



SIERRA ENVIRONMENTAL GROUP, INC.

September 22, 2015

Mr. Dennis Zimmer
City of Dayton
Department of Building Services/Division of Housing Inspection
P.O. Box 22
371 West 2nd Street, Room 324
Dayton, OH 45402

Re: Comprehensive Pre-Demolition Asbestos Inspection
Vacant Residence
1115 Tennyson Avenue
Dayton, Ohio
Sierra Project Number: MCLB.001

Dear Mr. Zimmer:

On September 8, 2015, Mr. Todd Taylor (Ohio Department of Health Certified Asbestos Hazard Evaluation Specialist #ES32139) of Sierra Environmental Group, Inc. (Sierra) visited the vacant residence located at 1115 Tennyson Avenue in Dayton, Ohio. The purpose of this visit was to conduct a comprehensive asbestos inspection of the specified residence scheduled for demolition. This inspection process includes a visual inspection, as well as, the collection and analyses of samples from suspect asbestos-containing materials.

During the survey, the samples were collected utilizing sampling methods outlined in current EPA Guidance Documents. Each sample was collected and placed in a clean, sealable container and labeled with a unique sample identification number. Pertinent information was recorded on a Bulk Sample Log Sheet, including sample identification number, date of inspection, name of inspector, building name, a brief description and location of the sample, and the type of material sampled (e.g., thermal insulation, fireproofing, acoustical plaster). The samples were submitted to an analytical laboratory and analyzed for asbestos content by polarized-light microscopy (PLM) and dispersion staining (Method Reference: EPA-600/R-93/116). This analytical method, which the EPA currently recommends for the determination of asbestos in bulk samples of suspect materials, can be used for qualitative identification of six morphologically different types of asbestos fibers: chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite asbestos.

The method specifies that the asbestos content in a bulk sample shall be estimated and reported as a finite percentage (rounded to the nearest percentage) within the range of 0 to 100. The result of the bulk sample analysis is reported in a standard written laboratory report. This report includes the client's name, the project number, the laboratory identification number, the sample number assigned to the bulk sample upon receipt at the laboratory, and the field number assigned to the bulk sample upon collection on site. If the bulk sample contains more than one distinct layer of material, each layer is analyzed separately. The composition of the bulk sample is reported in percentages of asbestos (i.e., chrysotile, amosite, or other) and non-asbestos (i.e., cellulose, fiberglass, or other) components. The results of the sample analyses can be found on the laboratory report enclosed and Table 1.

Sierra collected samples from wall and ceiling systems, flooring materials, ceiling tiles, roofing materials, window glaze, cementitious panels and blown-in insulation. Three (3) asbestos-containing materials were identified within this residence scheduled for demolition (Table -2 Asbestos Inventory). The cost to remove the Category II asbestos-containing materials from this site prior to demolition would be \$14,855.00. The cost to remove the Category I asbestos-containing materials from this site prior to demolition would be \$2,100.00. These costs have been estimated and are based on local wage rates and do not include prevailing wage rates. These costs do not include specifications, permits, contractor oversight or third party monitoring.

Sierra made every effort to locate suspect asbestos-containing materials that may be concealed; however, suspect asbestos-containing materials which may be located behind hard plaster walls or ceilings, hard walled chases, under flooring or sub-flooring, under building contents, etc., were not assessed or quantified. If through demolition suspect materials are discovered that were not sampled during the initial site visit; Sierra should be notified to document any additional samples that may be required and handled accordingly.

This report is prepared to assist the Montgomery County Land Reutilization Corporation, City of Dayton, construction managers and asbestos abatement contractors in locating asbestos-containing materials. This report is not intended as a bidding document or project specifications.

Enclosed are the following Sierra documents: 1) Table 1-Bulk Sample Data Summary; 2) Table 2-Asbestos Inventory; 3) Table 3-Cost Estimate; 4) Laboratory Report; 5) Site Photographs; 6) Inspector's Certification. If we can be of further assistance on this or any other project, do not hesitate to call us at (513) 542-5323.

Sincerely,

SIERRA ENVIRONMENTAL GROUP, INC.



