASBESTOS – material can be crumbled, pulverized, or reduced to powder by hand pressure; these materials must be removed prior to demolition activities and should be addressed during renovation activities that would disturb the material, such as thermal system insulation. The following friable asbestos containing materials were identified:

- Duct insulation (50% Chrysotile)
- Yellow/gold sheet linoleum in bathroom on 1st floor (20% Chrysotile)
- Green hexagon sheet linoleum in hall and kitchen on 1st floor (20% Chrysotile)
- Green sheet linoleum in bathroom on 1st floor (20% Chrysotile)
- Stone pattern sheet linoleum in hallway on 2nd floor (20% Chrysotile)
- Grey/beige sheet linoleum in bathroom on 2nd floor (20% Chrysotile)

CATEGORY 1 NON-FRIABLE – material is pliable (not brittle), breaks by tearing rather than fracturing and does not easily release asbestos fibers upon breaking; these materials should be addressed during renovation activities that would disturb the material, but do not need removal prior to demolition activities (handled as demolition material at a certified landfill) if they are in good condition and not rendered friable during handling, transporting, and disposal. However, most asbestos containing building materials on concrete substrate are removed prior to demolition activities to reduce the overall cost due to landfill charges and the fact that concrete cannot be left on site or recycled with these materials in place. Category I Non-Friable materials include resilient floor coverings, asphalt roofing materials, gaskets, and packing. The following types of Category I Non-Friable asbestos were identified:

- Roofing Tar (7% Chrysotile)

*Please Note: non-friable asbestos containing materials in **good** condition that fall under Category I, such as flooring and/or mastics on wood substrate and roofing materials are not **required** to be removed prior to demolition per the USEPA 40 CFR Part 61 National Emissions Standards for Hazardous Air Pollutants (NESHAP); Final Rule, dated November 20, 1990. However, while demolition is being performed the material must be kept wet and all debris must go to an approved landfill that accepts demolition debris and does not burn, crush, grind or recycle the material. In addition, you must have a trained individual knowledgeable in the provisions of 40 CFR Part 61, Subpart M, on site during the demolition and available for inspection during normal business hours. If material becomes damaged or rendered friable during demolition, proper abatement procedures must immediately be instituted.*

CATEGORY II NON-FRIABLE – material is not pliable, breaks by fracturing rather than tearing, and does release some asbestos fibers upon breaking; these materials should be addressed during renovation activities that would disturb the material and are removed prior to demolition activities since they are normally rendered friable during demolition and/or handling, transporting and disposal. Category II Non-Friable materials include any non-friable asbestos containing material that is not in Category I (i.e. transite siding). The following types of Category II Non-Friable asbestos were identified:

- None

NON ASBESTOS CONTAINING MATERIALS – The following materials were tested and found to contain *no* asbestos (or less than1%):

- Brick and mortar
- Window glazing (<1% Chrysotile by PLM, <0.25% Chrysotile by point count method)
- Window caulk
- Red brick sheet linoleum on stairs and entryway
- Beige/pink sheet linoleum in bathroom on 1st floor
- Yellow wall mastic in bathroom on 1st floor
- Plaster throughout
- Beige sheet linoleum in bathroom on 1st floor
- Carpet mastic throughout
- Electric wire insulation throughout
- Black underlayment under green hexagon linoleum in kitchen on 1st floor
- Beige/white 12” x 12” floor tile and mastic in bathroom on 2nd floor
- White 4” x 4” ceramic wall tile, grout and mastic in bathroom on 2nd floor
- Beige/brown sheet linoleum with multiple layers in kitchen on 2nd floor
- Wallboard behind plaster throughout
- Kitchen wallboard and mastic in kitchen on 2nd floor

- Chimney brick and mortar in attic
- Roofing shingles

EPA guidance recommends analysis of non-friable materials by PLM with gravimetric reduction due to the high number of false negative PLM analyses for these types of materials. Asbestos fibers in these materials are often below the detection capabilities of the optical PLM microscope and can not be detected. Gravimetric reduction includes high temperature ashing and acid digestion and is normally performed prior to Transmission Electron Microscopy (TEM) analysis. Gravimetric reduction of non-friable samples prior to PLM analysis enhances the detection of fibers. If no asbestos is detected by this method, TEM is recommended for definitive analysis.

Due to the distinct possibility that conditions may exist which could not be identified within the scope of this preliminary inspection or which were not apparent during the site visit, any additional material discovered that has not been listed above must be assumed to be asbestos containing; or, if non-friable material becomes damaged or rendered friable during the renovation/demolition activities, proper abatement procedures must immediately be instituted. You must have a trained individual knowledgeable in the provisions of 40 CFR Part 61, Subpart M, on site during the demolition and available for inspection during normal business hours. It is recommended that this report be sent to the demolition contractor as well.

If you have any questions, please feel free to contact me at 815/962-9000. Thank you for the opportunity to serve you on this project.

Sincerely,

Jennifer L. Anderson
President

Attachment A - Laboratory Analytical Reports
Attachment B – Photographs
Attachment C – Quantities and Budgetary Estimate

Exhibit A

MICRO ANALYTICAL, INC.

11521 West North Avenue
Milwaukee, WI 53226
(800) 771-9820 (414) 771-0855
Fax: (414) 771-6570

BULK ASBESTOS ANALYTICAL REPORT
Utilizing PLM and Dispersion Stain Technique

Customer: Anderson Environmental
& Engineering, Co.
124 N. Water Street-Suite 206
Rockford , IL 61107

Report #: 116945
Received: 11-Apr-2012
Analyzed: 17-Apr-2012

Job ID: 133.77

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
1A	None Detected		100%	Multi-Colored	Compact
1B	None Detected		100%	Multi-Colored	Compact
1C	None Detected		100%	Multi-Colored	Compact
2A	None Detected		100%	Off-White	Compact
2B	<1% Chrysotile		100%	Gray	Compact
2C	<1% Chrysotile		100%	Gray	Compact
3A	None Detected		100%	Off-White	Resinous
3B	None Detected		100%	Off-White	Resinous
3C	None Detected		100%	Off-White	Resinous
4A	None Detected	40% Cellulose	60%	Red	Linoleum
4A II	None Detected		100%	Brown	Mastic
4B	None Detected		100%	Multi-Colored	Linoleum
4C	None Detected	40% Cellulose	60%	Red	Linoleum
4C II	None Detected		100%	Brown	Mastic
5A	20% Chrysotile	10% Cellulose	70%	Multi-Colored	Linoleum
6A	20% Chrysotile	10% Cellulose	70%	Green	Linoleum
7A	None Detected	<1% Fibrous Glass 30% Cellulose	70%	Tan	Linoleum
7A II	None Detected		100%	Tan	Mastic

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
7B	None Detected	<1% Fibrous Glass 30% Cellulose	70%	Multi-Colored	Linoleum
7B II	None Detected		100%	Tan	Mastic
7C	None Detected	<1% Fibrous Glass 30% Cellulose	70%	Multi-Colored	Linoleum
7C II	None Detected		100%	Tan	Mastic
8A	20% Chrysotile	10% Cellulose	70%	Multi-Colored	Linoleum
8A II	None Detected	50% Cellulose	50%	Black	Compressed
8B II	None Detected	50% Cellulose	50%	Black	Compressed
8C II	None Detected	50% Cellulose	50%	Black	Compressed
9A	None Detected		100%	Tan	Mastic
9B	None Detected		100%	Tan	Mastic
9C	None Detected		100%	Tan	Mastic
10A	None Detected		100%	Off-White	Compact
10B	None Detected		100%	Gray	Compact
10C	None Detected		100%	Gray	Compact
10D	None Detected	<1% Hair	100%	Gray	Compact
10E	None Detected		100%	Multi-Colored	Compact
11A	None Detected	<1% Fibrous Glass 27% Cellulose 3% Synthetic Fiber	70%	Tan	Linoleum
11A II	None Detected		100%	Tan	Mastic
11B	None Detected	<1% Fibrous Glass 27% Cellulose 3% Synthetic Fiber	70%	Tan	Linoleum
11B II	None Detected		100%	Tan	Mastic
11C	None Detected	<1% Fibrous Glass 27% Cellulose 3% Synthetic Fiber	70%	Tan	Linoleum
11C II	None Detected		100%	Tan	Mastic
12A	None Detected		100%	Tan	Mastic
12B	None Detected		100%	Tan	Mastic
12C	None Detected		100%	Tan	Mastic
13A	50% Chrysotile	25% Cellulose	25%	Gray	Compressed

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
14A	None Detected	40% Cellulose	60%	Multi-Colored	Insulated Wire
14B	None Detected	50% Cellulose	50%	Multi-Colored	Insulated Wire
14C	None Detected	50% Cellulose	50%	Multi-Colored	Insulated Wire
15A	None Detected	40% Cellulose	60%	Multi-Colored	Linoleum
15A II	None Detected		100%	Brown	Mastic
15A III	None Detected	50% Cellulose	50%	Black	Compressed
15A IV	None Detected		100%	Brown	Mastic
15B	None Detected	45% Cellulose	55%	Multi-Colored	Linoleum
15B II	None Detected		100%	Brown	Mastic
15B III	None Detected	50% Cellulose	50%	Black	Compressed
15B IV	None Detected		100%	Brown	Mastic
15C	None Detected	40% Cellulose	60%	Multi-Colored	Linoleum
15C II	None Detected		100%	Brown	Mastic
15C III	None Detected	50% Cellulose	50%	Black	Compressed
15C IV	None Detected		100%	Brown	Mastic
16A	20% Chrysotile	10% Cellulose	70%	Multi-Colored	Linoleum
17A	20% Chrysotile	10% Cellulose	70%	Tan	Linoleum
18A	None Detected		100%	Multi-Colored	Floortile
18A II	None Detected		100%	Tan	Mastic
18B	None Detected		100%	Multi-Colored	Floortile
18B II	None Detected		100%	Tan	Mastic
18C	None Detected		100%	Multi-Colored	Floortile
18C II	None Detected		100%	Tan	Mastic
19A	None Detected		100%	Off-White	Ceramic Tile
19A II	None Detected		100%	Tan	Mastic
19B	None Detected		100%	Off-White	Ceramic Tile
19B II	None Detected		100%	Tan	Mastic

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
19C	None Detected		100%	Off-White	Ceramic Tile
19C II	None Detected		100%	Tan	Mastic
20A	None Detected	2% Fibrous Glass	98%	Brown	Linoleum
20A II	None Detected		100%	Tan	Mastic
20A III	None Detected	40% Cellulose	60%	Red	Linoleum
20A IV	None Detected		100%	Brown	Mastic
20A V	None Detected	40% Cellulose	60%	Multi-Colored	Linoleum
20A VI	None Detected		100%	Brown	Mastic
20B	None Detected	3% Fibrous Glass	97%	Brown	Linoleum
20B II	None Detected		100%	Tan	Mastic
20B III	None Detected	40% Cellulose	60%	Red	Linoleum
20B IV	None Detected		100%	Brown	Mastic
20B V	None Detected	50% Cellulose	50%	Black	Compressed
20B VI	None Detected		100%	Brown	Mastic
20C	None Detected	3% Fibrous Glass	97%	Brown	Linoleum
20C II	None Detected		100%	Tan	Mastic
20C III	None Detected	40% Cellulose	60%	Red	Linoleum
20C IV	None Detected		100%	Brown	Mastic
20C V	None Detected	50% Cellulose	50%	Black	Compressed
20C VI	None Detected		100%	Brown	Mastic
21A	None Detected	10% Cellulose	90%	Off-White	Compact
21B	None Detected	10% Cellulose	90%	Off-White	Compact
21C	None Detected	10% Cellulose	90%	Off-White	Compact
22A	None Detected	85% Cellulose	15%	Brown	Compressed
22A II	None Detected		100%	Tan	Mastic
22B	None Detected	85% Cellulose	15%	Brown	Compressed
22B II	None Detected		100%	Tan	Mastic
22C	None Detected	85% Cellulose	15%	Brown	Compressed
22C II	None Detected		100%	Tan	Mastic
23A	None Detected		100%	Multi-Colored	Compact
23B	None Detected		100%	Multi-Colored	Compact
23C	None Detected		100%	Multi-Colored	Compact

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
24A	7% Chrysotile		93%	Black	Resinous

Analyzed By: Kevin Hachey

Test method: EPA/600/R-93/116. Quantitation is done by Calibrated Visual Estimation which has an accepted Relative Percent Difference of 35. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This test report relates only to the items tested and shall not be reproduced except in full, without the written approval of MICRO ANALYTICAL, INC.

Anderson
environmental&engineering

SAMPLE LOG & SAMPLE NOTES

Date: 4/10/12

Day of Week: Tuesday

Page 1 of 3

THIS IS A CHAIN-OF-CUSTODY DOCUMENT.
PLEASE FILL IT OUT COMPLETELY AND SIGN ACCORDINGLY.

Job Name: 1137 W. State Street Job # 133.77

Building Name: Apartment Building

Sample Area/Lot Number and Name:

Sample Number	Photo Number	Description of Sampled Material	Sample Site Location
1ABC	1	BRICK AND MORTAR	EXTERIOR
2ABC	2	WINDOW GLAZING	EXTERIOR
3ABC	3	WINDOW CAULK	EXTERIOR
4ABC	4	RED BRICK SHEET LINOLEUM	KITCHEN 1ST FLOOR
5ABC	5	YELLOW/GOLD SHEET LINOLEUM	BATHROOM 1ST FLOOR
6ABC	6	GREEN HEXAGON SHEET LINOLEUM	HALL/KITCHEN 1ST FLOOR
7ABC	7	BEIGE/PINK SHEET LINOLEUM	BATHROOM 1ST FLOOR
8ABC	8	GREEN SHEET LINOELUM (FADED RED)	BATHROOM 1ST FLOOR
9ABC	9	YELLOW WALL MASTIC	BATHROOM 1ST FLOOR
10ABCDE	10	PLASTER	THROUGHOUT
11ABC	11	BEIGE SHEET LINOLEUM	BATHROOM 1ST FLOOR

NOTE: IF MAILED, HAVE CARRIER PROVIDED SIGNED PICK-UP AND DELIVERY RECEIPTS TO BE ATTACHED TO THE ORIGINAL OF THIS DOCUMENT.

Faxed (815) 962-7978 Y N
Process Speed: S V N
Date results requested: HC _____ Verbal _____

Receiving Analyst's Name	Receiving Analyst's Firm	Inspector's Name	Inspector's Firm
		Jennifer L. Anderson AII-12247; 100-07971	Anderson Environmental & Engineering, Co.

Receiving Analyst's Signature	Date Samples Received	Inspector's Signature	Date Samples Collected
	4/11/12		4/10/12

Anderson
environmental&engineering

SAMPLE LOG & SAMPLE NOTES

Date: 4/10/12

Day of Week: Tuesday

Page 2 of 3

THIS IS A CHAIN-OF-CUSTODY DOCUMENT.
PLEASE FILL IT OUT COMPLETELY AND SIGN ACCORDINGLY.

Job Name: 1137 W. State Street Job # 133.77

Building Name: Apartment Building

Sample Area/Lot Number and Name:

Sample Number	Photo Number	Description of Sampled Material	Sample Site Location
12ABC	12	CARPET MASTIC (YELLOW)	THROUGHOUT
13ABC	13	DUCT INSULATION	THROUGHOUT
14ABC	14	ELECTRIC WIRE INSULATION/BLACK CLOTH	THROUGHOUT
15ABC	15	BLACK UNDERLAYMENT UNDER GREEN HEXAGON LINOLEUM	KITCHEN 1ST FLOOR
16ABC	16	STONE PATTERN SHEET LINOLEUM	HALLWAY 2ND FLOOR
17ABC	17	GREY/BEIGE SHEET LINOLEUM	BATHROOM 2ND FLOOR
18ABC	18	BEIGE/WHITE 12" X 12" FLOOR TILE AND MASTIC	BATHROOM 2ND FLOOR
19ABC	19	WHITE 4" X 4" CERAMIC WALL TILE, GROUT AND MASTIC	BATHROOM 2ND FLOOR
20ABC	20	BEIGE/BROWN SHEET LINOLEUM WITH MULTIPLE LAYERS – BLACK/TAN/REDDISH-BROWN	KITCHEN 2ND FLOOR
21ABC	21	WALLBOARD BEHIND PLASTER	THROUGHOUT
22ABC	22	KITCHEN WALLBOARD AND MASTIC	KITCHEN 2ND FLOOR

NOTE: IF MAILED, HAVE CARRIER PROVIDED SIGNED PICK-UP AND DELIVERY RECEIPTS TO BE ATTACHED TO THE ORIGINAL OF THIS DOCUMENT.

Faxed (815) 962-7978 Y N
Process Speed: S V N
Date results requested: HC _____ Verbal _____

Receiving Analyst's Name	Receiving Analyst's Firm	Inspector's Name	Inspector's Firm
		Jennifer L. Anderson AII-12247; 100-07971	Anderson Environmental & Engineering, Co.

Receiving Analyst's Signature	Date Samples Received	Inspector's Signature	Date Samples Collected
	4/11/12	Jennifer L. Anderson	4/10/12

Anderson
environmental&engineering

SAMPLE LOG & SAMPLE NOTES

Date: 4/10/12

Day of Week: Tuesday

Page 3 of 3

THIS IS A CHAIN-OF-CUSTODY DOCUMENT.
PLEASE FILL IT OUT COMPLETELY AND SIGN ACCORDINGLY.

Job Name: 1137 W. State Street Job # 133.77

Building Name: Apartment Building

Sample Area/Lot Number and Name:

Sample Number	Photo Number	Description of Sampled Material	Sample Site Location
23ABC	23	CHIMNEY BRICK AND MORTAR	ATTIC
24ABD	24	ROOFING SHINGLE AND TAR	ROOF

NOTE: IF MAILED, HAVE CARRIER PROVIDED SIGNED PICK-UP AND DELIVERY RECEIPTS TO BE ATTACHED TO THE ORIGINAL OF THIS DOCUMENT.