Todd Taylor
Operations Manager

Attachments



TABLE 1: BULK SAMPLE DATA SUMMARY

SAMPLE DESCRIPTION (Material Type)	SAMPLE LOCATION	HOMO AREA #	SAMPLE I.D. NO.	ASBESTOS CONTENT	FRIABLE/ NONFRIABLE
The following samples were collected from the vacant residence located at 1115 Tennyson Avenue, Dayton, Ohio.					
Drywall (Miscellaneous)	Living room	1	1-1	None Detected	Nonfriable
Drywall (Miscellaneous)	Kitchen	1	1-2	*1.3% Chrysotile	Nonfriable
Joint compound (Miscellaneous)	Living room	2	2-1	None Detected	Nonfriable
Joint compound (Miscellaneous)	Kitchen	2	2-2	None Detected	Nonfriable
12"x12" Tan/red sticky back floor tile (Miscellaneous)	Kitchen	3	3-1	None Detected	Nonfriable
12"x12" Tan/red sticky back floor tile (Miscellaneous)	Bathroom	3	3-2	None Detected	Nonfriable
9"x9" Tan floor tile (Miscellaneous)	Kitchen	4	4-1	*4.3% Chrysotile	Nonfriable
9"x9" Tan floor tile (Miscellaneous)	Living room	4	4-2	Stopped Analysis	Nonfriable
Black mastic associated with 9" tan floor tile (Miscellaneous)	Kitchen	5	5-1	None Detected	Nonfriable
Black mastic associated with 9" tan floor tile (Miscellaneous)	Living room	5	5-2	None Detected	Nonfriable
Fiberboard wall (Miscellaneous)	Kitchen	6	6-1	None Detected	Nonfriable
Fiberboard wall (Miscellaneous)	Bathroom	6	6-2	None Detected	Nonfriable
Blown-in insulation (Miscellaneous)	Living room	7	7-1	None Detected	Friable
Blown-in insulation (Miscellaneous)	Kitchen	7	7-2	None Detected	Friable
Cream linoleum (Miscellaneous)	Side room	8	8-1	None Detected	Nonfriable
Cream linoleum (Miscellaneous)	Side room	8	8-2	None Detected	Nonfriable

Table 1-1

TABLE 1: BULK SAMPLE DATA SUMMARY

SAMPLE DESCRIPTION (Material Type)	SAMPLE LOCATION	HOMO AREA #	SAMPLE I.D. NO.	ASBESTOS CONTENT	FRIABLE/ NONFRIABLE
12"x12" White sticky back floor tile (Miscellaneous)	Bathroom	9	9-1	None Detected	Nonfriable
12"x12" White sticky back floor tile (Miscellaneous)	Bathroom	9	9-2	None Detected	Nonfriable
Cementitious panel (Miscellaneous)	Mechanical room	10	10-1	20% Chrysotile	Nonfriable
12" White ceiling tile (Miscellaneous)	Bedroom 3	11	11-1	None Detected	Friable
12" White ceiling tile (Miscellaneous)	Bedroom 3	11	11-2	None Detected	Friable
12" White ceiling tile (Miscellaneous)	Bedroom 3	11	11-3	None Detected	Friable
Window glaze (Miscellaneous)	Exterior	12	12-1	None Detected	Friable
Window glaze (Miscellaneous)	Exterior	12	12-2	None Detected	Friable
Black asphalt roof shingle (Miscellaneous)	Exterior	13	13-1	None Detected	Nonfriable
Black asphalt roof shingle (Miscellaneous)	Exterior	13	13-2	None Detected	Nonfriable

*Quantified By PLM Point Count Method

TABLE 2 - ASBESTOS INVENTORY

Location	Type ACM	Material Description	Amt. of Material (approx.)
The following asbestos-containing materials are located in the vacant residence located at 1115 Tennyson Avenue, Dayton.			
Living room	II	Drywall and associated joint compound	615 sf
Living room	I	9"x9" Tan floor tile (under carpet)	180 sf
Kitchen	II	Drywall and associated joint compound	500 sf
Kitchen	I	9"x9" Tan floor tile	135 sf
Laundry	II	Drywall and associated joint compound	445 sf
Laundry	I	9"x9" Tan floor tile	110 sf
Hallway	II	Drywall and associated joint compound	385 sf
Hallway	I	9"x9" Tan floor tile (under carpet)	85 sf
Front bedroom	II	Drywall and associated joint compound	420 sf
Front bedroom	I	9"x9" Tan floor tile (under carpet)	100 sf
Bedroom #2	II	Drywall and associated joint compound	475 sf
Bedroom #2	I	9"x9" Tan floor tile (under carpet)	120 sf
Bedroom #3	II	Drywall and associated joint compound	475 sf
Bedroom #3	I	9"x9" Tan floor tile (under carpet)	120 sf
Bathroom	II	Drywall and associated joint compound	275 sf
Bathroom	I	9"x9" Tan floor tile (under 2 layers of flooring)	50 sf
Mechanical room	II	Cementitious panel	215 sf
Mechanical room	II	Drywall and associated joint compound	20 sf

Table 2-1

TABLE 3 - COST ESTIMATE

Location	Type ACM	Material Description	Cost for abatement (approx.)
The following asbestos-containing materials are located in the vacant residence located at 1115 Tennyson Avenue, Dayton, Ohio.			
Living room	II	Drywall and associated joint compound	\$2,460.00
Living room	I	9"x9" Tan floor tile (under carpet)	\$250.00
Kitchen	II	Drywall and associated joint compound	\$2,000.00
Kitchen	I	9"x9" Tan floor tile	\$250.00
Laundry	II	Drywall and associated joint compound	\$1,780.00
Laundry	I	9"x9" Tan floor tile	\$250.00
Hallway	II	Drywall and associated joint compound	\$1,540.00
Hallway	I	9"x9" Tan floor tile	\$250.00
Front bedroom	II	Drywall and associated joint compound	\$1,680.00
Front bedroom	I	9"x9" Tan floor tile	\$250.00
Bedroom #2	II	Drywall and associated joint compound	\$1,900.00
Bedroom #2	I	9"x9" Tan floor tile	\$250.00
Bedroom #3	II	Drywall and associated joint compound	\$1,900.00
Bedroom #3	I	9"x9" Tan floor tile (under carpet)	\$300.00
Bathroom	II	Drywall and associated joint compound	\$700.00
Bathroom	I	9"x9" Tan floor tile (under 2 layers of flooring)	\$300.00
Mechanical room	II	Cementitious panels	\$645.00
Mechanical room	II	Drywall and associated joint compound	\$250.00

Table 3-1

CERTIFICATE OF ANALYSIS

Client: Sierra Environmental Group Inc
1041 Straight Street
Cincinnati OH 45214

Report Date: 9/11/2015
Report No.: 373608
Project: 1115 Tennyson Ave
Project No.: MCLB.001

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5734076	Description / Location: Tan/White Sheetrock			
Client No.: 1-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Cellulose	95

Lab No.: 5734077	Description / Location: Tan/White Sheetrock			
Client No.: 1-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Cellulose	95

Lab No.: 5734077	Description / Location: Off-White Joint Compound			Layer No.: 2
Client No.: 1-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.3	Chrysotile	None Detected	None Detected	PC 98.7

Lab No.: 5734078	Description / Location: White Joint Compound			
Client No.: 2-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

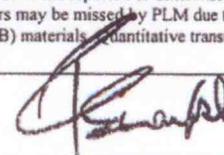
Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government
This report shall not be reproduced except in full, without written approval of the laboratory.*

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: M. Mirza

Approved By: _____



Date: 9/11/2015

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Sierra Environmental Group Inc
1041 Straight Street
Cincinnati OH 45214

Report Date: 9/11/2015
Report No.: 373608
Project: 1115 Tennyson Ave
Project No.: MCLB.001

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5734079	Description / Location: White Joint Compound			
Client No.: 2-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5734080	Description / Location: White/Yellow/Pink Floor Tile			
Client No.: 3-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5734081	Description / Location: White/Yellow/Pink Floor Tile			
Client No.: 3-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5734081	Description / Location: Brown Mastic			Layer No.: 2
Client No.: 3-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

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Analysis Performed By: M. Mirza

Date: 9/11/2015

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1041 Straight Street
Cincinnati OH 45214

Report Date: 9/11/2015
Report No.: 373608
Project: 1115 Tennyson Ave
Project No.: MCLB.001

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5734082	Description / Location: Tan/Brown Floor Tile			
Client No.: 4-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 4.3	Chrysotile	None Detected	None Detected	PC 95.7

Lab No.: 5734083	Description / Location: Sample Not Analyzed			
Client No.: 4-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
	Sample Not Analyzed		Sample Not Analyzed	

Lab No.: 5734084	Description / Location: Black Mastic			
Client No.: 5-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5734085	Description / Location: Black Mastic			
Client No.: 5-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analysis Performed By: M. Mirza

Date: 9/11/2015

CERTIFICATE OF ANALYSIS

Client: Sierra Environmental Group Inc
1041 Straight Street
Cincinnati OH 45214

Report Date: 9/11/2015
Report No.: 373608
Project: 1115 Tennyson Ave
Project No.: MCLB.001

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5734086	Description / Location: Grey-Tan Fibrous			
Client No.: 6-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	100	Cellulose	None Detected

Lab No.: 5734087	Description / Location: Grey-Tan Fibrous			
Client No.: 6-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	100	Cellulose	None Detected

Lab No.: 5734088	Description / Location: Tan Fibrous			
Client No.: 7-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	100	Cellulose	None Detected

Lab No.: 5734089	Description / Location: Tan Fibrous			
Client No.: 7-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	100	Cellulose	None Detected

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

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Analysis Performed By: M. Mirza

Date: 9/11/2015

CERTIFICATE OF ANALYSIS

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1041 Straight Street
Cincinnati OH 45214

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5734090	Description / Location: Tan/Brown Vinyl Sheet Flooring			
Client No.: 8-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	75
		5	Fibrous Glass	

Lab No.: 5734091	Description / Location: Tan/Brown Vinyl Sheet Flooring			
Client No.: 8-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	75
		5	Fibrous Glass	

Lab No.: 5734092	Description / Location: White Floor Tile			
Client No.: 9-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5734092	Description / Location: Yellow Mastic			Layer No.: 2
Client No.: 9-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Report No.: 373608
Project: 1115 Tennyson Ave
Project No.: MCLB.001

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5734093	Description / Location: White Floor Tile		
Client No.: 9-2			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u>
			100

Lab No.: 5734093	Description / Location: Yellow Mastic			Layer No.: 2
Client No.: 9-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5734094	Description / Location: Off-White Transite		
Client No.: 10-1			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
20	Chrysotile	None Detected	None Detected
			<u>% Non-Fibrous Material</u>
			80

Lab No.: 5734095	Description / Location: White/Lt Tan Ceiling Tile		
Client No.: 11-1			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	65	Cellulose
		5	Mineral Wool
			<u>% Non-Fibrous Material</u>
			30