Faxed (815) 962-7978 Y N
Process Speed: S V N
Date results requested: HC _____ Verbal _____

Receiving Analyst's Name	Receiving Analyst's Firm	Inspector's Name	Inspector's Firm
		Jennifer L. Anderson AII-12247; 100-07971	Anderson Environmental & Engineering, Co.

Receiving Analyst's Signature	Date Samples Received	Inspector's Signature	Date Samples Collected
	4/11/12		4/10/12

MICRO ANALYTICAL, INC.

11521 West North Avenue
Milwaukee, WI 53226
(800) 771-9820 (414) 771-0855
Fax: (414) 771-6570

BULK POINTCOUNT ANALYTICAL REPORT
Utilizing PLM and Dispersion Staining

Customer: Anderson Environmental
& Engineering, Co.
124 N. Water Street-Suite 206
Rockford , IL 61107

Report #: 117119
Received: 19-Apr-2012
Analyzed: 20-Apr-2012

Job ID: 133.77

Sample ID	% Asbestos	Asbestos Type	Color	Description
2B	<0.25	Chrysotile	Gray	Compact
2C	<0.25	Chrysotile	Gray	Compact

Analyzed By: Jon Yakish

Test method: EPA/600/R-93/116. Quantitation is done by Point Count Technique, which has an accepted Relative Percent Difference of 35.
This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This test report relates only to the items tested and shall not be reproduced except in full, without the written approval of MICRO ANALYTICAL, INC.

NVLAP Lab Code 101247-0

Exhibit B

Photo #1
Date: April 10, 2012
Location: Exterior
Description: Brick and mortar

Photo #2
Date: April 10, 2012
Location: Exterior
Description: Window glazing

Photo #3
Date: April 10, 2012
Location: Exterior
Description: Window caulk

Photo #4
Date: April 10, 2012
Location: Stairs and entryway
Description: Red brick sheet linoleum

Photo #5
Date: April 10, 2012
Location: Hallway 1st Floor
Description: Yellow/gold sheet linoleum **(20% Chrysotile)**

Photo #6
Date: April 10, 2012
Location: Hall/Kitchen 1st Floor
Description: Green hexagon sheet linoleum **(20% Chrysotile)**

Photo #7
Date: April 10, 2012
Location: Bathroom 1st Floor
Description: Beige/pink sheet linoleum

Photo #8
Date: April 10, 2012
Location: Bathroom 1st Floor
Description: Green sheet linoleum - Faded red in some areas **(20% Chrysotile)**

Photo #9
Date: April 10, 2012
Location: Bathroom 1st Floor
Description: Yellow wall mastic

Photo #10
Date: April 10, 2012
Location: Throughout
Description: Plaster

Photo #11
Date: April 10, 2012
Location: Bathroom 1st Floor
Description: Beige sheet linoleum

Photo #12
Date: April 10, 2012
Location: Throughout
Description: Carpet mastic (yellow)

Photo #13
Date: April 10, 2012
Location: Throughout
Description: Duct insulation
(50% Chrysotile)

Photo #14
Date: April 10, 2012
Location: Throughout
Description: Electric wire insulation/ Black cloth

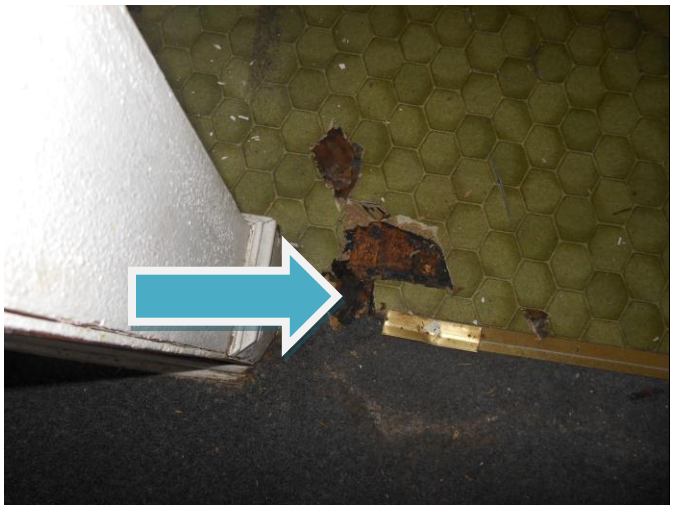


Photo #15
Date: April 10, 2012
Location: Kitchen 1st Floor
Description: Black underlayment under green hexagon linoleum

Photo #16
Date: April 10, 2012
Location: Hallway 2nd Floor
Description: Stone pattern sheet linoleum **(20% Chrysotile)**

Photo #17
Date: April 10, 2012
Location: Bathroom 2nd Floor
Description: Grey/beige sheet linoleum **(20% Chrysotile)**

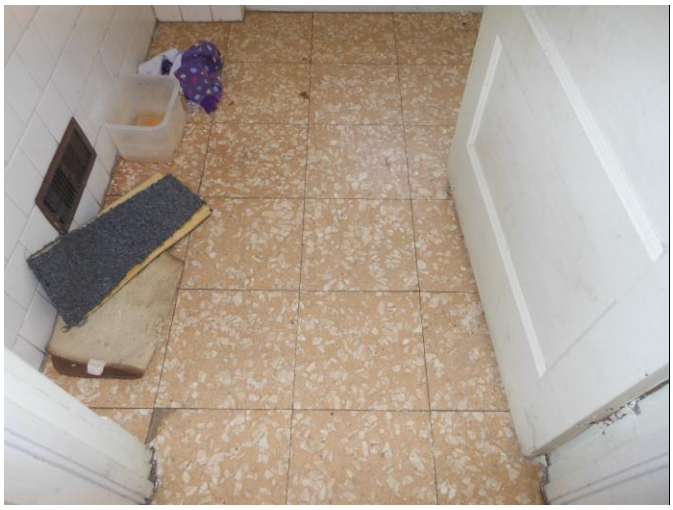


Photo #18
Date: April 10, 2012
Location: Bathroom 2nd Floor
Description: Beige/white 12”x12” floor tile and mastic

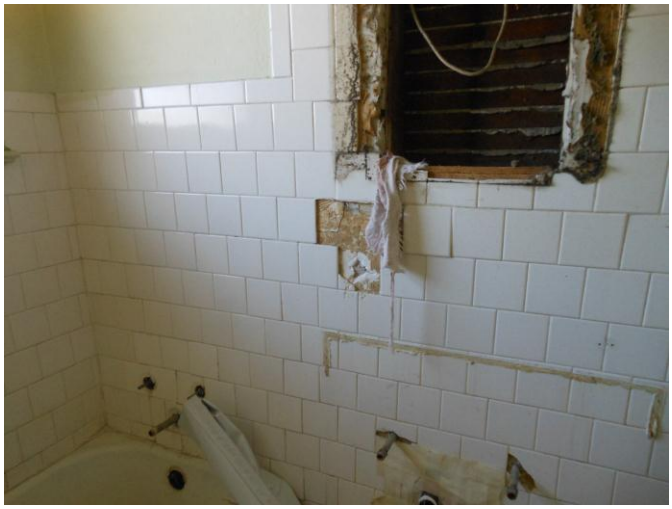


Photo #19
Date: April 10, 2012
Location: Bathroom 2nd Floor
Description: White 4”x4” ceramic wall tile, grout and mastic

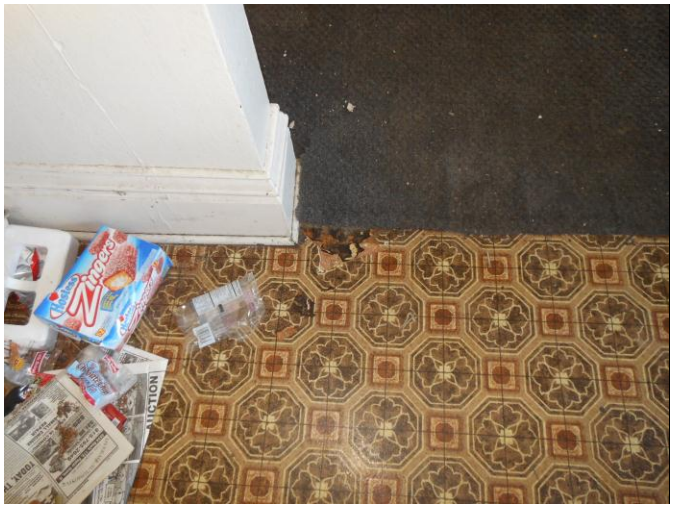


Photo #20
Date: April 10, 2012
Location: Kitchen 2nd Floor
Description: Beige/brown sheet linoleum with multiple layers – Black/tan/reddish-brown

Photo #21
Date: April 10, 2012
Location: Throughout
Description: Wallboard behind plaster

Photo #22
Date: April 10, 2012
Location: Kitchen 2nd Floor
Description: Kitchen wallboard and mastic

Photo #23
Date: April 10, 2012
Location: Attic
Description: Chimney brick and mortar

Photo #24
Date: April 10, 2012
Location: Roof
Description: Roofing shingle (non-ACM) and tar **(7% Chrysotile)**

Exhibit C

Table 1 - Asbestos Containing Materials
Summary of Results
1137 West Main Street, Rockford, IL

Material Description	Material Location	Asbestos Type	Material Condition	Quantity	Removal cost/unit
Roofing Tar	Roof	7% Chrysotile	Good	N/A	Leave in place for demolition
Yellow/gold sheet linoleum	Hall on 1st floor	20% Chrysotile	Good	24 s.f.	
Green hexagon sheet linoleum	Hall/kitchen on 1st floor	20% Chrysotile	Good	150 s.f.	
Green sheet linoleum	Bathroom on 1st floor	20% Chrysotile	Good	36 s.f.	
Duct Insulation	Basement	50% Chrysotile	Good	6 vents, basement to 2nd floor (480 s.f.)	
Stone pattern sheet linoleum	Hallway on 2nd floor	20% Chrysotile	Good	36 s.f.	
Grey/beige sheet linoleum	Bathroom on 2nd floor	20% Chrysotile	Good	25 s.f.	

- *All quantities are estimated and any contractor should field verify quantities prior to bidding on this work.*

NESHAPS Asbestos

Building Inspection

1216 West State St

Rockford, IL.

Winnebago County

Prepared for:

City of Rockford

Public Works Dept.

425 East State St.

Prepared by:

Ironwood Environmental Inc.

3349 Carbineer Dr.

Belvidere, IL. 61008

Office: 815-877-7547

Fax: 815-877-5905

Ironwood

Environmental Inc.

Ironwood

Environmental Inc.

3349 Carbineer Dr.
Belvidere, IL. 61008
Office 815-877-7547
Fax: 815-877-5905

Mr. Dean Kurth
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

9/12/12

Re: Asbestos building inspection: 1216 West State St, Rkfd. IL. MC1236

Mr. Kurth,

Ironwood Environmental Inc. is pleased to have had the opportunity to complete the NESHAPS pre demolition asbestos building inspection for the property listed above. Jeremy Bonacquisti, IL. asbestos building inspector # 100-6296, has completed a non-destructive asbestos building inspection at the request of the City of Rockford @ the property listed above. The inspection was completed in compliance with EPA regulations under NESHAPS CFR 763.86, for the sole purpose of demolition. Ironwood is not responsible for the presence of acbms existing in undetectable places, such as false walls, pipe chase, etc. All asbestos quantities are estimates. Roofing materials comprised of asphalt have not been tested and are to be assumed asbestos containing. It is the responsibility of the bidding contractor to field verify these quantities. Samples were collected and sent to TEM, an independent EPA / NVLAP approved lab, for PLM determination of the presence of asbestos, “Please refer to TEM report for results, methods, credentials and contacts”.

When preparing for asbestos abatement it is important to determine if the asbestos containing materials (ACMs) are friable or non-friable. Friability is the degree to which a solid substance can be broken up into smaller pieces with a minimum of effort. In the case of asbestos, friable usually refers to whether the mineral can be broken down by a human hand. Friable asbestos materials are the ones that

are most dangerous. They easily release asbestos fibers into the air, and these fibers pose a significant health risk to anyone nearby. Non-friable asbestos, on the other hand, is less likely to release fibers. Roofing material, for example, is a non-friable asbestos-containing material because the asbestos fibers are bound or locked into place. Non-friable asbestos is still a health risk, as it can be made friable if damaged or altered. To further differentiate the potential risks associated with ACMs, the EPA divides non-friable asbestos into two subcategories:

Category I Non-Friable: Includes non-friable materials which are unlikely to be made friable, due to a strong interlocking material which binds the fibers. These materials should only be removed during demolition if they are in very poor condition. Examples include vinyl floor coverings, vinyl asbestos tile, asphalt roofing products and gaskets.

Category II Non-Friable: Includes all non-friable materials which are not Category I. These materials are more likely to be made friable, as they are not resistant to weathering or crushing forces and may be subjected to extreme conditions or excessive use. Examples include cement siding, transite board shingles and concrete-like products.

Regulated Asbestos-Containing Material

Federal regulatory agencies such as the EPA consider the following asbestos materials to be potentially dangerous and thus subject to regulations during the removal or renovation process:

Regulated Asbestos-Containing Material

- All friable ACMs
- Category I non-friable materials which have become friable
- Category I non-friable materials which have been subjected to sanding, grinding, cutting, etc.
- Category II non-friable materials with a high probability of becoming friable during renovation or demolition

If a facility or home will be demolished by burning, all asbestos material, whether it is friable or non-friable, should be removed prior to the demolition procedures.

Sample #	Description	Location	% asbestos	NESHAPS Classification	Condition	Estimated Quantity
01	HVAC tape / insulation	Basement and in walls / ceilings	50-60	Friable regulated	damaged	unknown
02	Attic insulation	attic	None detected	NA	NA	NA
03	Black vinyl floor 1st layer	2nd floor	None detected	NA	NA	NA
04	Black vinyl floor 2nd layer	2nd floor	None detected	NA	NA	NA
05	White flooring 1st layer	Rear room	None detected	NA	NA	NA
06	Black flooring 2nd layer	Rear room	None detected	NA	NA	NA
07	Plaster	throughout	None detected	NA	NA	NA

08	Sheet rock wallboard	throughout	None detected	NA	NA	NA
09	Ceiling texture	1st floor	None detected	NA	NA	NA
10	Window glazing	wood framed windows	2-3	Friable regulated	damaged	10 windows

Sample 01

Sample 02

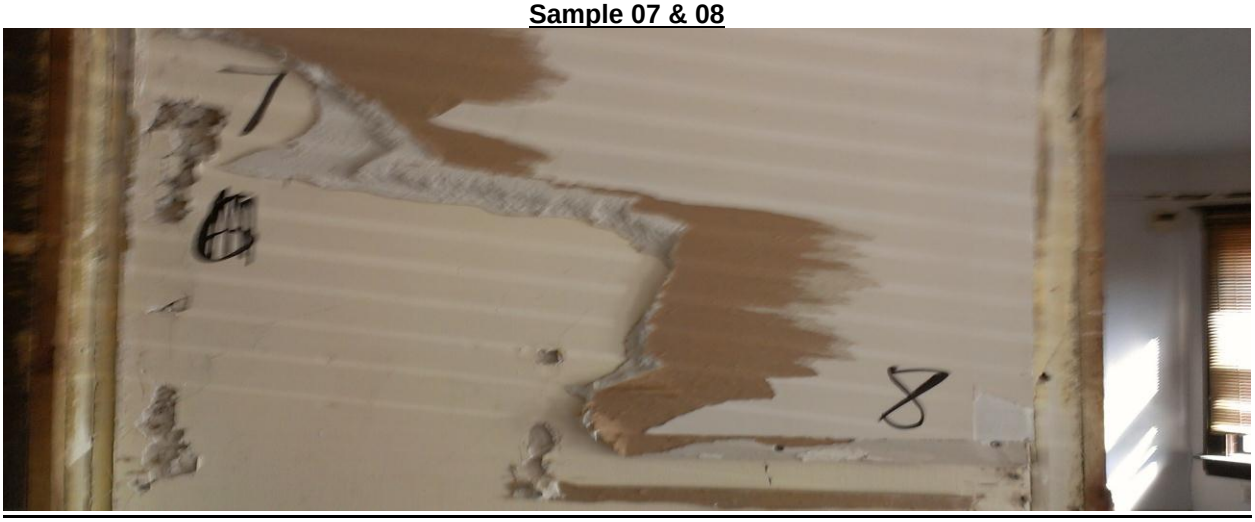
Ironwood

Environmental Inc.

Sample 03 & 04

Sample 05 & 06

Sample 07 & 08

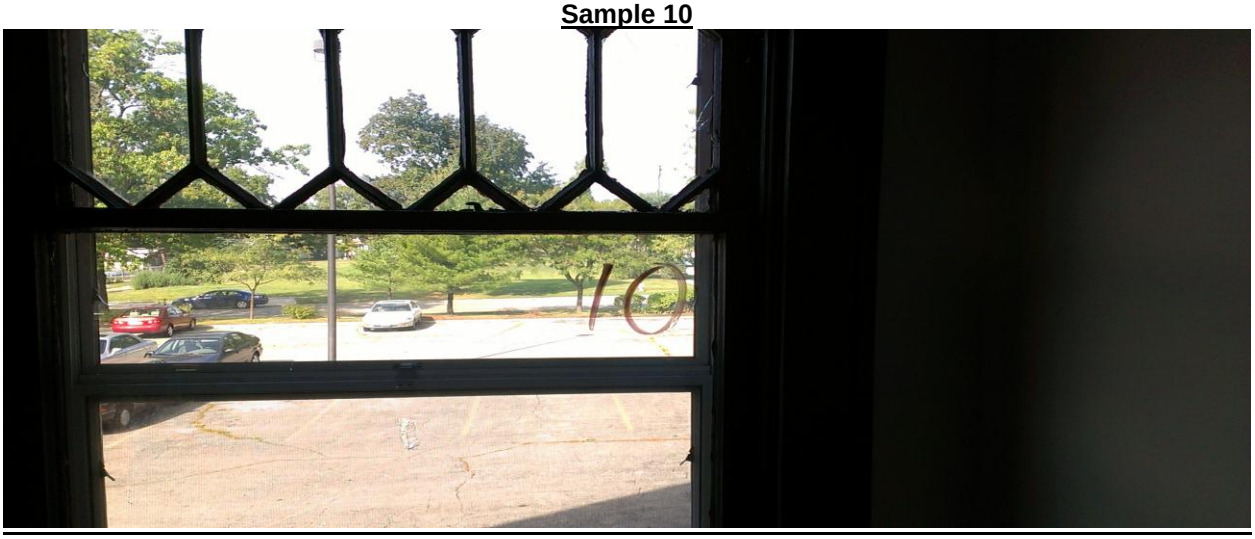


Ironwood

Environmental Inc.