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

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Project No.: MCLB.001

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5734096	Description / Location: White/Lt Tan Ceiling Tile			
Client No.: 11-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	65	Cellulose	30
		5	Mineral Wool	

Lab No.: 5734097	Description / Location: White/Lt Tan Ceiling Tile			
Client No.: 11-3				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	65	Cellulose	30
		5	Mineral Wool	

Lab No.: 5734098	Description / Location: Lt Grey Glazing			
Client No.: 12-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5734099	Description / Location: Lt Grey Glazing			
Client No.: 12-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government
This report shall not be reproduced except in full, without written approval of the laboratory.*

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: M. Mirza

Date: 9/11/2015

CERTIFICATE OF ANALYSIS

Client: Sierra Environmental Group Inc
1041 Straight Street
Cincinnati OH 45214

Report Date: 9/11/2015
Report No.: 373608
Project: 1115 Tennyson Ave
Project No.: MCLB.001

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5734100	Description / Location: Grey/Black Shingle			
Client No.: 13-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Fibrous Glass	95

Lab No.: 5734101	Description / Location: Grey/Black Shingle			
Client No.: 13-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Fibrous Glass	95

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

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Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: M. Mirza

Date: 9/11/2015

Chain of Custody

-Bulk Asbestos-

Contact Information	
Client Company: <u>Sierra</u> Office Address: <u>1041 Straight St.</u> City, State, Zip: <u>Circ. OH 45214</u> Fax Number: _____ Email Address: <u>tt.sierra@hxx.net</u>	Project Number: <u>MCLB:001</u> Project Name: <u>1115 Tennyson Ave</u> Primary Contact: <u>T. Taylor</u> Office Phone: _____ Cell Phone: _____

PLM Instructions:	
<input checked="" type="checkbox"/> PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993 <input type="checkbox"/> PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982 <input type="checkbox"/> PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985 <input type="checkbox"/> PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002 <input type="checkbox"/> PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010 <input type="checkbox"/> TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009 <input type="checkbox"/> PLM: Point Counting <input type="checkbox"/> PC: via ELAP 198.1 <input type="checkbox"/> PC: 400 Points <input type="checkbox"/> PC: 800 Points * <input type="checkbox"/> PC: 1600 Points * <input type="checkbox"/> PLM: Instructions for Multi-Layered Samples <input type="checkbox"/> Analyze and Report All Separable Layers per EPA 600 <input type="checkbox"/> Report Composite for Drywall Systems per NESHAP <input type="checkbox"/> Report All Layers and Composite Where Applicable <input type="checkbox"/> Only Analyze and Report Specifically Noted Layer	<input checked="" type="checkbox"/> PLM: Analyze Until Positive (Positive Stop) <input type="checkbox"/> AUP: by Homogenous Area as Noted <input type="checkbox"/> AUP: by Material Type as Noted <input type="checkbox"/> PLM: NOB via 198.6 <input type="checkbox"/> PLM: Friable via EPA 600 2.3 <input type="checkbox"/> If <1% by PLM, to TEM via 198.4 * <input type="checkbox"/> If <1% by PLM, Hold for Instructions <input type="checkbox"/> PLM: Non-Building Material *** (Dust, Wipe, Tape) <input type="checkbox"/> Soil or Vermiculite Analysis <input type="checkbox"/> CARB 435
Special Instructions: _____ <small>* Additional charge and turnaround may be required ** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory</small>	

Turnaround Time	
Preliminary Results Requested Date: _____ <small>Specific date / time</small> <input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input checked="" type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day* <input type="checkbox"/> 12 Hour** <input type="checkbox"/> 6 Hour** <input type="checkbox"/> RUSH**	<input type="checkbox"/> Verbal <input type="checkbox"/> Email <input type="checkbox"/> Fax 26
<small>* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***</small>	

Chain of Custody			
Relinquished (Name/Organization): <u>Sierra</u>	Date: <u>9-8-15</u>	Time: _____	<div style="border: 2px solid black; padding: 10px; display: inline-block;"> RECEIVED SEP 9 2015 </div>
Received (Name / iATL): _____	Date: _____	Time: _____	
Sample Login (Name / iATL): _____	Date: <u>9/9/15</u>	Time: _____	
Analysis(Name(s) / iATL): _____	Date: <u>9/11/15</u>	Time: _____	
QA/QC Review (Name / iATL): <u>mm</u>	Date: _____	Time: _____	
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____	

iATL-By

EMAILED
Res 27

Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: Sierra Environmental Group, Inc. Address: 1041 Straight Street City/State/Zip: Cincinnati, OH 45214

Phone: (513) 542-5323 Fax: () _____ E-mail: tsierra@fuse.net

Project Name / Testing Address: MELB, 001-1115 Tennyson Ave. City/State (Required): _____

Collected by: Todd Taylor Purchase Order Number _____

Turn Around Times : 1 - Day 2 - Day 3 - Day 2 - Day 3 - Day _____ Weekend (Must Call Ahead)