Sample 09

Sample 10



Ironwood

Environmental Inc.

Applicable Regulations:
USEPA NESHAPS (40cfr61, Subpart M)
IEPA (Illinois Administrative Code 35 part 228 asbestos)
IDPH (77 iac 85 asbestos abatement for public and private schools and commercial and public buildings)
OSHA (29 cfr 1926.1101)

Abatement recommendations:
All abatement activities in Illinois must be performed by personal accredited by IEPA and licensed by IDPH. All work practices must comply with applicable US/IEPA, IDPH and OSHA regs.
If roofing material were found to contain asbestos or assumed to contain asbestos, according to USEPA regulations, tar-impregnated roofing felts, asphalt shingles and mastics that are non-friable and will remain that way during demolition need not be abated prior to demolition or landfilled as acm. This does not include controlled burns.
Asbestos floor tile may remain in the structure during demolition, however it must be undamaged prior to demolition and remain that way during demolition. In addition, if floor tile remains in the building during demolition all waste must be treated and landfilled according to NESHAPS regs as acm. Concrete coated with acm mastic may not be used as clean fill or recycled.

If you have any questions please do not hesitate to contact me. 815-378-6113

Thank you.
Respectfully Submitted,

Jeremy Bonacquisti
Ironwood Environmental Inc.

NESHAPS Asbestos

Building Inspection

1305 West State St.

Rockford, IL.

Winnebago County

Prepared for:

City of Rockford

Public Works Dept.

425 East State St.

Prepared by:

Ironwood Environmental Inc.

3349 Carbineer Dr.

Belvidere, IL. 61008

Office: 815-877-7547

Fax: 815-877-5905

Ironwood

Environmental Inc.

Ironwood

Environmental Inc.

3349 Carbineer Dr.
Belvidere, IL. 61008
Office 815-877-7547
Fax: 815-877-5905

7/19/12
Mr. Dean Kurth
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Re: Asbestos building inspection: 1305 West State St., Rkfd. IL. MC1218

Mr. Kurth,

Ironwood Environmental Inc. is pleased to have had the opportunity to complete the NESHAPS pre demolition asbestos building inspection for the property listed above. Jeremy Bonacquisti, IL. asbestos building inspector # 100-6296, has completed a non-destructive asbestos building inspection at the request of the City of Rockford @ the property listed above. The inspection was completed in compliance with EPA regulations under NESHAPS CFR 763.86, for the sole purpose of demolition. Ironwood is not responsible for the presence of acbms existing in undetectable places, such as false walls, pipe chase, etc. All asbestos quantities are estimates. Roofing materials comprised of asphalt have not been tested and are to be assumed asbestos containing. It is the responsibility of the bidding contractor to field verify these quantities. Samples were collected and sent to TEM, an independent EPA / NVLAP approved lab, for PLM determination of the presence of asbestos, “Please refer to TEM report for results, methods, credentials and contacts”.

When preparing for asbestos abatement it is important to determine if the asbestos containing materials (ACMs) are friable or non-friable. Friability is the degree to which a solid substance can be broken up into smaller pieces with a minimum of effort. In the case of asbestos, friable usually refers to whether the mineral can be broken down by a human hand. Friable asbestos materials are the ones that are most dangerous. They easily release asbestos fibers into the air, and these fibers pose a significant health risk to anyone nearby. Non-friable asbestos, on the other hand, is less likely to release fibers. Roofing material, for example, is a non-friable asbestos-containing material because the asbestos fibers are bound or locked into place. Non-friable asbestos is still a health risk, as it can be made friable if damaged or altered. To further differentiate the potential risks associated with ACMs, the EPA divides non-friable asbestos into two subcategories:

Category I Non-Friable: Includes non-friable materials which are unlikely to be made friable, due to a strong interlocking material which binds the fibers. These materials should only be removed during demolition if they are in very poor condition. Examples include vinyl floor coverings, vinyl asbestos tile, asphalt roofing products and gaskets.

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Regulated Asbestos-Containing Material

Federal regulatory agencies such as the EPA consider the following asbestos materials to be potentially dangerous and thus subject to regulations during the removal or renovation process:

Regulated Asbestos-Containing Material

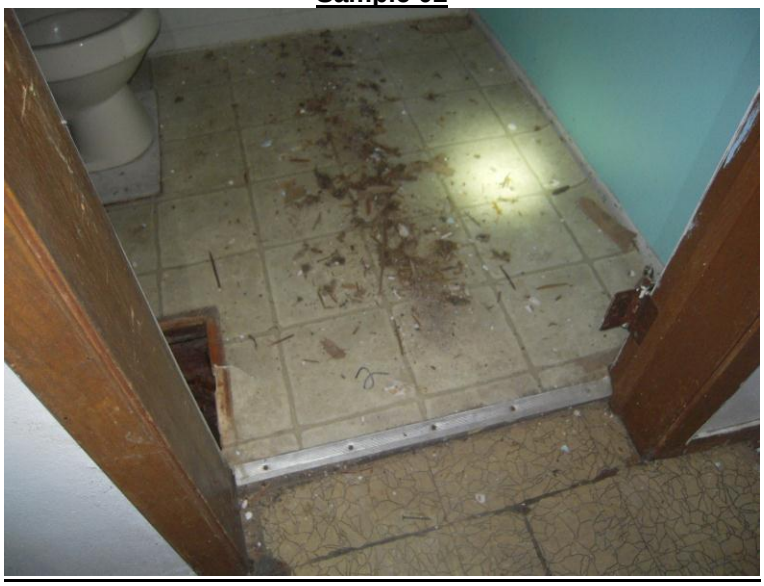
- All friable ACMs
- Category I non-friable materials which have become friable
- Category I non-friable materials which have been subjected to sanding, grinding, cutting, etc.
- Category II non-friable materials with a high probability of becoming friable during renovation or demolition

If a facility or home will be demolished by burning, all asbestos material, whether it is friable or non-friable, should be removed prior to the demolition procedures.

Sample #	Description	Location	% asbestos	NESHAPS Classification	Condition	Estimated Quantity
01	12 x 12 floor tile	Apartmnets 1e,1w,2e,2w	None detected	NA	NA	NA
02	White vinyl flooring	bathrooms	None detected	NA	NA	NA
03	Window glazing	1st and 2nd floor exterior windows	None detected	NA	NA	NA
04	Vinyl floor	Bathroom 1w	None detected	NA	NA	NA
05	Wall tile grout	Bathroom 1w	None detected	NA	NA	NA
06	Wall tile grout	Bathroom 1e	None detected	NA	NA	NA
07	Fireproofing paper	Basement on beams	80-90%	Friable	Damaged	20 sq ft.
08	HVAC tape / insulation	In basement on 4 systems and in walls	60-70%	Friable	damaged	unknown
09	Window glazing	10Basement windows	None detected	NA	NA	NA
10	Gray vinyl flooring	Apartment 2e bathroom	None detected	NA	NA	NA
11	Drywall	Throughout	None detected	NA	NA	NA

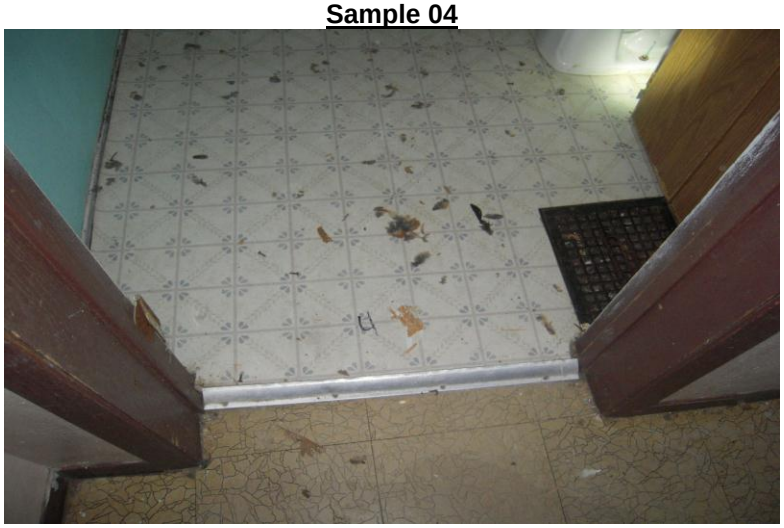
Sample 01

Sample 02



Sample 03

Sample 04



Sample 05

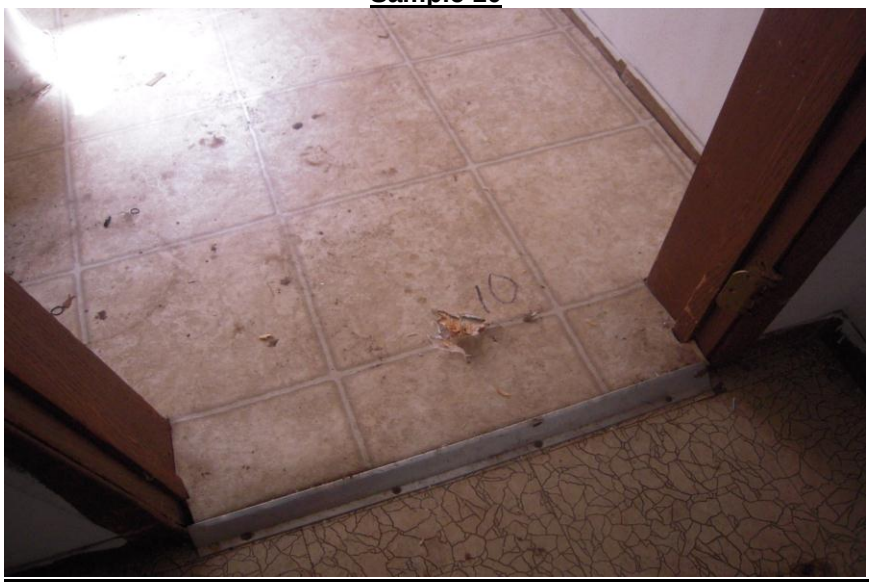
Sample 06

Sample 07

Sample 08

Sample 09

Sample 10



Sample 11

Applicable Regulations:
USEPA NESHAPS (40cfr61, Subpart M)
IEPA (Illinois Administrative Code 35 part 228 asbestos)
IDPH (77 iac 85 asbestos abatement for public and private schools and commercial and public buildings)
OSHA (29 cfr 1926.1101)

Abatement recommendations:
All abatement activities in Illinois must be performed by personal accredited by IEPA and licensed by IDPH. All work practices must comply with applicable US/IEPA, IDPH and OSHA regs.

If roofing material were found to contain asbestos or assumed to contain asbestos, according to USEPA regulations, tar-impregnated roofing felts, asphalt shingles and mastics that are non-friable and will remain that way during demolition need not be abated prior to demolition or landfilled as acm. This does not include controlled burns.
Asbestos floor tile may remain in the structure during demolition, however it must be undamaged prior to demolition and remain that way during demolition. In addition, if floor tile remains in the building during demolition all waste must be treated and landfilled according to NESHAPS regs as acm. Concrete coated with acm mastic may not be used as clean fill or recycled.

If you have any questions please do not hesitate to contact me. 815-378-6113

Thank you.
Respectfully Submitted,

Jeremy Bonacquisti
Ironwood Environmental Inc.

BULK ASBESTOS SAMPLE EVALUATION
POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1218
Contact	Jeremy Bonacquisti	**Project Location:**	1305 W. State
Address:	3349 Carbineer Dr.	**TEM Project:**	44779
	Belvidere IL 61008-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	7/13/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
01 12x12 Floor Tile	216563	Beige	N/D	Chrysotile Amosite		Cellulose Glass		90-100	SLM
02 Vinyl Floor, Bath	216564	White	N/D	Chrysotile Amosite		Cellulose Glass	10-15	85-90	
03 Window Glaze	216565	Beige	N/D	Chrysotile Amosite		Cellulose Glass	1-2	98-99	
04 Vinyl Floor, Bath Apt. 1W	216566	White	N/D	Chrysotile Amosite		Cellulose Glass	10-15	85-90	
05 Bath Wall Tile Grout, Apt. 1W	216567	White	N/D	Chrysotile Amosite		Cellulose Glass		90-100	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

This report may not be reproduced except in full and with the approval of the Laboratory. This report may not be used by the client to claim product endorsement by NVLAP or any agency of the US government. An estimate of the laboratory uncertainity is available upon request.

Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1218
Contact	Jeremy Bonacquisti	**Project Location:**	1305 W. State
Address:	3349 Carbineer Dr.	**TEM Project:**	44779
	Belvidere IL 61008-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	7/13/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
06 Bath Wall Tile Grout, Apt. 1E	216568	White	N/D	Chrysotile Amosite		Cellulose Glass		90-100	
07 Fireproof Paper, Basement	216569	Gray	Yes	Chrysotile Amosite	80-90	Cellulose Glass	2-4	6-18	
08 HVAC 4 Furnaces	216570	Gray	Yes	Chrysotile Amosite	60-70	Cellulose Glass	25-30	0-15	
09 Basement Window Glaze	216571	Beige	N/D	Chrysotile Amosite		Cellulose Glass		90-100	
10 Vinyl Floor Apt. 2E	216572	Gray	N/D	Chrysotile Amosite		Cellulose Glass	5-10	90-95	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

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Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1218
Contact	Jeremy Bonacquisti	**Project Location:**	1305 W. State
Address:	3349 Carbineer Dr.	**TEM Project:**	44779
	Belvidere IL 61008-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	7/13/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
11 Drywall	216573	Gray	N/D	Chrysotile Amosite		Cellulose Glass	3-5	95-97	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

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Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

TEM, Incorporated

CHAIN OF CUSTODY REPORT

www.tem-inc.com

443 Duane Street
Glen Ellyn, IL 60137
(630) 790-0880
FAX (630) 790-0882

CLIENT: Ironwood Environmental Date:	TAT 6 HOUR 12 HOUR 24 HOUR 48 HOUR 72 HOUR 4 DAYS
Contact: J. Bonacquist E-Mail: IRONwoodenv@AOL.com	Project Name/No. MC 1218 1305 W. State
Address: 3349 Carbiner Dr.	Results Due by: (Date & Time)
City/State/Zip Belvidere, IL, 61008	TEM Project#: 44779
Phone: 815-378-6112 FAX	NVLAP ID 101130 AIHA-PAT 101151 AIHA-AAR 101151

Comments:

PO/Quote#:

Client ID No.	Description	Sample Volume	PLM Bulk	PLM Point Count	PLM Gravimetric	TEM Air-AHERA	TEM Air-Other	TEM Bulk	TEM Chatfield	TEM Water	TEM Micro-Vac	TEM PCM-Air	TEM Other	Comments
1	12x12 Flr tile Apt 1E, 1W, 2E, 2W													
2	Vinyl flr Bath													
3	window glaze													
4	Vinyl flr Bath Apt 1W													
5	Bath wall tile grout 1W													
6	" " " " 1E													
7	Fire proof paper Base	2"												
8	HVAC 4 furnaces													
9	Basement window glaze	10												
10	Vinyl flr 2F	Bath												
11	Dry wall													

RELINQUISHED (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	DATE/TIME 7-12-12
RELINQUISHED (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	DATE/TIME
LOGGED IN BY (SIGNATURE)	DATE/TIME	ANALYZED BY (SIGNATURE)	DATE/TIME

Ironwood
Environmental Inc
6551 E. Riverside Blvd.
Suite 101
Rockford, IL. 61114

City of Rockford
Attn: Dean
425 E. State St.
Rockford, IL. 61104

3/2/12
RE: Asbestos building inspection @ 1406 W. State St, IWE job # MC1107

Illinois asbestos building inspector Jeremy Bonacquisti IDPH # 100-6296 has completed the non-destructive, pre-demo NESHAPS inspection of the property listed above. The inspection was completed for the purpose of demolition. Ironwood is not responsible for the presence of acbms hidden in undetectable places, such as false walls, pipe chase, etc. All quantities are to be considered estimates. It is the responsibility of each bidding contractors to field verify quantities for their own bidding purposes. Samples were collected during a visual inspection of the property listed above and sent to Analytics, an independent EPA / NVLAP approved lab, for determination of the presence of asbestos. Please refer to Analytics report for results, methods and credentials. The following samples tested positive for asbestos and would be required to be abated by an EPA accredited and IDPH licensend asbestos abatement contractor, prior to demolition or a controlled burn. Floor tile may stay in the building during demolition but not for a controlled burn; however all debris must then be properly containerized, hauled, manifested and land filled in an EPA approved landfill for asbestos. In addition, unless the asbestos floor tile and mastic is abated, the concrete which had floor tile attached may not be recycled or used as clean fill. NESHAPS regulations require a 40hours trained asbestos competent person be on site during the demolition of this structure, to continuously observe and respond to any unforeseen acbms, which may arise due to demolition.