If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			COMMENTS		
			PLM (Count 10)	PLM (Count 100)	PLM % Percent	PCM	TEM (Count 100)	TEM (Count 10)	Time On	Time Off	Flow Rate (L/min)		Total Time (mins)	Volume (Total Liters)
1	1-1	9-8-15	-	-	-	-	-	-	-	-	5734076	5734077		
2	1-2		-	-	-	-	-	-	-	-	5734078	5734079		
3	2-1		-	-	-	-	-	-	-	-	-	5734080	5734081	
4	2-2		-	-	-	-	-	-	-	-	-	5734082	5734083	
5	3-1		-	-	-	-	-	-	-	-	-	5734084	5734085	
6	3-2		-	-	-	-	-	-	-	-	-	5734086	5734087	
7	4-1		-	-	-	-	-	-	-	-	-	5734088	5734089	
8	4-2		-	-	-	-	-	-	-	-	-	5734090	5734091	
9	5-1		-	-	-	-	-	-	-	-	-	5734092	5734093	
10	5-2		-	-	-	-	-	-	-	-	-	5734094	5734095	

Released by: T. Taylor Signature: [Signature] Date/Time: _____

Received by: _____ Signature: _____ Date/Time: _____

Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: Sierra Environmental Group, Inc. Address: 1041 Straight Street City/State/Zip: Cincinnati, OH 45214
 Phone: (513) 542-5323 Fax: () E-mail: jsierra@huse.net
 Project Name / Testing Address: MCLB, 001- City/State (Required):
 Collected by: Todd Taylor Purchase Order Number:

Turn Around Times: 1 - Day 2 - Day 3 - Day
 If no TAT is specified, sample(s) will be processed and charged as 3-day TAT. Weekend (Must Call Ahead)

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			COMMENTS	
			PM	PM Post (cont. 100)	PM N Process	PM	TM Certified (Bulk)	TM ALBRA (M)	Time On	Time Off	Flow Rate (L/min)		Total Time (gross)
1	6-1	9-8-15	-	-	-	-	-	-	-	-	5734086	5734088	
2	6-2		-	-	-	-	-	-	-	-	5734087	5734088	
3	7-1		-	-	-	-	-	-	-	-	5734089	5734090	
4	7-2		-	-	-	-	-	-	-	-	5734090	5734091	
5	8-1		-	-	-	-	-	-	-	-	5734091	5734092	
6	8-2		-	-	-	-	-	-	-	-	5734092	5734093	
7	9-1		-	-	-	-	-	-	-	-	5734093	5734094	
8	9-2		-	-	-	-	-	-	-	-	5734094	5734095	
9	10-1		-	-	-	-	-	-	-	-	5734095		
10	11-1		-	-	-	-	-	-	-	-	5734095		

Released by: T. Taylor Signature: Date/Time:
 Received by: Signature: Date/Time:

Asbestos Chain-of-Custody

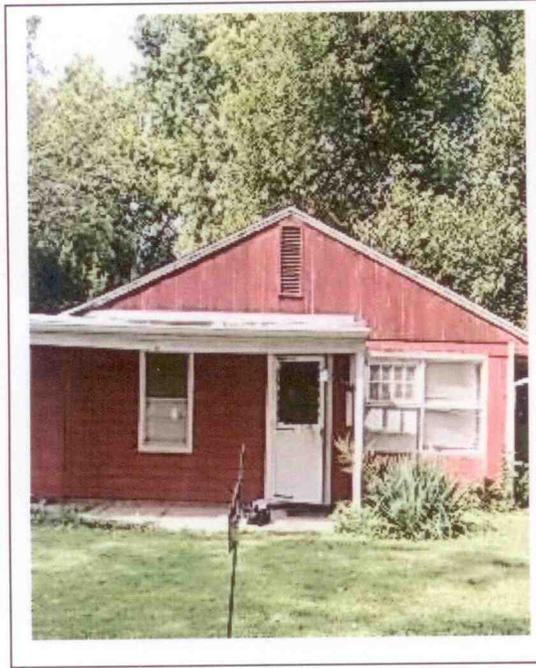
~ For Lab Use Only ~

Company Name: Sierra Environmental Group, Inc. Address: 1041 Straight Street City/State/Zip: Cincinnati, OH 45214
 Phone: (513) 542-5323 Fax: () _____ E-mail: itsierra@fuse.net
 Project Name / Testing Address: MCLB. 001 City/State (Required): _____
 Collected by: Todd Taylor Purchase Order Number _____

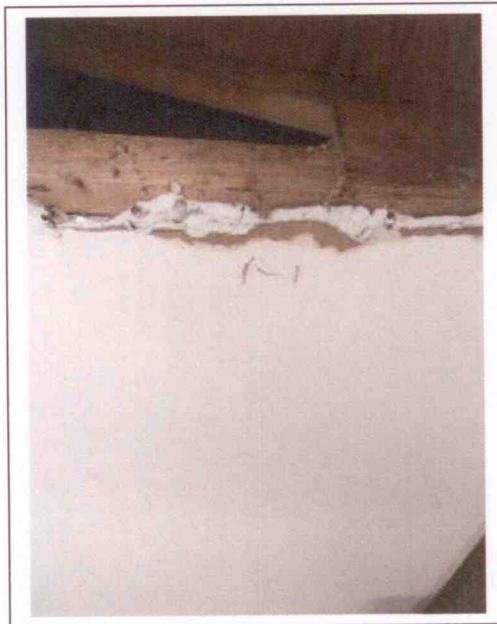
Turn Around Times : *If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.*
 1 - Day _____ 2 - Day 2 3 - Day _____ Same Day (Must Call Ahead) _____ Weekend (Must Call Ahead) _____