-005 HVAC tape / insulation, located on the HVAC duct work in the basemen / crawlspace and possibly in the walls or ceilings. Condition is friable

-008 Window glazing, located on all wood sash exterior windows, condition is friable

Thank you.
Respectfully Submitted,

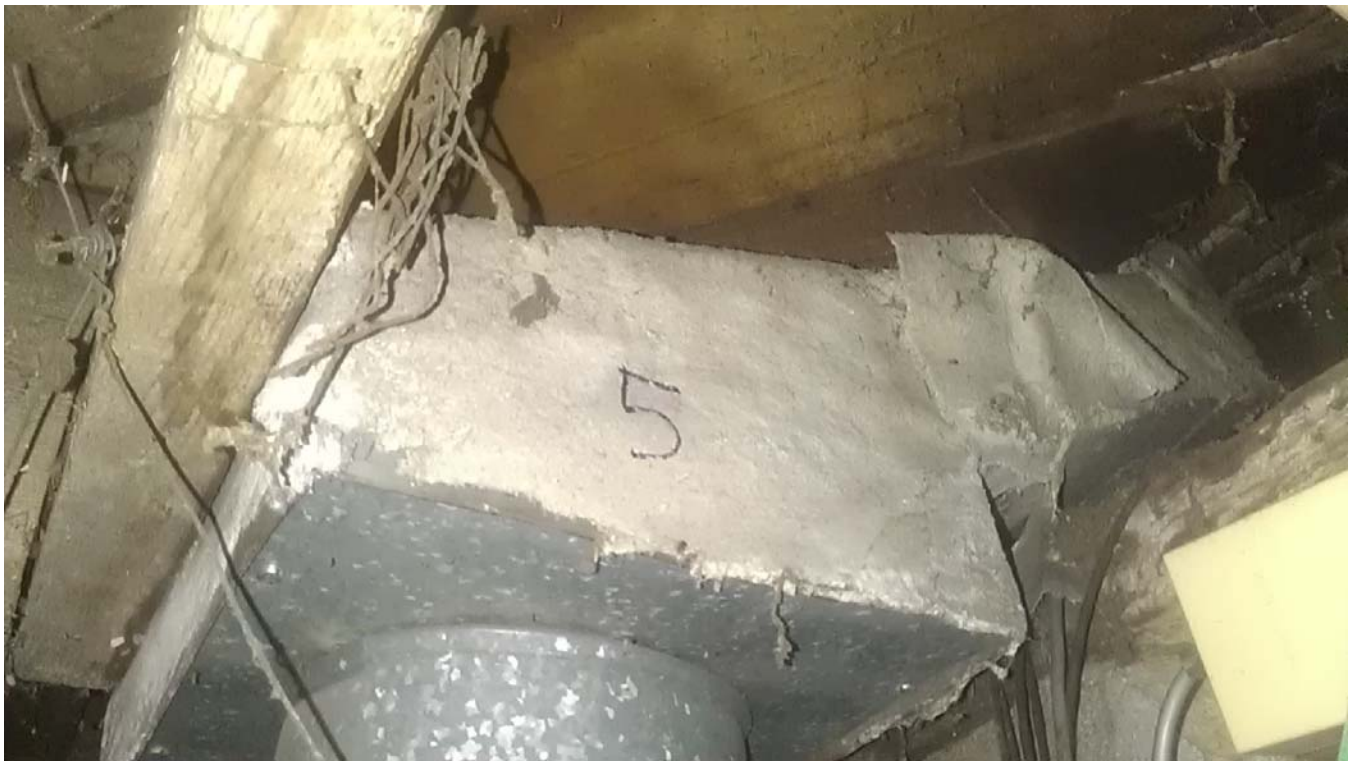
Jeremy Bonacquisti V.P.
Ironwood Environmental Inc.

1405

3

Swim Safe
88-395-1389
Proactiv

4


5

10

ANALYTICS CORPORATION
10329 Stony Run Lane
Ashland, Virginia 23005
804-365-3000 Phone
800-888-8061 Phone
804-365-3002 Fax
www.analyticscorp.com

Group No. Q061-011
Account No. 12818005
Report Date: 03/02/12

JCB
IRONWOOD

3349 CARBINEER DRIVE
BELVIDERE, IL 61008

**** FINAL REPORT ****

Date Received: 03/01/12
Sample Type: 10 - Bulk Sample(s)
Project: 1406 W.STATE

Date Sampled:

PO Number: MC1181

Analytical Results

Client No.\ Description	Lab ID	Total % Asbestos in Samp	Layer % of Samp	Sample Components	Results per Layer
1 KITCHEN FLR TILES	-001	ND,<1	100	BEIGE FLOORING W/O MASTIC	
				Non-fibrous	100 %
2 FOYER	-002	ND,<1	100	TAN FLOORING W/ MASTIC	
				Fibrous Glass	10 %
				Non-fibrous	90 %
3 FRNT PORCH CEILING TEXT	-003	ND,<1	100	WHITE PLASTER-LIKE	
				Non-fibrous	100 %
4 KIT. CEILING TILES	-004	ND,<1	100	TAN FIBROUS	
				Cellulose	100 %
				Non-fibrous	TR,<1 %
5 HVAC	-005	90	100	GRAY FIBROUS	
				Chrysotile	90 %
				Non-fibrous	10 %
6 ATTIC INSULATION	-006	ND,<1	100	BROWN FIBROUS	
				Cellulose	100 %
				Non-fibrous	TR,<1 %

Quality Industrial Hygiene and Environmental Laboratory Testing

ANALYTICS CORPORATION
10329 Stony Run Lane
Ashland, Virginia 23005
804-365-3000 Phone
800-888-8061 Phone
804-365-3002 Fax
www.analyticscorp.com

Group No. Q061-011
Account No. 12818005
Report Date: 03/02/12

JCB
IRONWOOD

3349 CARBINEER DRIVE
BELVIDERE, IL 61008

Final Report

Date Received: 03/01/12
Sample Type: 10 - Bulk Sample(s)
Project: 1406 W.STATE

Date Sampled:

PO Number: MC1181

Analytical Results

Client No.\ Description	Lab ID	Total % Asbestos in Samp	Layer % of Samp	Sample Components	Results per Layer
7 VINYL FLR/BATH	-007	ND,<1	100	GREEN FLOORING W/O MASTIC	
				Cellulose	25 %
				Non-fibrous	75 %
8 WINDOW GLAZE	-008	5	100	GRAY BRITTLE	
				Chrysotile	5 %
				Non-fibrous	95 %
9 DRYWALL	-009	ND,<1	100	TAN/WHITE DRYWALL	
				Cellulose	40 %
				Non-fibrous	60 %
10 PLASTER	-010	ND,<1	100	GRAY PLASTER	
				Non-fibrous	100 %

Lynne Overman, Analyst

Quality Industrial Hygiene and Environmental Laboratory Testing

ANALYTICS CORPORATION
10329 Stony Run Lane
Ashland, Virginia 23005
804-365-3000 Phone
800-888-8061 Phone
804-365-3002 Fax
www.analyticscorp.com

Group No. Q061-011
Account No. 12818005
Report Date: 03/02/12

JCB
IRONWOOD

3349 CARBINEER DRIVE
BELVIDERE, IL 61008

Methods, Notes and Abbreviations

Detection Limit: 1 percent by weight based on Calibrated Area Visual Estimates.

Abbreviations: ND = Not Detected; TR = Trace.

Analytical Method: EPA-600/M4-82-020

NVLAP Accreditation Code: 101004-0

PLM results may be biased on the high side, therefore you may opt to have samples with less than 10 percent asbestos re-analyzed by the reportedly more accurate point count procedure in the EPA Interim Method for the Identification of Asbestos in Bulk Materials.

PLM analysis of vinyl floor tile samples may yield false negative results as the size and thickness of asbestos fibers in vinyl floor may be less than the limit of resolution for a polarized-light microscope. Confirmation of PLM negative vinyl floor tiles by transmission electron microscopy (TEM) may be necessary.

Results reflect the samples that were tested and the report analysis must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

This report shall not be reproduced except in full, without the written approval of the laboratory.

End of Report

Quality Industrial Hygiene and Environmental Laboratory Testing

LABORATORY TEST REQUEST

ACCOUNT NUMBER, NAME AND ADDRESS

IRONWOOD

3349 CARBINEER DRIVE
BELVIDERE, IL 61008
Phone: 800-775-5355
Fax: 1-815-877-5905
ACCT#: 12818005

FAX: 815-877-5905

ANALYTICS

10329 Stony Run Lane
Ashland, VA 23005
(804) 365-3000
TOLL FREE (800) 888-8061
FAX (804) 365-3002

DATE SHIPPED	# OF SAMPLES	SAMPLE TYPE/MEDIA	PROJECT NAME OR NUMBER
	10	PLM	1406 W. State

PURCHASE ORDER NO.	CONTACT	TELEPHONE NUMBER
McI181	JCD	815-378-6113

TURN AROUND TIME
* ☐ SAMEDAY
* ☐ 1 DAY
* CALL FOR AVAILABILITY
* ☐ 2 DAY
* ☒ STANDARD
* EXTRA CHARGE

SPECIAL INSTRUCTIONS AND/OR UNUSUAL CONDITIONS:

☒ FAX RESULTS FAX NUMBER: ( ) _____
☐ EMAIL RESULTS - EMAIL: _____

FOR LABORATORY USE ONLY	SAMPLE # OR SAMPLE AREA	SAMPLE DATE	SAMPLE VOLUME/LITERS	ANALYSIS REQUESTED-PLEASE USE SEPARATE LABORATORY TEST REQUEST FOR EACH SAMPLE TYPE
	1		Kitch	12x12 floor tiles
	2		Foyer	Vinyl tile
	3		Front porch	ceiling texture
	4		Kitch	2x4 ceiling tiles
	5			HVAC
	6			Attic insul
	7			Vinyl floor 2nd flr Mstr
	8			window glue
	9			drywall
	10			Plaster

CHAIN OF CUSTODY RECORD

SAMPLES HAVE BEEN SEALED FOR TRANSPORT AND DELIVERED TO LABORATORY VIA:

CARRIER

IF "ANALYTICS COURIER" SIGN HERE

SIGN HERE TO INITIATE CHAIN OF CUSTODY

DATE

DATE/TIME	CONDITION OF SAMPLE	SAMPLES RECEIVED BY:	SAMPLES RELEASED BY:
2/1/12 930	OK	SIGNATURE(SAMPLE RECEIVING) MChildress	SIGNATURE(SAMPLE RECEIVING) MICHELE CHILDRESS
		SIGNATURE(SAMPLE ADMINISTRATION)	SIGNATURE(SAMPLE ADMINISTRATION)
		SIGNATURE(LAB)	SIGNATURE(LAB)
		SIGNATURE(LAB)	SIGNATURE(LAB)

PLEASE RETAIN PART 3 FOR YOUR RECORDS

andersonenveng.com | 815.962.9000 124 N. Water St., Suite 206 | Rockford, IL 61107 | fax 815.962.7978

Anderson
environmental&engineering

February 9, 2012

City of Rockford
Attn: Mr. Ryan Lundberg
425 E. State Street
Rockford, IL 61107

Re: Preliminary Asbestos Inspection, Sports Dome, 1515 West State Street, Rockford, Illinois
AEE Job #133.69

Dear Mr. Lundberg:

On January 30, 2012 a non-destructive NESHAP preliminary inspection was performed at 1515 West State Street, Rockford, Illinois. Certified Asbestos Inspectors Jennifer Anderson (100-07971) and Tony Kaprelian (100-10577) performed the inspection in order to determine the presence of asbestos within the building materials. The inspection consisted of visual observation, non-destructive bulk sampling of building materials, and laboratory analysis of suspect asbestos containing building materials by a laboratory that successfully participates in the AIHA Proficiency Analytical Testing (PAT) program. Samples were submitted to Micro Analytical in Milwaukee, WI, for analysis by polarized light microscopy (PLM). The type and quantity (percentage) of asbestos are identified by polarized light microscopy (PLM) following preparation and identification protocols recommended by the National Institute for Occupation Safety and Health (NIOSH) and the National Voluntary Laboratory Accreditation Program (NVLAP).

FRIABLE ASBESTOS – material can be crumbled, pulverized, or reduced to powder by hand pressure; these materials must be removed prior to demolition activities and should be addressed during renovation activities that would disturb the material, such as thermal system insulation. No friable asbestos containing materials were identified.

CATEGORY 1 NON-FRIABLE – material is pliable (not brittle), breaks by tearing rather than fracturing and does not easily release asbestos fibers upon breaking; these materials should be addressed during renovation activities that would disturb the material, but do not need removal prior to demolition activities (handled as demolition material at a certified landfill) if they are in good condition and not rendered friable during handling, transporting, and disposal. However, most asbestos containing building materials on concrete substrate are removed prior to demolition activities to reduce the overall cost due to landfill charges and the fact that concrete cannot be left on site or recycled with these materials in place. Category I Non-Friable materials include resilient floor coverings, asphalt roofing materials, gaskets, and packing. The following types of Category I Non-Friable asbestos were identified:

- Carpet mastic (5% Chrysotile)
- Roofing materials (assumed)

*Please Note: non-friable asbestos containing materials in **good** condition that fall under Category I, such as flooring and/or mastics on wood substrate and roofing materials are not **required** to be removed prior to demolition per the USEPA 40 CFR Part 61 National Emissions Standards for Hazardous Air Pollutants (NESHAP); Final Rule, dated November 20, 1990. However, while demolition is being performed the material must be kept wet and all debris must go to an approved landfill that accepts demolition debris and does not burn, crush, grind or recycle the material. In*

addition, you must have a trained individual knowledgeable in the provisions of 40 CFR Part 61, Subpart M, on site during the demolition and available for inspection during normal business hours. If material becomes damaged or rendered friable during demolition, proper abatement procedures must immediately be instituted.

CATEGORY II NON-FRIABLE – material is not pliable, breaks by fracturing rather than tearing, and does release some asbestos fibers upon breaking; these materials should be addressed during renovation activities that would disturb the material and are removed prior to demolition activities since they are normally rendered friable during demolition and/or handling, transporting and disposal. Category II Non-Friable materials include any non-friable asbestos containing material that is not in Category I (i.e. transite siding). No Category II Non-Friable asbestos containing materials were identified.

NON ASBESTOS CONTAINING MATERIALS – The following materials were tested and found to contain *no* asbestos (or less than1%):

- Brick and mortar
- Stone mortar
- Glass block mortar
- Concrete block mortar
- Window caulk
- Red quarry tile
- White 24”x24” lay-in ceiling tile
- Ceramic wall tile
- Ceramic floor tile
- Drywall/spackle
- Freezer insulation and black mastic

EPA guidance recommends analysis of non-friable materials by PLM with gravimetric reduction due to the high number of false negative PLM analyses for these types of materials. Asbestos fibers in these materials are often below the detection capabilities of the optical PLM microscope and can not be detected. Gravimetric reduction includes high temperature ashing and acid digestion and is normally performed prior to Transmission Electron Microscopy (TEM) analysis. Gravimetric reduction of non-friable samples prior to PLM analysis enhances the detection of fibers. If no asbestos is detected by this method, TEM is recommended for definitive analysis.

Due to the distinct possibility that conditions may exist which could not be identified within the scope of this preliminary inspection or which were not apparent during the site visit, any additional material discovered that has not been listed above must be assumed to be asbestos containing; or, if non-friable material becomes damaged or rendered friable during the renovation/demolition activities, proper abatement procedures must immediately be instituted. You must have a trained individual knowledgeable in the provisions of 40 CFR Part 61, Subpart M, on site during the demolition and available for inspection during normal business hours. It is recommended that this report be sent to the demolition contractor as well.

If you have any questions, please feel free to contact me at 815/962-9000. Thank you for the opportunity to serve you on this project.

Sincerely,

Jennifer L. Anderson
President

Attachment A - Laboratory Analytical Reports
Attachment B – Photographs
Attachment C – Quantities and Budgetary Estimate

Exhibit A

MICRO ANALYTICAL, INC.

11521 West North Avenue
Milwaukee, WI 53226
(800) 771-9820 (414) 771-0855
Fax: (414) 771-6570

BULK ASBESTOS ANALYTICAL REPORT
Utilizing PLM and Dispersion Stain Technique

Customer: Anderson Environmental
& Engineering, Co.
124 N. Water Street-Suite 206
Rockford , IL 61107

Report #: 115640
Received: 31-Jan-2012
Analyzed: 07-Feb-2012

Job ID: 133.69

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
1A	None Detected		100%	Multi-Colored	Compact
1B	None Detected		100%	Multi-Colored	Compact
1C	None Detected		100%	Multi-Colored	Compact
2A	None Detected		100%	Gray	Compact
2B	None Detected		100%	Gray	Compact
2C	None Detected		100%	Gray	Compact
3A	None Detected		100%	Gray	Compact
3B	None Detected		100%	Gray	Compact
3C	None Detected		100%	Gray	Compact
4A	None Detected		100%	Gray	Compact
4B	None Detected		100%	Gray	Compact
4C	None Detected		100%	Gray	Compact
5A	None Detected		100%	White	Resinous
5B	None Detected		100%	White	Resinous
5C	None Detected		100%	White	Resinous
6A	None Detected		100%	Red	Compact
6B	None Detected		100%	Red	Compact
6C	None Detected		100%	Red	Compact
7A	5% Chrysotile	<1% Cellulose <1% Synthetic Fiber	95%	Multi-Colored	Mastic

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
8A	None Detected	10% Fibrous Glass 45% Cellulose	45%	Off-White	Compressed
8B	None Detected	10% Fibrous Glass 45% Cellulose	45%	Off-White	Compressed
8C	None Detected	10% Fibrous Glass 45% Cellulose	45%	Off-White	Compressed
9A	None Detected		100%	Tan	Ceramic Tile
9A II	None Detected		100%	Tan	Mastic
9B	None Detected		100%	Tan	Ceramic Tile
9B II	None Detected		100%	Tan	Mastic
9C	None Detected		100%	Tan	Ceramic Tile
9C II	None Detected		100%	Tan	Mastic
10A	None Detected		100%	Multi-Colored	Ceramic Tile
10A II	None Detected		100%	Gray	Compact
10B	None Detected		100%	Multi-Colored	Ceramic Tile
10B II	None Detected		100%	Gray	Compact
10C	None Detected		100%	Multi-Colored	Ceramic Tile
10C II	None Detected		100%	Gray	Compact
11A	None Detected	10% Cellulose	90%	Off-White	Compact
11B	None Detected	10% Cellulose	90%	Off-White	Compact
11C	None Detected	10% Cellulose	90%	Off-White	Compact
12A	None Detected		100%	Off-White	Foam
12A II	None Detected		100%	Black	Resinous
12B	None Detected		100%	Off-White	Foam
12B II	None Detected		100%	Black	Resinous
12C	None Detected		100%	Off-White	Foam
12C II	None Detected		100%	Black	Resinous

Analyzed By: Jon Yakish

Test method: EPA/600/R-93/116. Quantitation is done by Calibrated Visual Estimation which has an accepted Relative Percent Difference of 35. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This test report relates only to the items tested and shall not be reproduced except in full, without the written approval of MICRO ANALYTICAL, INC.

Anderson
environmental&engineering

SAMPLE LOG & SAMPLE NOTES

Date: January 30, 2012

Day of Week: Monday

Page 1 of 2

THIS IS A CHAIN-OF-CUSTODY DOCUMENT.
PLEASE FILL IT OUT COMPLETELY AND SIGN ACCORDINGLY.

Job Name: City of Rockford Job # 133.69

Building Name: Sports Dome – 1515 West State Street

Sample Area/Lot Number and Name:

Sample Number	Photo Number	Description of Sampled Material	Sample Site Location
1 ABC	1	BRICK AND MORTAR	EXTERIOR
2 ABC	2	STONE MORTAR	EXTERIOR
3 ABC	3	GLASS BLOCK MORTAR	EXTERIOR
4 ABC	4	CONCRETE BLOCK MORTAR	EXTERIOR
5 ABC	5	WINDOW CAULK	EXTERIOR
6 ABC	6	RED QUARRY TILE	EAST SIDE
7 ABC	7	CARPET MASTIC	THROUGHOUT
8 ABC	8	WHITE 24"X24" LAY-IN CEILING TILE	THROUGHOUT
9 ABC	9	CERAMIC WALL TILE	BATHROOM
10 ABC	10	CERAMIC FLOOR TILE	BATHROOM
11 ABC	11	DRYWALL/SPACKLE	ABOVE CEILING TILE

NOTE: IF MAILED, HAVE CARRIER PROVIDED SIGNED PICK-UP AND DELIVERY RECEIPTS TO BE ATTACHED TO THE ORIGINAL OF THIS DOCUMENT.

Faxed (815) 962-7978 Y N
Process Speed: S V N
Date results requested: HC _____ Verbal _____

Receiving Analyst's Name	Receiving Analyst's Firm	Inspector's Name	Inspector's Firm
		Jennifer L. Anderson AII-12247; 100-07971	Anderson Environmental & Engineering, Co.

Receiving Analyst's Signature	Date Samples Received	Inspector's Signature	Date Samples Collected
	1/31/12	Jennifer L. Anderson	1/30/2012

Anderson
environmental&engineering

SAMPLE LOG & SAMPLE NOTES

Date: January 30, 2012

Day of Week: Monday

Page 2 of 2

THIS IS A CHAIN-OF-CUSTODY DOCUMENT.
PLEASE FILL IT OUT COMPLETELY AND SIGN ACCORDINGLY.

Job Name: City of Rockford Job # 133.69

Building Name: Sports Dome – 1515 West State Street

Sample Area/Lot Number and Name:

Sample Number	Photo Number	Description of Sampled Material	Sample Site Location
12 ABC	12	FREEZER INSULATION AND BLACK MASTIC	EAST SIDE OF BUILDING

NOTE: IF MAILED, HAVE CARRIER PROVIDED SIGNED PICK-UP AND DELIVERY RECEIPTS TO BE ATTACHED TO THE ORIGINAL OF THIS DOCUMENT.

Faxed (815) 962-7978 Y N
Process Speed: S V N
Date results requested: HC _____ Verbal _____

Receiving Analyst's Name	Receiving Analyst's Firm

Inspector's Name	Inspector's Firm
Jennifer L. Anderson AII-12247; 100-07971	Anderson Environmental & Engineering, Co.

Receiving Analyst's Signature	Date Samples Received
	1/31/12

Inspector's Signature	Date Samples Collected
Jennifer L. Anderson	1/30/2012

Exhibit B

Photo #1
Date: January 30, 2012
Location: Exterior
Description: Brick and mortar

Photo #2
Date: January 30, 2012
Location: Exterior
Description: Stone mortar

Photo #3
Date: January 30, 2012
Location: Exterior
Description: Glass block mortar

Photo #4
Date: January 30, 2012
Location: Exterior
Description: Concrete block mortar

Photo #5
Date: January 30, 2012
Location: Exterior
Description: Window caulk

Photo #6
Date: January 30, 2012
Location: East side
Description: Red quarry tile

Photo #7
Date: January 30, 2012
Location: Throughout
Description: Carpet mastic (5% Chrysotile)

Photo #8
Date: January 30, 2012
Location: Throughout
Description: White 24”x24” lay-in ceiling tile

Photo #9
Date: January 30, 2012
Location: Bathroom
Description: Ceramic wall tile

Photo #10
Date: January 30, 2012
Location: Bathroom
Description: Ceramic floor tile

Photo #11
Date: January 30, 2012
Location: Above ceiling tile
Description: Drywall/spackle

Photo #12
Date: January 30, 2012
Location: East side of Building
Description: Freezer insulation and black mastic

Exhibit C

Table 1 - Asbestos Containing Materials
Summary of Results
1601 W. State Street, Rockford, IL

Material Description	Material Location	Asbestos Type	Material Condition	Quantity	Removal cost/unit
Roofing Material	Roof	Assumed		N/A	Leave in place for demolition
Carpet Mastic (multi-colored)	Customer Service Area	5% Chrysotile	Good	600 s.f.	

- *All quantities are estimated and any contractor should field verify quantities prior to bidding on this work.*

NESHAPS Asbestos Building Inspection

1801 West State
Rockford, IL.
Winnebago County

Prepared for:
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Prepared by:
Ironwood Environmental Inc.
3349 Carbineer Dr.
Belvidere, IL. 61008

Office: 815-877-7547
Fax: 815-877-5905

Ironwood
Environmental Inc.

Ironwood
Environmental Inc.
3349 Carbineer Dr.
Belvidere, IL. 61008
Office: 815-877-7547
Fax: 815-877-5905

6/20/12

Mr. Dean Kurth
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Re: Asbestos building inspection: 1801 West State, Rkfd. IL. MC1208

Mr. Kurth,

Ironwood Environmental Inc. is pleased to have had the opportunity to complete the NESHAPS pre demolition asbestos building inspection for the property listed above.

Jeremy Bonacquisti, IL. asbestos building inspector # 100-6296, has completed a non-destructive asbestos building inspection at the request of the City of Rockford @ the property listed above. The inspection was completed in compliance with EPA regulations under NESHAPS CFR 763.86, for the sole purpose of demolition. Ironwood is not responsible for the presence of acbms existing in undetectable places, such as false walls, pipe chase, etc. All asbestos quantities are estimates. Roofing materials comprised of asphalt have not been tested and are to be assumed asbestos containing. It is the responsibility of the bidding contractor to field verify these quantities. Samples were collected and sent to TEM, an independent EPA / NVLAP approved lab, for PLM determination of the presence of asbestos, “Please refer to TEM report for results, methods, credentials and contacts”.

The following materials tested > or equal to1% asbestos

Sample NO	Description	Location	Percentage of asbestos	NESHAPS Classification	Condition	Estimated Quantity
01	Vinyl Flooring	Dinning room	None	NA	NA	NA
02	Plaster	throughout	None	NA	NA	NA
03	Wallboard	Throughout	None	NA	NA	NA
04	White vinyl floor	Bathroom	None	NA	NA	NA
05	HVAC tape insulation	Bsmnt and walls on hvac system	75-85	Friable	Damaged	Unknown
06	Black 12x12 floor tile	Kitchen	None	NA	NA	NA

07	Black 12x12 floor tile	Bath 2nd flr	None	NA	NA	NA
08	Window glazing	All exterior windows	None	NA	NA	NA

Sample 01 Vinyl floor dining room

Sample 02 Plaster

Sample 03 Wallboard

Sample 04 Vinyl floor bath

Sample 05 HVAC

Sample 6 12x12 Floor tile 2nd flr. kitchen

Sample 7 12x12 floor tile 2nd flr. Bath

Sample 8 Window glazing

Applicable Regulations:
USEPA NESHAPS (40cfr61, Subpart M)
IEPA (Illinois Administrative Code 35 part 228 asbestos)
IDPH (77 iac 85 asbestos abatement for public and private schools and commercial and public buildings)
OSHA (29 cfr 1926.1101)

Abatement recommendations:
All abatement activities in Illinois must be performed by personal accredited by IEPA and licensed by IDPH. All work practices must comply with applicable US/IEPA, IDPH and OSHA regs.

If roofing material were found to contain asbestos or assumed to contain asbestos, according to USEPA regulations, tar-impregnated roofing felts, asphalt shingles and mastics that are non friable and will remain that way during demolition need not be abated prior to demolition or landfilled as acm. This does not include controlled burns.

Asbestos floor tile may remain in the structure during demolition, however it must be undamaged prior to demolition and remain that way during demolition. In addition, if floor tile remains in the building during demolition all waste must be treated and landfilled according to NESHAPS regs as acm. Concrete coated with acm mastic may not be used as clean fill or recycled.

If you have any questions please do not hesitate to contact me. 815-378-6113

Thank you.
Respectfully Submitted,

Jeremy Bonacquisti
Ironwood Environmental Inc.

TEM, Incorporated

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1208
Contact	Jeremy Bonacquisti	**Project Location:**	1801 W. State
Address:	6551 E. Riverside Blvd. #101	**TEM Project:**	44607
	Rockford IL 61114-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	6/5/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
01 Vinyl Fl. Dining Rm.	215305	Beige	N/D	Chrysotile Amosite		Cellulose Glass	5-10 1-2	88-94	
02 Plaster	215306	Gray	N/D	Chrysotile Amosite		Cellulose Glass	Trace	90-100	
03 Wallboard	215307	Gray	N/D	Chrysotile Amosite		Cellulose Glass	3-5	95-97	
04 Bath Vinyl Floor	215308	White	N/D	Chrysotile Amosite		Cellulose Glass	10-15 Trace	85-90	
05 HVAC	215309	Gray	Yes	Chrysotile Amosite	75-85	Cellulose Glass	3-5	10-22	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

This report may not be reproduced except in full and with the approval of the Laboratory. This report may not be used by the client to claim product endorsement by NVLAP or any agency of the US government. An estimate of the laboratory uncertainity is available upon request.

Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

TEM, Incorporated

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1208
Contact	Jeremy Bonacquisti	**Project Location:**	1801 W. State
Address:	6551 E. Riverside Blvd. #101	**TEM Project:**	44607
	Rockford IL 61114-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	6/5/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
06 12x12 FT Kitch. 2nd Floor	215310	Black	N/D	Chrysotile Amosite		Cellulose Glass		90-100	
07 12x12 FT Bath 2nd Floor	215311	Black	N/D	Chrysotile Amosite		Cellulose Glass	1-2	98-99	
08 Window Glaze	215312	Beige	N/D	Chrysotile Amosite		Cellulose Glass		90-100	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

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Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

Report Approved by:

NESHAPS Asbestos

Building Inspection

1807 West State St.

Rockford, IL.

Winnebago County

Prepared for:

City of Rockford

Public Works Dept.

425 East State St.

Prepared by:

Ironwood Environmental Inc.

3349 Carbineer Dr.

Belvidere, IL. 61008

Office: 815-877-7547

Fax: 815-877-5905

Ironwood

Environmental Inc.

Ironwood

Environmental Inc.

3349 Carbineer Dr.
Belvidere, IL. 61008
Office 815-877-7547
Fax: 815-877-5905

7/19/12
Mr. Dean Kurth
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Re: Asbestos building inspection: 1807 West State St., Rkfd. IL. MC1219

Mr. Kurth,

Ironwood Environmental Inc. is pleased to have had the opportunity to complete the NESHAPS pre demolition asbestos building inspection for the property listed above. Jeremy Bonacquisti, IL. asbestos building inspector # 100-6296, has completed a non-destructive asbestos building inspection at the request of the City of Rockford @ the property listed above. The inspection was completed in compliance with EPA regulations under NESHAPS CFR 763.86, for the sole purpose of demolition. Ironwood is not responsible for the presence of acbms existing in undetectable places, such as false walls, pipe chase, etc. All asbestos quantities are estimates. Roofing materials comprised of asphalt have not been tested and are to be assumed asbestos containing. It is the responsibility of the bidding contractor to field verify these quantities. Samples were collected and sent to TEM, an independent EPA / NVLAP approved lab, for PLM determination of the presence of asbestos, “Please refer to TEM report for results, methods, credentials and contacts”.

When preparing for asbestos abatement it is important to determine if the asbestos containing materials (ACMs) are friable or non-friable. Friability is the degree to which a solid substance can be broken up into smaller pieces with a minimum of effort. In the case of asbestos, friable usually refers to whether the mineral can be broken down by a human hand. Friable asbestos materials are the ones that are most dangerous. They easily release asbestos fibers into the air, and these fibers pose a significant health risk to anyone nearby. Non-friable asbestos, on the other hand, is less likely to release fibers. Roofing material, for example, is a non-friable asbestos-containing material because the asbestos fibers are bound or locked into place. Non-friable asbestos is still a health risk, as it can be made friable if damaged or altered. To further differentiate the potential risks associated with ACMs, the EPA divides non-friable asbestos into two subcategories:

Category I Non-Friable: Includes non-friable materials which are unlikely to be made friable, due to a strong interlocking material which binds the fibers. These materials should only be removed during demolition if they are in very poor condition. Examples include vinyl floor coverings, vinyl asbestos tile, asphalt roofing products and gaskets.

Category II Non-Friable: Includes all non-friable materials which are not Category I. These materials are more likely to be made friable, as they are not resistant to weathering or crushing forces and may be subjected to extreme conditions or excessive use. Examples include cement siding, transite board shingles and concrete-like products.

Regulated Asbestos-Containing Material

Federal regulatory agencies such as the EPA consider the following asbestos materials to be potentially dangerous and thus subject to regulations during the removal or renovation process:

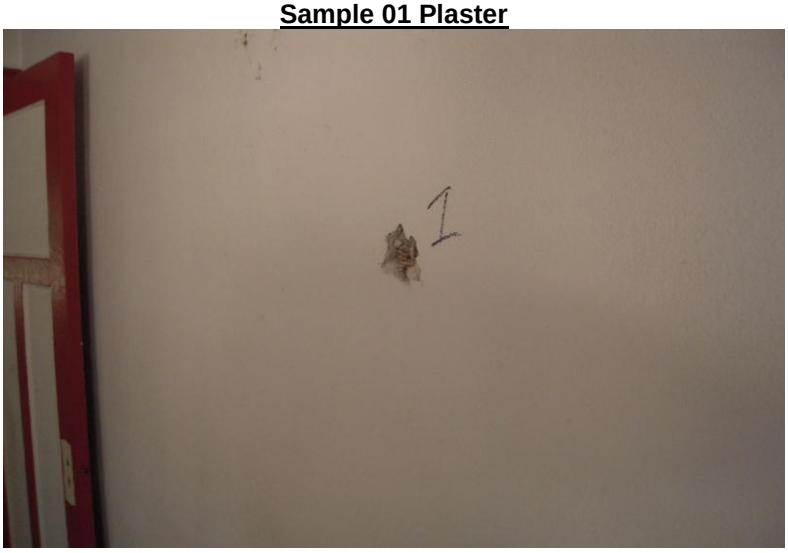
Regulated Asbestos-Containing Material

- All friable ACMs
- Category I non-friable materials which have become friable
- Category I non-friable materials which have been subjected to sanding, grinding, cutting, etc.
- Category II non-friable materials with a high probability of becoming friable during renovation or demolition

If a facility or home will be demolished by burning, all asbestos material, whether it is friable or non-friable, should be removed prior to the demolition procedures.