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			Volume (Total Liters)	COMMENTS
			PM	PM (Cont. #)	PM & Percut	PM	TSM (Infield) (Bk)	TSM/BERA (M)	Time On	Time Off	Flow Rate (L/min)		
1	11-2	9-8-15	-	-	-	-	-	-	-	-	-	5734096	
2	11-3	↓	-	-	-	-	-	-	-	-	-	5734097	
3	12-1		-	-	-	-	-	-	-	-	-	5734098	
4	12-2	↓	-	-	-	-	-	-	-	-	-	5734099	
5	13-1		-	-	-	-	-	-	-	-	-	5734100	
6	13-2	↓	-	-	-	-	-	-	-	-	-	5734101	
7													
8													
9													
10													

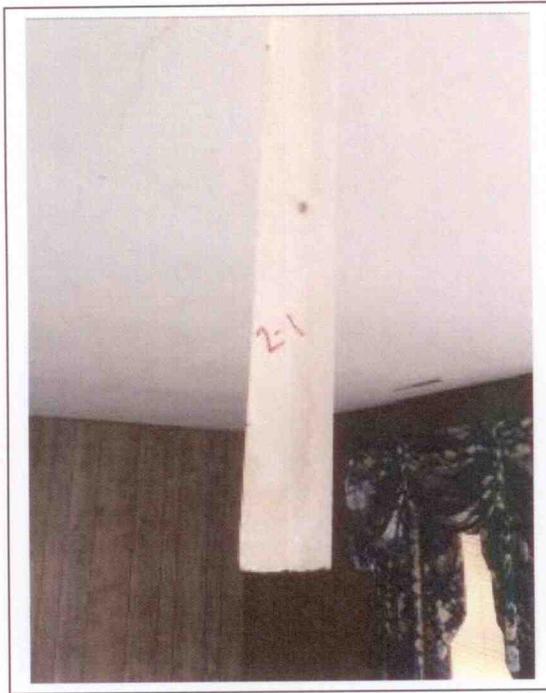
Released by: T. Taylor Signature: [Signature] Date/Time: _____
 Received by: _____ Signature: _____ Date/Time: _____



1115 Tennyson Avenue, Dayton, Ohio 45406



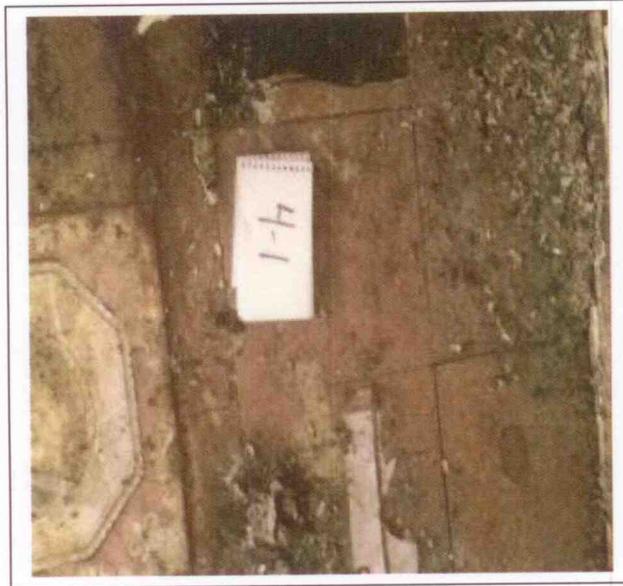
HA #1 - Drywall



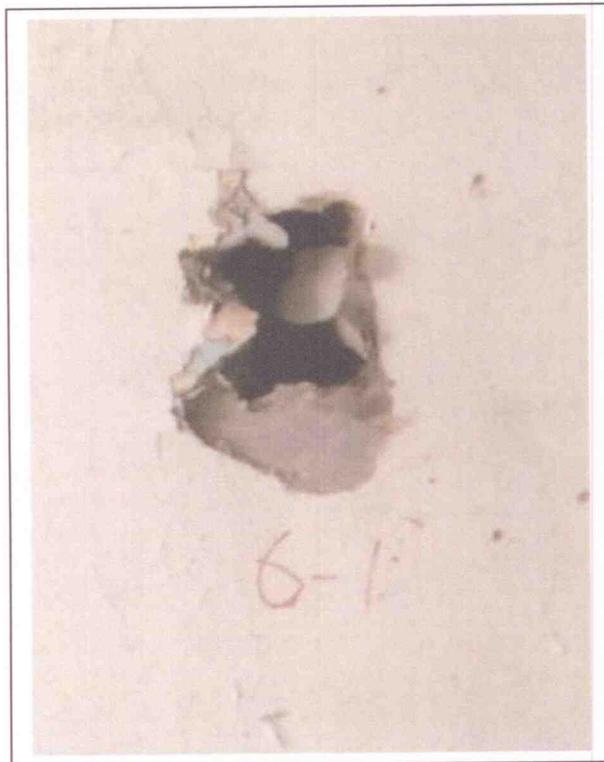
HA #2 – Joint Compound



HA #3 – 12"x12" Red pattern sticky back floor tile



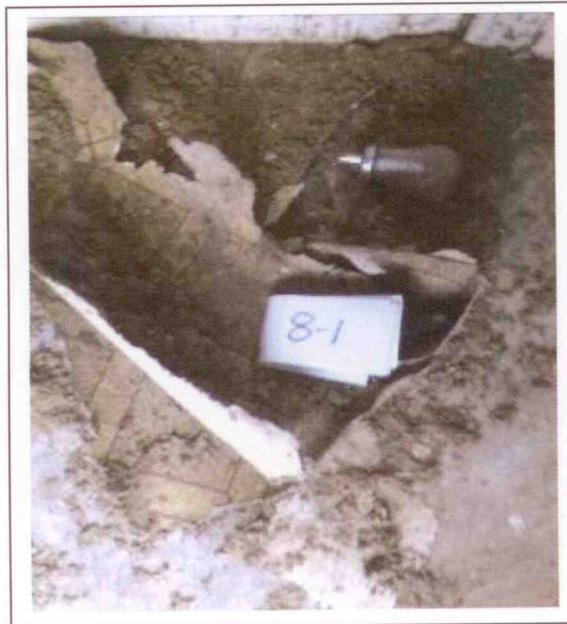
HA #4 & #5 – 9”x9” Tan floor tile and black mastic