Sample #	Description	Location	% asbestos	NESHAPS Classification	Condition	Estimated Quantity
01	Plaster	throughout	None detected	NA	NA	NA
02	White vinyl flooring	kitchen	None detected	NA	NA	NA
03	Window glazing	18 exterior windows	None detected	NA	NA	NA
04	Ceiling texture	1st floor	None detected	NA	NA	NA
05	Attic Insulation	attic	None detected	NA	NA	NA
06	White 12 x 12 floor tile	basement	None detected	NA	NA	NA
07	HVAC tape / insulation	In basement and walls	80-85%	Friable	Damaged	unknown
08	Window glazing	8 Basement windows	2-4%	Friable	damaged	NA
09	2 x 4 ceiling tiles	Basement	None detected	NA	NA	NA

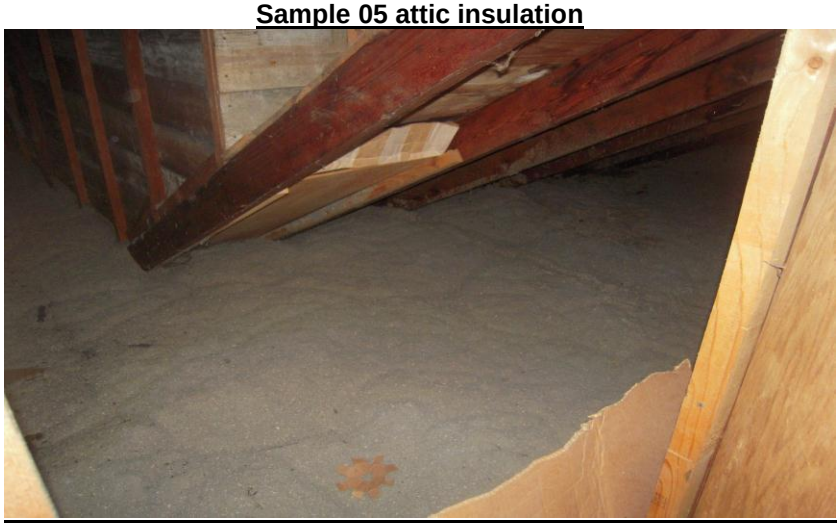
Sample 01 Plaster



Sample 02 Vinyl Floor kitchen

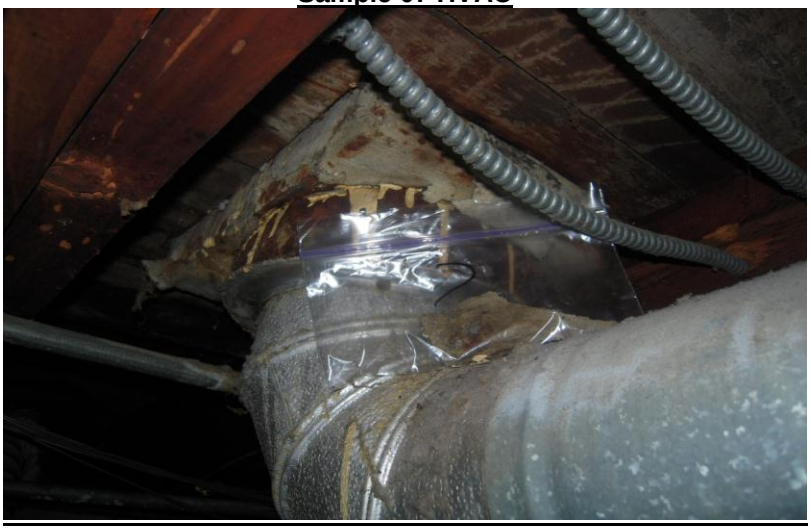
Sample 03 window glazing

Sample 05 attic insulation

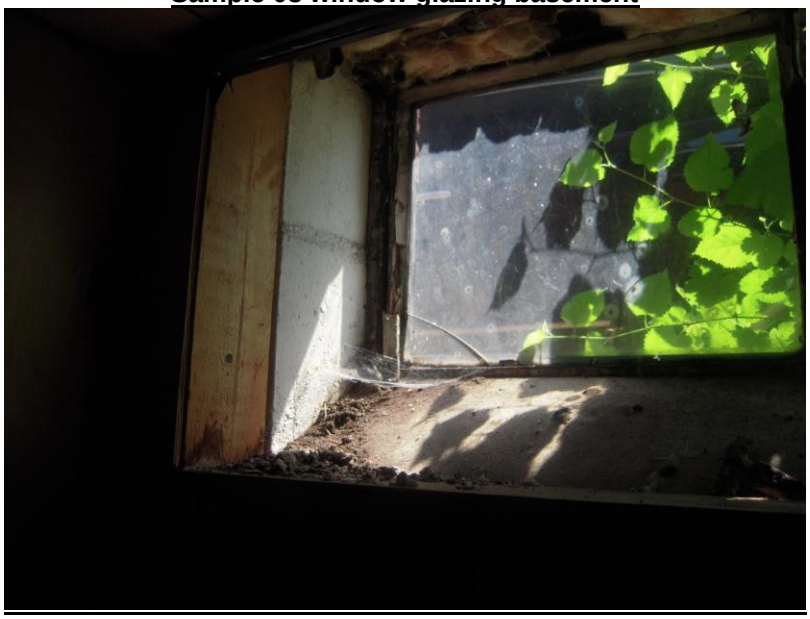


Sample 06 12 x 12 floor tile

Sample 07 HVAC



Sample 08 window glazing basement



Sample 09 2 x 4 ceiling tiles

Applicable Regulations:
USEPA NESHAPS (40cfr61, Subpart M)
IEPA (Illinois Administrative Code 35 part 228 asbestos)
IDPH (77 iac 85 asbestos abatement for public and private schools and commercial and public buildings)
OSHA (29 cfr 1926.1101)

Abatement recommendations:
All abatement activities in Illinois must be performed by personal accredited by IEPA and licensed by IDPH. All work practices must comply with applicable US/IEPA, IDPH and OSHA regs.
If roofing material were found to contain asbestos or assumed to contain asbestos, according to USEPA regulations, tar-impregnated roofing felts, asphalt shingles and mastics that are non-friable and will remain that way during demolition need not be abated prior to demolition or landfilled as acm. This does not include controlled burns.
Asbestos floor tile may remain in the structure during demolition, however it must be undamaged prior to demolition and remain that way during demolition. In addition, if floor tile remains in the building during demolition all waste must be treated and landfilled according to NESHAPS regs as acm. Concrete coated with acm mastic may not be used as clean fill or recycled.

If you have any questions please do not hesitate to contact me. 815-378-6113

Thank you.
Respectfully Submitted,

Jeremy Bonacquisti
Ironwood Environmental Inc.

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1219
Contact	Jeremy Bonacquisti	**Project Location:**	1807 W. State
Address:	3349 Carbineer Dr.	**TEM Project:**	44780
	Belvidere IL 61008-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	7/13/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
01 Plaster	216574	Gray	N/D	Chrysotile Amosite		Cellulose Glass		90-100	
02 Vinyl Floor, Kitchen	216575	White	N/D	Chrysotile Amosite		Cellulose Glass	10-15	85-90	
03 Window Glaze	216576	Beige	N/D	Chrysotile Amosite		Cellulose Glass	Trace	90-100	
04 Ceiling Texture, 1st Floor	216577	Beige	N/D	Chrysotile Amosite		Cellulose Glass	Trace	90-100	
05 Attic Insulation	216578	Gray	N/D	Chrysotile Amosite		Cellulose Glass	90-100		

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

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Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

BULK ASBESTOS SAMPLE EVALUATION
POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1219
Contact	Jeremy Bonacquisti	**Project Location:**	1807 W. State
Address:	3349 Carbineer Dr.	**TEM Project:**	44780
	Belvidere IL 61008-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	7/13/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
06 12x12 Floor Tile, Basement	216579	White	N/D	Chrysotile Amosite		Cellulose Glass	1-2	98-99	
07 HVAC	216580	Brown	Yes	Chrysotile Amosite	80-85	Cellulose Glass	2-3	12-18	
08 Basement Window Glaze	216581	Beige	Yes	Chrysotile Amosite	2-4	Cellulose Glass		96-98	
09 2x4 Ceiling Tile, Basement	216582	Gray	N/D	Chrysotile Amosite		Cellulose Glass	70-75 5-10	15-25	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

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Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

TEM, Incorporated

CHAIN OF CUSTODY REPORT

www.tem-inc.com

443 Duane Street
Glen Ellyn, IL 60137
(630) 790-0880
FAX (630) 790-0882

CLIENT: Ironwood Environmental	Date:	TAT 6 HOUR 12 HOUR 24 HOUR 48 HOUR 72 HOUR 4 DAYS	
Contact: J. Bonacquisti	E-Mail: IRONWOODENV@AOL.com	Project Name/No. MC1219 1807 W. State	
Address: 3349 Carbineer Dr.		Results Due by: (Date & Time)	
City/State/Zip Belvidere, IL, 61008		TEM Project#: 44780	
Phone: 815-378-6112	FAX	NVLAP ID 101130 AIHA-PAT 101151 AIHA-AAR 101151	

Comments:

PO/Quote#:

Client ID No.	Description	Sample Volume	PLM Bulk	PLM Point Count	PLM Gravimetric	TEM Air-AHERA	TEM Air-Other	TEM Bulk	TEM Chatfield	TEM Water	TEM Micro-Vac	TEM PCM-Air	TEM Other	Comments
1	Plaster													
2	Vinyl flr Kitch													
3	Window glaze	18												
4	Ceiling texture bt flr													
5	Attic insulation													
6	12x12 flr tile base	300												
7	HVAC													
8	Basement window glaze	8												
9	2x4 ceiling tile base													

RELINQUISHED (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE) Lori Bolstorne	DATE/TIME 7-12-12
RELINQUISHED (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	DATE/TIME
LOGGED IN BY (SIGNATURE)	DATE/TIME	ANALYZED BY (SIGNATURE)	DATE/TIME

NESHAPS Asbestos Building Inspection

1811 West State
Rockford, IL.
Winnebago County

Prepared for:
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Prepared by:
Ironwood Environmental Inc.
3349 Carbineer Dr.
Belvidere, IL. 61008

Office: 815-877-7547
Fax: 815-877-5905

Ironwood
Environmental Inc.

Ironwood
Environmental Inc.
3349 Carbineer Dr.
Belvidere, IL. 61008
Office: 815-877-7547
Fax: 815-877-5905

6/20/12

Mr. Dean Kurth
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Re: Asbestos building inspection: 1811 West State, Rkfd. IL. MC1209

Mr. Kurth,

Ironwood Environmental Inc. is pleased to have had the opportunity to complete the NESHAPS pre demolition asbestos building inspection for the property listed above.

Jeremy Bonacquisti, IL. asbestos building inspector # 100-6296, has completed a non-destructive asbestos building inspection at the request of the City of Rockford @ the property listed above. The inspection was completed in compliance with EPA regulations under NESHAPS CFR 763.86, for the sole purpose of demolition. Ironwood is not responsible for the presence of acbms existing in undetectable places, such as false walls, pipe chase, etc. All asbestos quantities are estimates. Roofing materials comprised of asphalt have not been tested and are to be assumed asbestos containing. It is the responsibility of the bidding contractor to field verify these quantities. Samples were collected and sent to TEM, an independent EPA / NVLAP approved lab, for PLM determination of the presence of asbestos, “Please refer to TEM report for results, methods, credentials and contacts”.

The following materials tested > or equal to1% asbestos

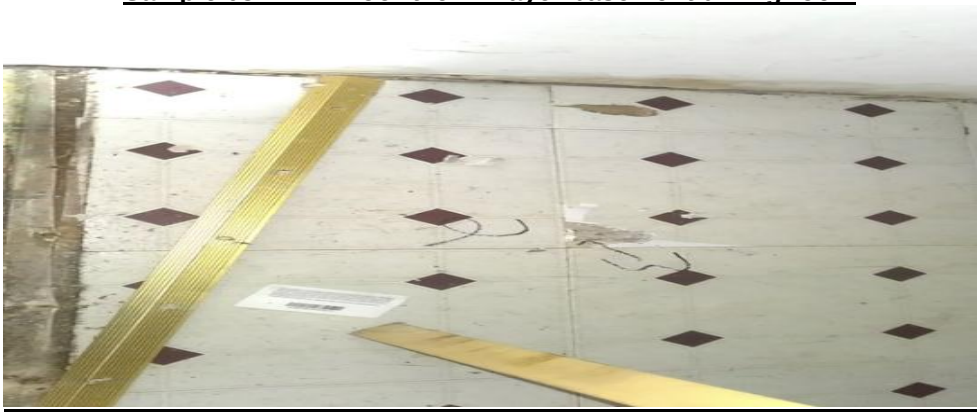
Sample NO	Description	Location	Percentage of asbestos	NESHAPS Classification	Condition	Estimated Quantity
01	Beige Vinyl Flooring	Basmnt kitchen	None	NA	NA	NA
02	Grey 12x12 flr tile	Basmnt dining room as the 1st layer	None	NA	NA	NA
03	Grey 12x12 flr tile	Basmnt dining room as the 2nd layer	None	NA	NA	NA
04	Black 12x12 flr tile	Bathroom in basmnt	None	NA	NA	NA

05	Gray 12x12 flr tile	2nd flr kitchen	None	NA	NA	NA
06	Gray 12x12 flr tile	2nd flr dining rm	None	NA	NA	NA
07	Gray vinyl floor	2nd flr bath	None	NA	NA	NA
08	HVAC tape/insulation	Basmnt and in walls	80-90	friable	damaged	Unknown
09	Window glazing	All exterior windows	2-4	Friable	Damaged	32 windows
10	Plaster	throughout	None	NA	NA	NA
11	Drywall	Throughout	None	NA	NA	NA

Sample 01 Vinyl floor basement kitchen

Sample 02 12x12 floor tile 1st layer basement dining room

Sample 03 12x12 floor tile 2nd layer basement dining room



Sample 04 12x12 floor tile basement bath

Sample 05 12x12 floor tile kitchen 2nd floor

Sample 6 12x12 Floor tile 2nd floor dining

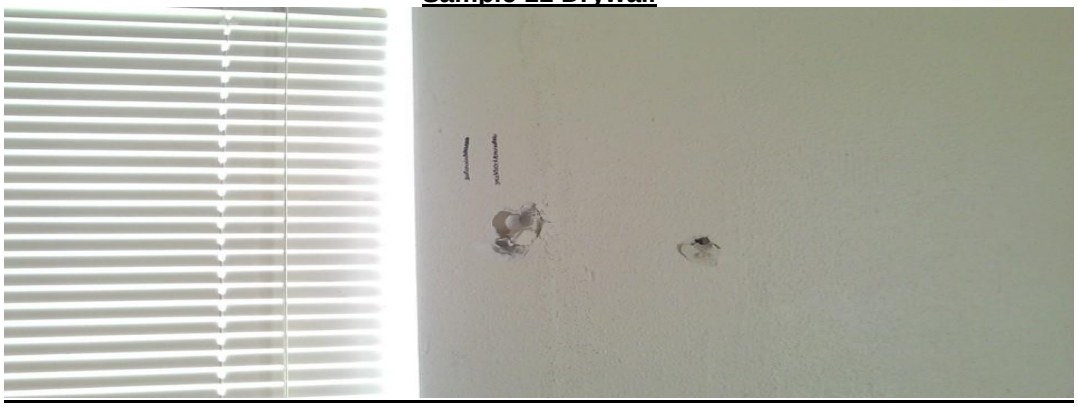
Sample 7 Vinyl floor 2nd floor bath

Sample 8 HVAC tape insulation basement and in walls on HVAC system

Sample 9 Window glazing

Sample 10 Plaster

Sample 11 Drywall



Applicable Regulations:
USEPA NESHAPS (40cfr61, Subpart M)
IEPA (Illinois Administrative Code 35 part 228 asbestos)
IDPH (77 iac 85 asbestos abatement for public and private schools and commercial and public buildings)
OSHA (29 cfr 1926.1101)

Abatement recommendations:
All abatement activities in Illinois must be performed by personal accredited by IEPA and licensed by IDPH. All work practices must comply with applicable US/IEPA, IDPH and OSHA regs.

If roofing material were found to contain asbestos or assumed to contain asbestos, according to USEPA regulations, tar-impregnated roofing felts, asphalt shingles and mastics that are non friable and will remain that way during demolition need not be abated prior to demolition or landfilled as acm. This does not include controlled burns.

Asbestos floor tile may remain in the structure during demolition, however it must be undamaged prior to demolition and remain that way during demolition. In addition, if floor tile remains in the building during demolition all waste must be treated and landfilled according to NESHAPS regs as acm. Concrete coated with acm mastic may not be used as clean fill or recycled.

If you have any questions please do not hesitate to contact me. 815-378-6113

Thank you.
Respectfully Submitted,

Jeremy Bonacquisti
Ironwood Environmental Inc.

TEM, Incorporated

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1209
Contact	Jeremy Bonacquisti	**Project Location:**	1811 West St.
Address:	6551 E. Riverside Blvd. #101	**TEM Project:**	44608
	Rockford IL 61114-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	6/5/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
01 Vinyl Fl. Kitch. Base	215313	Beige	N/D	Chrysotile Amosite		Cellulose Glass	Trace	90-100	
02 12x12 FT 1st Dine Base	215314	Gray	N/D	Chrysotile Amosite		Cellulose Glass		90-100	**SLM**
03 12x12 FT 2nd Dine Base	215315	Gray	N/D	Chrysotile Amosite		Cellulose Glass	30-35	65-70	
04 12x12 FT Bath Base	215316	Black	No	Chrysotile Amosite	Trace	Cellulose Glass	Trace	90-100	
05 12x12 FT Kitch. 2nd Floor	215317	Gray	N/D	Chrysotile Amosite		Cellulose Glass		90-100	**SLM**

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

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Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

TEM, Incorporated

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1209
Contact	Jeremy Bonacquisti	**Project Location:**	1811 West St.
Address:	6551 E. Riverside Blvd. #101	**TEM Project:**	44608
	Rockford IL 61114-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	6/5/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
06 12x12 FT Dining 2nd Floor	215318	Gray	N/D	Chrysotile Amosite		Cellulose Glass	5-10	90-95	
07 Vinyl Fl. Bath 2nd Floor	215319	Gray	N/D	Chrysotile Amosite		Cellulose Glass	10-15 Trace	85-90	
08 HVAC	215320	Gray	Yes	Chrysotile Amosite	80-90	Cellulose Glass	Trace	10-20	
09 Window Glaze	215321	Beige	Yes	Chrysotile Amosite	2-4	Cellulose Glass		96-98	
10 Plaster	215322	Beige	N/D	Chrysotile Amosite		Cellulose Glass		90-100	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

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Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

TEM, Incorporated

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1209
Contact	Jeremy Bonacquisti	**Project Location:**	1811 West St.
Address:	6551 E. Riverside Blvd. #101	**TEM Project:**	44608
	Rockford IL 61114-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	6/5/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID	TEM	COLOR	ACM	Asbestos Fibers		Non-Asbestos Fibers		Filler	Comments
Description	ID.			Type	Percent	Type	Percent	Binder	
11	215323	White	N/D	Chrysotile		Cellulose	3-5	93-96	
Drywall				Amosite		Glass	1-2		

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

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Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

Report Approved by:

NESHAPS Asbestos

Building Inspection

1821 West State St.

Rockford, IL.

Winnebago County

Prepared for:

City of Rockford

Public Works Dept.

425 East State St.

Prepared by:

Ironwood Environmental Inc.

3349 Carbineer Dr.

Belvidere, IL. 61008

Office: 815-877-7547

Fax: 815-877-5905

Ironwood

Environmental Inc.

Ironwood

Environmental Inc.

3349 Carbineer Dr.
Belvidere, IL. 61008
Office 815-877-7547
Fax: 815-877-5905

7/19/12
Mr. Dean Kurth
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Re: Asbestos building inspection: 1821 West State St., Rkfd. IL. MC1220

Mr. Kurth,

Ironwood Environmental Inc. is pleased to have had the opportunity to complete the NESHAPS pre demolition asbestos building inspection for the property listed above. Jeremy Bonacquisti, IL. asbestos building inspector # 100-6296, has completed a non-destructive asbestos building inspection at the request of the City of Rockford @ the property listed above. The inspection was completed in compliance with EPA regulations under NESHAPS CFR 763.86, for the sole purpose of demolition. Ironwood is not responsible for the presence of acbms existing in undetectable places, such as false walls, pipe chase, etc. All asbestos quantities are estimates. Roofing materials comprised of asphalt have not been tested and are to be assumed asbestos containing. It is the responsibility of the bidding contractor to field verify these quantities. Samples were collected and sent to TEM, an independent EPA / NVLAP approved lab, for PLM determination of the presence of asbestos, “Please refer to TEM report for results, methods, credentials and contacts”.

When preparing for asbestos abatement it is important to determine if the asbestos containing materials (ACMs) are friable or non-friable. Friability is the degree to which a solid substance can be broken up into smaller pieces with a minimum of effort. In the case of asbestos, friable usually refers to whether the mineral can be broken down by a human hand. Friable asbestos materials are the ones that are most dangerous. They easily release asbestos fibers into the air, and these fibers pose a significant health risk to anyone nearby. Non-friable asbestos, on the other hand, is less likely to release fibers. Roofing material, for example, is a non-friable asbestos-containing material because the asbestos fibers are bound or locked into place. Non-friable asbestos is still a health risk, as it can be made friable if damaged or altered. To further differentiate the potential risks associated with ACMs, the EPA divides non-friable asbestos into two subcategories:

Category I Non-Friable: Includes non-friable materials which are unlikely to be made friable, due to a strong interlocking material which binds the fibers. These materials should only be removed during demolition if they are in very poor condition. Examples include vinyl floor coverings, vinyl asbestos tile, asphalt roofing products and gaskets.

Category II Non-Friable: Includes all non-friable materials which are not Category I. These materials are more likely to be made friable, as they are not resistant to weathering or crushing forces and may be subjected to extreme conditions or excessive use. Examples include cement siding, transite board shingles and concrete-like products.

Regulated Asbestos-Containing Material

Federal regulatory agencies such as the EPA consider the following asbestos materials to be potentially dangerous and thus subject to regulations during the removal or renovation process:

Regulated Asbestos-Containing Material

- All friable ACMs
- Category I non-friable materials which have become friable
- Category I non-friable materials which have been subjected to sanding, grinding, cutting, etc.
- Category II non-friable materials with a high probability of becoming friable during renovation or demolition

If a facility or home will be demolished by burning, all asbestos material, whether it is friable or non-friable, should be removed prior to the demolition procedures.

Sample #	Description	Location	% asbestos	NESHAPS Classification	Condition	Estimated Quantity
01	Drywall	throughout	None detected	NA	NA	NA
02	White vinyl flooring	2nd floor	None detected	NA	NA	NA
03	Ceiling texture	2nd floor	None detected	NA	NA	NA
04	Attic insulation		None detected	NA	NA	NA
05	White 12 x 12 floor tile	Living room	None detected	NA	NA	NA
06	Window glazing	22 exterior windows	None detected	NA	NA	NA
07	Wall insulation		None detected	NA	NA	NA
08	Gray flooring	Kitchen as 1st layer	None detected	NA	NA	NA
09	White flooring	Kitchen as 2nd layer	None detected	NA	NA	NA
10	Red flooring	Kitchen as 3rd layer	Chrysotile 5-10%	Category 1 non-friable	Damaged	130 sq. ft.
11	Pipe insulation	Basement and in walls	Chrysotile 60-65%	Friable	Damaged	10 linear ft.
12	HVAC tape/insulation	Basement and in walls	Chrysotile 60-70%	Friable	Damaged	unknown

Sample 01 Drywall

Sample 02 Vinyl Floor 2nd floor

Sample 03 Ceiling texture 2nd floor

Sample 04 Attic insulation

Sample 05 12 x 12 floor tile living room

Sample 06 Window glazing

Sample 07 Wall insulation

Sample 08, 09, 10 Kitchen flooring Layer 1,2 & 3

Sample 11

Sample 12 HVAC tape / insulation

Applicable Regulations:
USEPA NESHAPS (40cfr61, Subpart M)
IEPA (Illinois Administrative Code 35 part 228 asbestos)
IDPH (77 iac 85 asbestos abatement for public and private schools and commercial and public buildings)
OSHA (29 cfr 1926.1101)

Abatement recommendations:
All abatement activities in Illinois must be performed by personal accredited by IEPA and licensed by IDPH. All work practices must comply with applicable US/IEPA, IDPH and OSHA regs.
If roofing material were found to contain asbestos or assumed to contain asbestos, according to USEPA regulations, tar-impregnated roofing felts, asphalt shingles and mastics that are non-friable and will remain that way during demolition need not be abated prior to demolition or landfilled as acm. This does not include controlled burns.
Asbestos floor tile may remain in the structure during demolition, however it must be undamaged prior to demolition and remain that way during demolition. In addition, if floor tile remains in the building during demolition all waste must be treated and landfilled according to NESHAPS regs as acm. Concrete coated with acm mastic may not be used as clean fill or recycled.

If you have any questions please do not hesitate to contact me. 815-378-6113

Thank you.
Respectfully Submitted,

Jeremy Bonacquisti
Ironwood Environmental Inc.

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1220
Contact	Jeremy Bonacquisti	**Project Location:**	1821 W. State
Address:	3349 Carbineer Dr.	**TEM Project:**	44781
	Belvidere IL 61008-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	7/16/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
01 Drywall	216583	Gray	N/D	Chrysotile Amosite		Cellulose Glass	2-4	96-98	
02 Vinyl Floor, 2nd Fl.	216584	White	N/D	Chrysotile Amosite		Cellulose Glass	10-15 Trace	85-90	
03 Ceiling Texture, 2nd Fl.	216585	White	N/D	Chrysotile Amosite		Cellulose Glass	Trace	90-100	
04 Attic Insulation	216586	Gray	N/D	Chrysotile Amosite		Cellulose Glass	Trace 90-100		
05 12x12 Floor Tile, Living Rm.	216587	White	N/D	Chrysotile Amosite		Cellulose Glass		90-100	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples and vermiculite) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

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Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected

Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1220
Contact	Jeremy Bonacquisti	**Project Location:**	1821 W. State
Address:	3349 Carbineer Dr.	**TEM Project:**	44781
	Belvidere IL 61008-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	7/16/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
06 Window Glaze	216588	Beige	N/D	Chrysotile Amosite		Cellulose Glass		90-100	
07 Wall Insulation	216589	Gray	N/D	Chrysotile Amosite		Cellulose Glass	90-100		
08 Kitchen Floor, 1st Layer	216590	Gray	N/D	Chrysotile Amosite		Cellulose Glass		90-100	
09 Kitchen Floor, 2nd Layer	216591	White	N/D	Chrysotile Amosite		Cellulose Glass		90-100	
10 Kitchen Floor, 3rd Layer	216592	Red	Yes	Chrysotile Amosite	5-10	Cellulose Glass	3-5	85-92	

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Report Approved by:

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BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1220
Contact	Jeremy Bonacquisti	**Project Location:**	1821 W. State
Address:	3349 Carbineer Dr.	**TEM Project:**	44781
	Belvidere IL 61008-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	7/16/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
11 TSI, Basement	216593	Gray	Yes	Chrysotile Amosite	60-65	Cellulose Glass	20-25	10-20	
12 HVAC	216594	Gray	Yes	Chrysotile Amosite	60-70	Cellulose Glass	15-20	10-25	

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993. This report applies only to samples tested.

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Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

TEM, Incorporated

CHAIN OF CUSTODY REPORT

www.tem-inc.com

443 Duane Street
Glen Ellyn, IL 60137
(630) 790-0880
FAX (630) 790-0882

CLIENT: Ironwood Environmental	Date:	TAT 6 HOUR 12 HOUR 24 HOUR 48 HOUR 72 HOUR (>4 DAYS)	
Contact: J. Bonacquisti	E-Mail: IRONWOODENV@AOL.com	Project Name/No. MC1220 1821 W. State	
Address: 3349 Carbineer Dr.		Results Due by: (Date & Time)	
City/State/Zip Belvidere, IL, 61008		TEM Project#: 44781	
Phone: 815-378-6113	FAX	NVLAP ID 101130	AIHA-PAT 101151 AIHA-AAR 101151

Comments:

PO/Quote#:

Client ID No.	Description	Sample Volume	PLM Bulk	PLM Point Count	PLM Gravimetric	TEM Air-AHERA	TEM Air-Other	TEM Bulk	TEM Chatfield	TEM Water	TEM Micro-Vac	TEM PCM-Air	TEM Other	Comments
1	Drywall													
2	Vinyl 2nd flr	140												
3	Ceiling texture 2nd flr													
4	Attic insul													
5	12x12 flr tile liv rm	30												
6	Window glaze	22												
7	Wall insulation													
8	Kitch flr 1st layer													
9	" " 2nd "													
10	" " 3rd "													
11	TSI Base 10 ft													
12	HVAC													

RELINQUISHED (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE) Lea Brown	DATE/TIME 2-12-12
RELINQUISHED (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	DATE/TIME
LOGGED IN BY (SIGNATURE)	DATE/TIME	ANALYZED BY (SIGNATURE)	DATE/TIME

NESHAPS Asbestos Building Inspection

115 N. Day,
Rockford, IL.
Winnebago County

Prepared for:
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Prepared by:
Ironwood Environmental Inc.
3349 Carbineer Dr.
Belvidere, IL. 61008

Office: 815-877-7547
Fax: 815-877-5905

Ironwood
Environmental Inc.

Ironwood
Environmental Inc.
3349 Carbineer Dr.
Belvidere, IL. 61008
Office: 815-877-7547
Fax: 815-877-5905

6/20/12

Mr. Dean Kurth
City of Rockford
Public Works Dept.
425 E. State St.
Rockford, IL. 61104

Re: Asbestos building inspection: 115 N. Day, Rkfd. IL. MC1210

Mr. Kurth,

Ironwood Environmental Inc. is pleased to have had the opportunity to complete the NESHAPS pre demolition asbestos building inspection for the property listed above.

Jeremy Bonacquisti, IL. asbestos building inspector # 100-6296, has completed a non-destructive asbestos building inspection at the request of the City of Rockford @ the property listed above. The inspection was completed in compliance with EPA regulations under NESHAPS CFR 763.86, for the sole purpose of demolition. Ironwood is not responsible for the presence of acbms existing in undetectable places, such as false walls, pipe chase, etc. All asbestos quantities are estimates. Roofing materials comprised of asphalt have not been tested and are to be assumed asbestos containing. It is the responsibility of the bidding contractor to field verify these quantities. Samples were collected and sent to TEM, an independent EPA / NVLAP approved lab, for PLM determination of the presence of asbestos, “Please refer to TEM report for results, methods, credentials and contacts”.

The following materials tested > or equal to1% asbestos

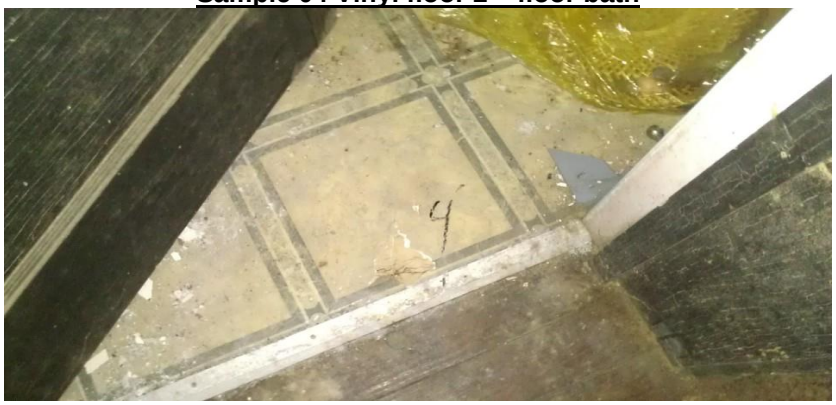
Sample NO	Description	Location	Percentage of asbestos	NESHAPS Classification	Condition	Estimated Quantity
01	Window glazing	Wood dbl hung ext windows	2-3	Friable	Damaged	24 windows
02	Beige vinyl flr	Kitchen	None	NA	NA	NA
03	HVAC tape insulation	In bsmnt and walls on hvac system	80-90	friable	damaged	unknown
04	Beige vinyl flr	2nd flr bath	None	NA	NA	NA
05	Drywall	Various throughout	None	NA	NA	NA
06	Plaster	Various throughout	None	NA	NA	NA

Sample 01 window glazing

Sample 02 Vinyl floor in kitchen

Sample 03 HVAC

Sample 04 Vinyl floor 2nd floor bath



Sample 05 Drywall

Applicable Regulations:
USEPA NESHAPS (40cfr61, Subpart M)
IEPA (Illinois Administrative Code 35 part 228 asbestos)
IDPH (77 iac 85 asbestos abatement for public and private schools and commercial and public buildings)
OSHA (29 cfr 1926.1101)

Abatement recommendations:
All abatement activities in Illinois must be performed by personal accredited by IEPA and licensed by IDPH. All work practices must comply with applicable US/IEPA, IDPH and OSHA regs.

If roofing material were found to contain asbestos or assumed to contain asbestos, according to USEPA regulations, tar-impregnated roofing felts, asphalt shingles and mastics that are non friable and will remain that way during demolition need not be abated prior to demolition or landfilled as acm. This does not include controlled burns.

Asbestos floor tile may remain in the structure during demolition, however it must be undamaged prior to demolition and remain that way during demolition. In addition, if floor tile remains in the building during demolition all waste must be treated and landfilled according to NESHAPS regs as acm. Concrete coated with acm mastic may not be used as clean fill or recycled.

If you have any questions please do not hesitate to contact me. 815-378-6113

Thank you.
Respectfully Submitted,

Jeremy Bonacquisti
Ironwood Environmental Inc.

TEM, Incorporated

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1210
Contact	Jeremy Bonacquisti	**Project Location:**	115 N. Day
Address:	6551 E. Riverside Blvd. #101	**TEM Project:**	44609
	Rockford IL 61114-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	6/8/2012

Sample Information				Fibrous Materials				Non-Fibrous Materials	
Client Sample ID Description	TEM ID.	COLOR	ACM	Asbestos Fibers Type	Asbestos Fibers Percent	Non-Asbestos Fibers Type	Non-Asbestos Fibers Percent	Filler Binder	Comments
01 Window Glaze	215324	Gray	Yes	Chrysotile Amosite	2-3	Cellulose Glass	Trace	97-98	
02 Vinyl Kitchen	215325	Beige	N/D	Chrysotile Amosite		Cellulose Glass	5-10	90-95	
03 HVAC	215326	Gray	Yes	Chrysotile Amosite	80-90	Cellulose Glass		10-20	
04 Vinyl Floor 2nd Bath	215327	Beige	N/D	Chrysotile Amosite		Cellulose Glass	10-15 2-3	82-88	
05 Drywall	215328	Gray	N/D	Chrysotile Amosite		Cellulose Glass	1-2	98-99	

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Report Approved by:

443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

TEM, Incorporated

BULK ASBESTOS SAMPLE EVALUATION

POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

NVLAP LAB ID 101130-0

Company Name:	Ironwood Environmental	**Client Project Ref:**	MC 1210
Contact	Jeremy Bonacquisti	**Project Location:**	115 N. Day
Address:	6551 E. Riverside Blvd. #101	**TEM Project:**	44609
	Rockford IL 61114-	**Analyzed by:**	Lori Boersma
		Date Analyzed:	6/8/2012

Sample Information				**Fibrous Materials**				**Non-Fibrous Materials**	
Client Sample ID	TEM	COLOR	ACM	Asbestos Fibers		Non-Asbestos Fibers		Filler	Comments
Description	ID.			Type	Percent	Type	Percent	Binder	
06	215329	Gray	N/D	Chrysotile		Cellulose	Trace	98-99	
Plaster				Amosite		Glass			
						Hair	1-2		

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443 Duane Street, Glen Ellyn, Illinois 60137 Phone (630) 790-0880 Fax (630) 790-0882

Report Approved by:

andersonenveng.com | 815.962.9000 124 N. Water St., Suite 206 | Rockford, IL 61107 | fax 815.962.7978

Anderson
environmental&engineering

April 30, 2012

City of Rockford
Attn: Ryan Lundberg
425 E. State Street
Rockford, IL 61107

Re: Preliminary Asbestos Inspection, 112 Carbaugh, Rockford, Illinois
AEE Job #133.78

Dear Mr. Lundberg:

On April 19, 2012 a non-destructive NESHAP preliminary inspection was performed at 112 Carbaugh, Rockford, Illinois. Certified Asbestos Inspector Jennifer Anderson (100-07971) performed the inspection in order to determine the presence of asbestos within the building materials. The inspection consisted of visual observation, non-destructive bulk sampling of building materials, and laboratory analysis of suspect asbestos containing building materials by a laboratory that successfully participates in the AIHA Proficiency Analytical Testing (PAT) program. Samples were submitted to Micro Analytical in Milwaukee, WI, for analysis by polarized light microscopy (PLM). The type and quantity (percentage) of asbestos are identified by polarized light microscopy (PLM) following preparation and identification protocols recommended by the National Institute for Occupation Safety and Health (NIOSH) and the National Voluntary Laboratory Accreditation Program (NVLAP).

This inspection included a residence and a commercial garage. The commercial garage was in a significant state of disrepair and not all areas were safely accessible.