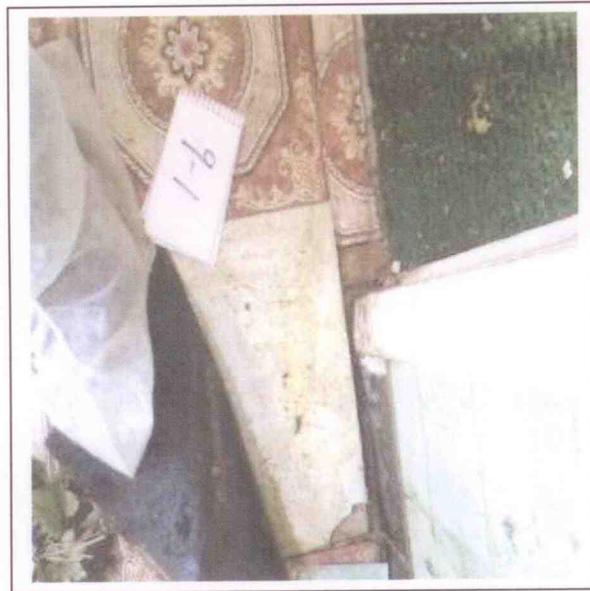
HA #6 – Fiberboard wall



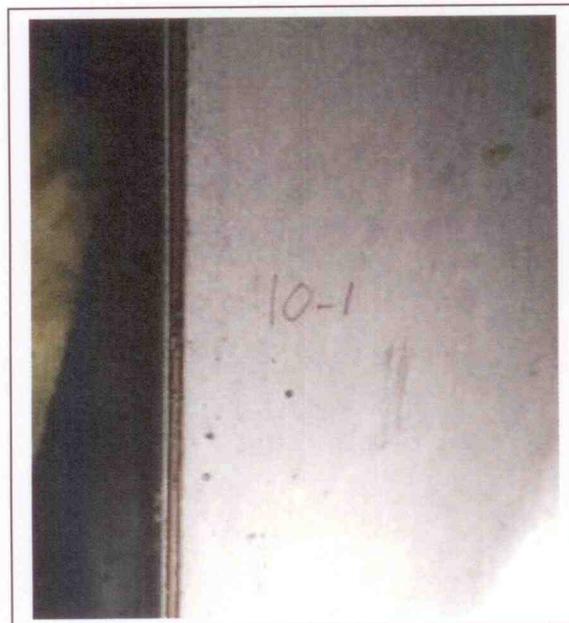
HA #7 – Blown-in insulation



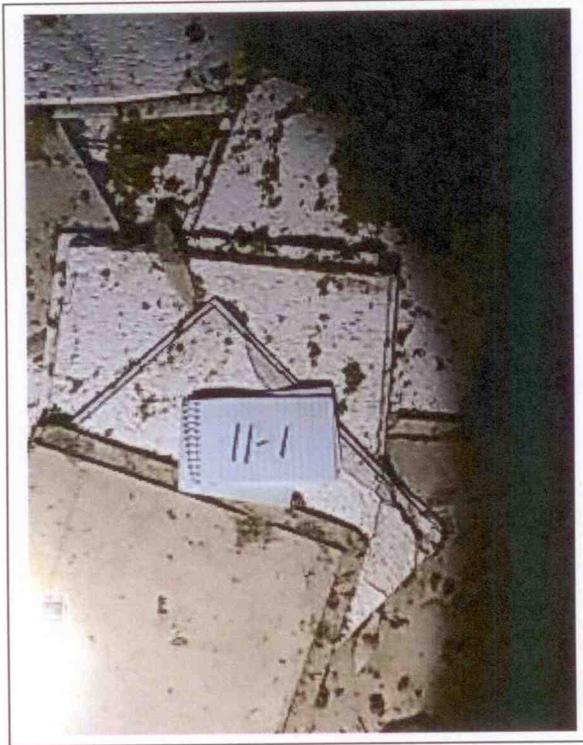
HA #8 – Cream linoleum



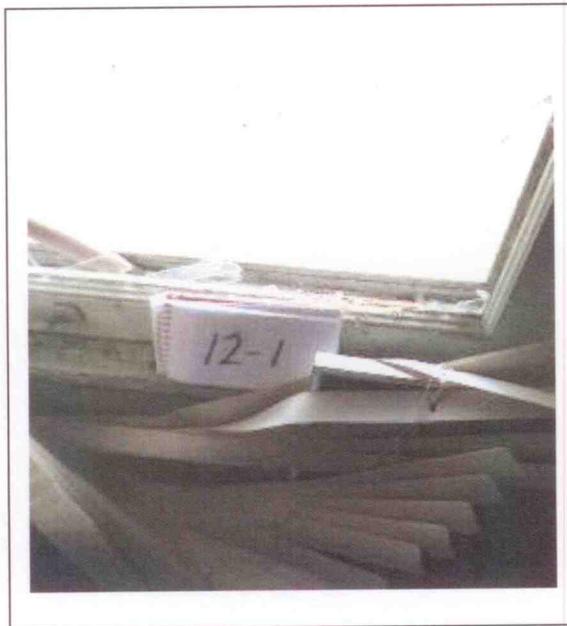
HA #9 – 12"x12" White sticky back floor tile



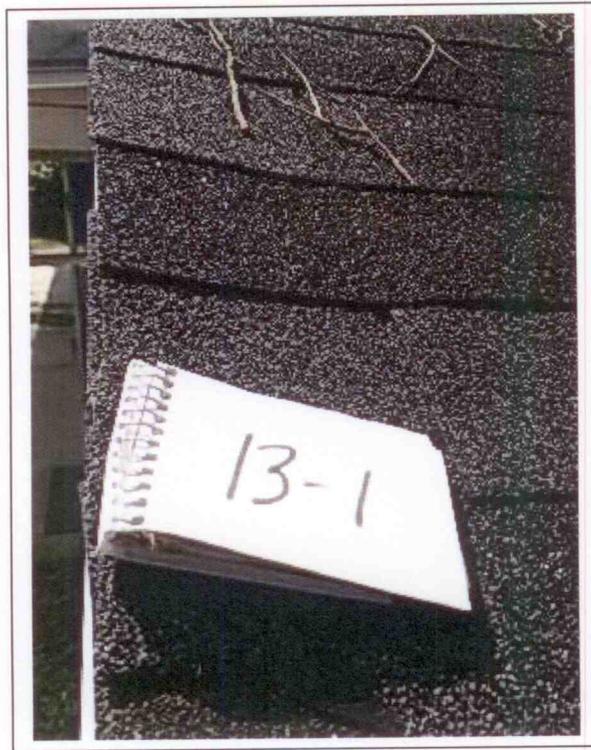
HA # 10 – Cementitious panel board



HA #11 – 12” White ceiling tile



HA # 12 – Window glaze



HA # 13 – Black asphalt roof shingles

OHIO DEPARTMENT OF HEALTH

246 Tappan Street

Columbus, Ohio 43233

www.ohio.gov

614/466-3543

www.odh.ohio.gov

Richard Hodges/Director of Health

May 12, 2015

Todd E Taylor
Sierra Environmental Group, Inc.
1041 Straight Street
Cincinnati OH 45214

RE: Asbestos Hazard Evaluation Specialist
Certification Number: ES32139
Expiration Date: 05/19/2016

Dear Todd E Taylor:

This letter and enclosed certification card approves your request to be certified as an Asbestos Hazard Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of Health for violation of any of the requirements of 3701-34 of the Ohio Administrative Code.

If you have any questions, please call Kathy Butcher, Licensure Specialist, at 614-644-0226.

Sincerely,



Bill Robbins, Section Chief
Bureau of Licensure Operations
Office of Health Assurance and Licensing

State of Ohio
Department of Health
Asbestos Program

Asbestos Hazard Evaluation Specialist



Todd E Taylor
Sierra Environmental Group, Inc.
1041 Straight Street
Cincinnati OH 45214

DOB: 07/23/1967 Certification Number: **ES32139** Expiration Date: **05/19/2016**

This certification is issued pursuant to Chapter 3710 of the Revised Code and 3701-34 of the Ohio Administrative Code. Certification Card is not valid if altered.