FRIABLE ASBESTOS – material can be crumbled, pulverized, or reduced to powder by hand pressure; these materials must be removed prior to demolition activities and should be addressed during renovation activities that would disturb the material, such as thermal system insulation. The following friable asbestos containing materials were identified:

- Duct insulation in residence (45% Chrysotile)
- Off-white sheet linoleum in kitchen of residence (20% Chrysotile)

CATEGORY 1 NON-FRIABLE – material is pliable (not brittle), breaks by tearing rather than fracturing and does not easily release asbestos fibers upon breaking; these materials should be addressed during renovation activities that would disturb the material, but do not need removal prior to demolition activities (handled as demolition material at a certified landfill) if they are in good condition and not rendered friable during handling, transporting, and disposal. However, most asbestos containing building materials on concrete substrate are removed prior to demolition activities to reduce the overall cost due to landfill charges and the fact that concrete cannot be left on site or recycled with these materials in place. Category I Non-Friable materials include resilient floor coverings, asphalt roofing materials, gaskets, and packing. The following types of Category I Non-Friable asbestos were identified:

- Roofing Materials in commercial building (2% Chrysotile)
- Roofing material on residence (assumed)

- Red/grey 9” x 9” floor tile in the basement of the residence (2% Chrysotile) with non-ACM mastic

*Please Note: non-friable asbestos containing materials in **good** condition that fall under Category I, such as flooring and/or mastics on wood substrate and roofing materials are not **required** to be removed prior to demolition per the USEPA 40 CFR Part 61 National Emissions Standards for Hazardous Air Pollutants (NESHAP); Final Rule, dated November 20, 1990. However, while demolition is being performed the material must be kept wet and all debris must go to an approved landfill that accepts demolition debris and does not burn, crush, grind or recycle the material. In addition, you must have a trained individual knowledgeable in the provisions of 40 CFR Part 61, Subpart M, on site during the demolition and available for inspection during normal business hours. If material becomes damaged or rendered friable during demolition, proper abatement procedures must immediately be instituted.*

CATEGORY II NON-FRIABLE – material is not pliable, breaks by fracturing rather than tearing, and does release some asbestos fibers upon breaking; these materials should be addressed during renovation activities that would disturb the material and are removed prior to demolition activities since they are normally rendered friable during demolition and/or handling, transporting and disposal. Category II Non-Friable materials include any non-friable asbestos containing material that is not in Category I (i.e. transite siding). The following types of Category II Non-Friable asbestos were identified:

- None

NON ASBESTOS CONTAINING MATERIALS – The following materials were tested and found to contain *no* asbestos (or less than1%):

Residence

- Brown/grey sheet linoleum in kitchen
- Plaster throughout
- Brown mastic on grey plastic 4” x 4” wall tile in kitchen
- Beige vapor barrier
- Beige sheet linoleum in bathroom
- White insulation in attic
- Black vapor barrier on 2nd floor
- Drywall tape
- Window glazing
- Concrete block mortar
- Window caulk

Commercial Garage

- Plaster
- Brick mortar

- Concrete block mortar
- Window glazing

EPA guidance recommends analysis of non-friable materials by PLM with gravimetric reduction due to the high number of false negative PLM analyses for these types of materials. Asbestos fibers in these materials are often below the detection capabilities of the optical PLM microscope and can not be detected. Gravimetric reduction includes high temperature ashing and acid digestion and is normally performed prior to Transmission Electron Microscopy (TEM) analysis. Gravimetric reduction of non-friable samples prior to PLM analysis enhances the detection of fibers. If no asbestos is detected by this method, TEM is recommended for definitive analysis.

Due to the distinct possibility that conditions may exist which could not be identified within the scope of this preliminary inspection or which were not apparent during the site visit, any additional material discovered that has not been listed above must be assumed to be asbestos containing; or, if non-friable material becomes damaged or rendered friable during the renovation/demolition activities, proper abatement procedures must immediately be instituted. You must have a trained individual knowledgeable in the provisions of 40 CFR Part 61, Subpart M, on site during the demolition and available for inspection during normal business hours. It is recommended that this report be sent to the demolition contractor as well.

If you have any questions, please feel free to contact me at 815/962-9000. Thank you for the opportunity to serve you on this project.

Sincerely,

Jennifer L. Anderson
President

Attachment A - Laboratory Analytical Reports
Attachment B – Photographs
Attachment C – Quantities and Budgetary Estimate

Exhibit A

MICRO ANALYTICAL, INC.

11521 West North Avenue
Milwaukee, WI 53226
(800) 771-9820 (414) 771-0855
Fax: (414) 771-6570

BULK ASBESTOS ANALYTICAL REPORT
Utilizing PLM and Dispersion Stain Technique

Customer: Anderson Environmental
& Engineering, Co.
124 N. Water Street-Suite 206
Rockford , IL 61107

Report #: 117164
Received: 20-Apr-2012
Analyzed: 27-Apr-2012

Job ID: 133.78

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
1A	45% Chrysotile	5% Cellulose	50%	Off-White	Compressed
2A	2% Chrysotile		98%	Red	Floortile
2A II	None Detected		100%	Black	Mastic
2B II	None Detected		100%	Black	Mastic
2C II	None Detected		100%	Black	Mastic
3A	None Detected	5% Fibrous Glass 35% Cellulose	60%	Brown	Compressed
3A II	None Detected		100%	Brown	Mastic
3A III	20% Chrysotile	5% Cellulose	75%	Off-White	Linoleum
3A IV	None Detected		100%	Gray	Compact
3B	None Detected	5% Fibrous Glass 20% Cellulose	75%	Brown	Linoleum
3C	None Detected	5% Fibrous Glass 20% Cellulose	75%	Brown	Linoleum
4A	None Detected		100%	Off-White	Compact
4B	None Detected		100%	Off-White	Compact
4C	None Detected		100%	Off-White	Compact
5A	None Detected		100%	Tan	Mastic
5B	None Detected		100%	Tan	Mastic
5C	None Detected		100%	Tan	Mastic
6A	None Detected	85% Cellulose	15%	Tan	Compressed
6B	None Detected	85% Cellulose	15%	Tan	Compressed
6C	None Detected	85% Cellulose	15%	Tan	Compressed

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
7A	None Detected	5% Fibrous Glass 20% Cellulose	75%	Beige	Linoleum
7A II	None Detected		100%	Tan	Mastic
7B	None Detected	5% Fibrous Glass 20% Cellulose	75%	Beige	Linoleum
7B II	None Detected		100%	Tan	Mastic
7C	None Detected	5% Fibrous Glass 20% Cellulose	75%	Beige	Linoleum
7C II	None Detected		100%	Tan	Mastic
8A	None Detected	83% Fibrous Glass 2% Cellulose	15%	Off-White	Associated
8B	None Detected	83% Fibrous Glass 2% Cellulose	15%	Off-White	Associated
8C	None Detected	83% Fibrous Glass 2% Cellulose	15%	Off-White	Associated
9A	None Detected	50% Cellulose	50%	Black	Resinous
9B	None Detected	50% Cellulose	50%	Black	Resinous
9C	None Detected	50% Cellulose	50%	Black	Resinous
10A	None Detected	65% Cellulose	35%	Tan	Compressed
10B	None Detected	65% Cellulose	35%	Tan	Compressed
10C	None Detected	65% Cellulose	35%	Tan	Compressed
11A	None Detected		100%	White	Compact
11B	None Detected		100%	White	Compact
11C	None Detected		100%	White	Compact
12A	None Detected		100%	Gray	Compact
12B	None Detected		100%	Gray	Compact
12C	None Detected		100%	Gray	Compact
13A	None Detected		100%	White	Resinous
13B	None Detected		100%	White	Resinous
13C	None Detected		100%	White	Resinous
14A	None Detected	<1% Hair	100%	Off-White	Compact
14B	None Detected	<1% Hair	100%	Off-White	Compact
14C	None Detected	<1% Hair	100%	Off-White	Compact
15A	2% Chrysotile	10% Fibrous Glass 30% Cellulose	58%	Black	Resinous
16A	None Detected		100%	Gray	Compact

Sample ID	% Asbestos	Non-Asbestos Fibrous Components	Non-Fibrous Components	Color	Texture
16B	None Detected		100%	Gray	Compact
16C	None Detected		100%	Gray	Compact
17A	None Detected		100%	Gray	Compact
17B	None Detected		100%	Gray	Compact
17C	None Detected		100%	Gray	Compact
18A	None Detected		100%	White	Resinous
18B	None Detected		100%	White	Resinous
18C	None Detected		100%	White	Resinous

Analyzed By: Arthur Warneke III

Test method: EPA/600/R-93/116. Quantitation is done by Calibrated Visual Estimation which has an accepted Relative Percent Difference of 35. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This test report relates only to the items tested and shall not be reproduced except in full, without the written approval of MICRO ANALYTICAL, INC.

Anderson
environmental&engineering

SAMPLE LOG & SAMPLE NOTES

Date: 4/19/2012

Day of Week: Thursday

Page 1 of 2

THIS IS A CHAIN-OF-CUSTODY DOCUMENT.
PLEASE FILL IT OUT COMPLETELY AND SIGN ACCORDINGLY.

Job Name: 112 Carbaugh Job # 133.78

Building Name: House and garage

Sample Area/Lot Number and Name:

Sample Number	Photo Number	Description of Sampled Material	Sample Site Location
1A	1	DUCT INSULATION	BASEMENT
2ABC	2	RED/GREY 9" X 9" FLOOR TILE WITH BLACK MASTIC	BASEMENT
3ABC	3	BROWN/GREY SHEET LINOLEUM WITH WHITE STONE PATTERN SHEET LINOLEUM UNDERNEATH	KITCHEN
4ABC	4	PLASTER	THROUGHOUT
5ABC	5	BROWN MASTIC ON GREY PLASTIC 4" X 4" WALL TILE	KITCHEN
6ABC	6	BEIGE VAPOR BARRIER	THROUGHOUT
7ABC	7	BEIGE SHEET LINOLEUM	BATHROOM
8ABC	8	WHITE INSULATION	ATTIC
9ABC	9	BLACK VAPOR BARRIER	2ND FLOOR
10ABC	10	DRYWALL TAPE	1ST FLOOR
11ABC	11	GLAZING	EXTERIOR

NOTE: IF MAILED, HAVE CARRIER PROVIDED SIGNED PICK-UP AND DELIVERY RECEIPTS TO BE ATTACHED TO THE ORIGINAL OF THIS DOCUMENT.

Faxed (815) 962-7978 Y N
Process Speed: S V N
Date results requested: HC _____ Verbal _____

Receiving Analyst's Name	Receiving Analyst's Firm	Inspector's Name	Inspector's Firm
		Jennifer L. Anderson AII-12247; 100-07971	Anderson Environmental & Engineering, Co.

Receiving Analyst's Signature	Date Samples Received	Inspector's Signature	Date Samples Collected
	4/20/12	Jennifer L. Anderson	4/19/12

Anderson
environmental&engineering

SAMPLE LOG & SAMPLE NOTES

Date: 4/19/2012

Day of Week: Thursday

Page 2 of 2

THIS IS A CHAIN-OF-CUSTODY DOCUMENT.
PLEASE FILL IT OUT COMPLETELY AND SIGN ACCORDINGLY.

Job Name: 112 Carbaugh Job # 133.78

Building Name: House and garage

Sample Area/Lot Number and Name:

Sample Number	Photo Number	Description of Sampled Material	Sample Site Location
12ABC	12	CONCRETE BLOCK MORTAR	EXTERIOR
13ABC	13	WINDOW CAULK	EXTERIOR
14ABC	14	PLASTER	GARAGE
15ABC	15	ROOFING (MULTIPLE LAYERS)	GARAGE
16ABC	16	BRICK MORTAR	EXTERIOR OF GARAGE
17ABC	17	CONCRETE BLOCK MORTAR	EXTERIOR OF GARAGE
18ABC	18	WINDOW GLAZING	EXTERIOR OF GARAGE

NOTE: IF MAILED, HAVE CARRIER PROVIDED SIGNED PICK-UP AND DELIVERY RECEIPTS TO BE ATTACHED TO THE ORIGINAL OF THIS DOCUMENT.

Faxed (815) 962-7978 Y N
Process Speed: S V N
Date results requested: HC _____ Verbal _____

Receiving Analyst's Name	Receiving Analyst's Firm	Inspector's Name	Inspector's Firm
		Jennifer L. Anderson AII-12247; 100-07971	Anderson Environmental & Engineering, Co.

Receiving Analyst's Signature	Date Samples Received	Inspector's Signature	Date Samples Collected
	4/20/12		4/19/12

Exhibit B

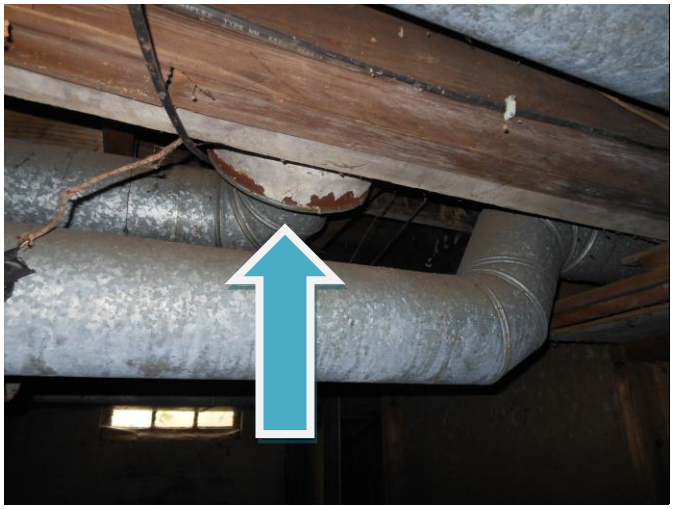

Photo #1
Date: April 19, 2012
Location: Basement
Description: Duct insulation

Photo #2
Date: April 19, 2012
Location: Basement
Description: Red/grey 9”x9” floor tile with black mastic

Photo #3
Date: April 19, 2012
Location: Kitchen
Description: Brown/grey sheet linoleum with white sheet linoleum underneath.

Photo #4
Date: April 19, 2012
Location: Throughout
Description: Plaster

Photo #5
Date: April 19, 2012
Location: Kitchen
Description: Brown mastic on grey plastic 4”x4” wall tile

Photo #6
Date: April 19, 2012
Location: Living Room
Description: Beige vapor barrier

Photo #7
Date: April 19, 2012
Location: Bathroom
Description: Beige sheet linoleum

Photo #8
Date: April 19, 2012
Location: 2nd Floor
Description: White insulation

Photo #9
Date: April 19, 2012
Location: 2nd Floor
Description: Black vapor barrier

Photo #10
Date: April 19, 2012
Location: 1st Floor
Description: Drywall tape

Photo #11
Date: April 19, 2012
Location: Exterior
Description: Glazing

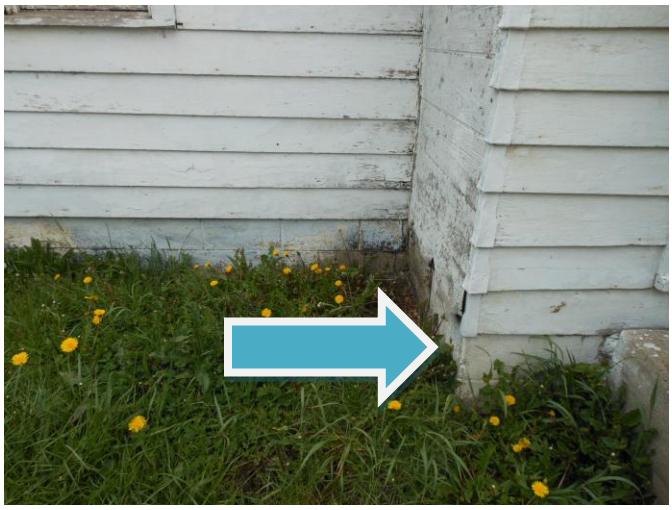

Photo #12
Date: April 19, 2012
Location: Exterior
Description: Concrete block mortar

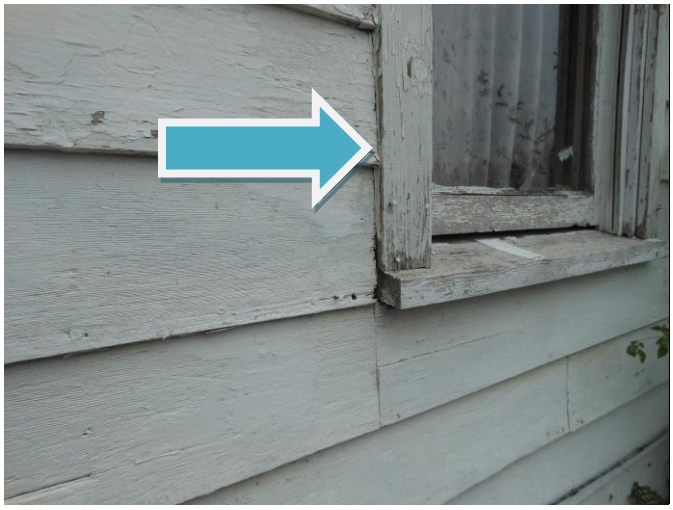

Photo #13
Date: April 19, 2012
Location: Exterior
Description: Window caulk

Photo #14
Date: April 19, 2012
Location: Garage
Description: Plaster

Photo #15
Date: April 19, 2012
Location: Garage
Description: Roofing materials

No photo available

Photo #16
Date: April 19, 2012
Location: Garage
Description: Brick mortar

Photo #17
Date: April 19, 2012
Location: Garage
Description: Concrete block mortar

Photo #18
Date: April 19, 2012
Location: Garage
Description: Window glazing

Exhibit C

Table 1 - Asbestos Containing Materials
Summary of Results
112 Carbaugh, Rockford, IL

Material Description	Material Location	Asbestos Type	Material Condition	Quantity	Removal cost/unit
Roofing Materials	Commercial garage	2% Chrysotile	Good	N/A	Leave in place for demolition
Roofing Materials	Residence	Assumed	Good	N/A	Leave in place for demolition
Off-white sheet linoleum	Kitchen of residence (lower layer)	20% Chrysotile	Good	80 s.f.	
Duct insulation	Basement of residence	45% Chrysotile	Good	100 s.f.	
Red/grey 9” x 9” floor tile with non-ACM mastic	Basement of residence	2% Chrysotile	Good	180 s.f.	

- *All quantities are estimated and any contractor should field verify quantities prior to bidding on this work.*
- *Duct insulation is assumed to be in the walls, as well as visible in the basement.*
- *Commercial garage was in a significant state of disrepair. Not all areas of the building were safely accessible for sampling purposes.*