



SIERRA ENVIRONMENTAL GROUP, INC.

November 21, 2013

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

Re: Comprehensive Pre-Demolition Asbestos Inspection
Vacant Residence
828 Mia Avenue
Dayton, Ohio
Sierra Project Number: CD.029

Dear Mr. Zimmer:

On November 14, 2013, Mr. Chris Kuetner (Ohio Department of Health Certified Asbestos Hazard Evaluation Specialist #ES33689) of Sierra Environmental Group, Inc. (Sierra) visited the vacant residence located at 828 Mia 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 I.

Sierra collected samples from wall and ceiling systems, flooring materials, roofing materials, window caulk and window glaze. Eight (8) asbestos-containing materials were identified within this residence scheduled for demolition. The cost to remove the RACM and Category II asbestos-containing materials from this residence prior to demolition would be \$11,300.00. The cost to remove the Category I asbestos-containing materials from this residence prior to demolition would be \$1,500.00.

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, etc., were not assessed or quantified. If through demolition suspect materials are discovered; they should be documented and handled accordingly.

This report is prepared to assist the 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) Laboratory Report and 4) 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 828 Mia Avenue, Dayton, Ohio.					
Window caulk (Miscellaneous)	Exterior	1	1-1	*2.3% Chrysotile	Friable
Window caulk (Miscellaneous)	Exterior	1	1-2	Stopped Analysis	Friable
Black paper under asphalt roof shingle (Miscellaneous)	Exterior	2	2-1	None Detected	Nonfriable
Black paper under asphalt roof shingle (Miscellaneous)	Exterior	2	2-2	None Detected	Nonfriable
Black asphalt roof shingle (Miscellaneous)	Exterior	3	3-1	None Detected	Nonfriable
Black asphalt roof shingle (Miscellaneous)	Exterior	3	3-2	None Detected	Nonfriable
Window glaze (Miscellaneous)	Garage	4	4-1	*1.3% Chrysotile	Friable
Window glaze (Miscellaneous)	Garage	4	4-2	Stopped Analysis	Friable
Green asphalt roof shingle (Miscellaneous)	Garage	5	5-1	None Detected	Nonfriable
Green asphalt roof shingle (Miscellaneous)	Garage	5	5-2	None Detected	Nonfriable
Drywall (Miscellaneous)	Living room	6	6-1	None Detected	Nonfriable
Drywall (Miscellaneous)	Hallway	6	6-2	None Detected	Nonfriable
Joint compound (Miscellaneous)	Living room	7	7-1	*2.5% Chrysotile	Nonfriable
Joint compound (Miscellaneous)	Hallway	7	7-2	Stopped Analysis	Nonfriable
Green linoleum (Miscellaneous)	Living room	8	8-1	None Detected	Nonfriable
Green linoleum (Miscellaneous)	Living room	8	8-2	None Detected	Nonfriable
Tan linoleum (Miscellaneous)	Living room	9	9-1	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
Tan linoleum (Miscellaneous)	Living room	9	9-2	None Detected	Nonfriable
Textured wall (Surfacing)	Living room	10	10-1	*1.2% Chrysotile	Nonfriable
Textured wall (Surfacing)	Living room	10	10-2	Stopped Analysis	Nonfriable
Textured wall (Surfacing)	Living room	10	10-3	Stopped Analysis	Nonfriable
Textured wall (Surfacing)	Living room	10	10-4	Stopped Analysis	Nonfriable
Textured wall (Surfacing)	Living room	10	10-5	Stopped Analysis	Nonfriable
12"x12" Green floor tile (Miscellaneous)	Hallway	11	11-1	*1.2% Chrysotile	Nonfriable
12"x12" Green floor tile (Miscellaneous)	Hallway	11	11-2	Stopped Analysis	Nonfriable
Brown mastic associated with 12" green floor tile (Miscellaneous)	Hallway	12	12-1	Stopped Analysis	Nonfriable
Brown mastic associated with 12" green floor tile (Miscellaneous)	Hallway	12	12-2	Stopped Analysis	Nonfriable
12"x12" Red floor tile (Miscellaneous)	Mechanical room	13	13-1	*2.1% Chrysotile	Nonfriable
12"x12" Red floor tile (Miscellaneous)	Mechanical room	13	13-2	Stopped Analysis	Nonfriable
Black mastic associated with 12" red floor tile (Miscellaneous)	Mechanical room	14	14-1	*1.8% Chrysotile	Nonfriable
Black mastic associated with 12" red floor tile (Miscellaneous)	Mechanical room	14	14-2	Stopped Analysis	Nonfriable
Yellow linoleum (Miscellaneous)	Kitchen	15	15-1	None Detected	Nonfriable
Yellow linoleum (Miscellaneous)	Kitchen	15	15-2	None Detected	Nonfriable

Table 1-2

TABLE 1: BULK SAMPLE DATA SUMMARY

SAMPLE DESCRIPTION (Material Type)	SAMPLE LOCATION	HOMO AREA #	SAMPLE I.D. NO.	ASBESTOS CONTENT	FRIABLE/ NONFRIABLE
Textured ceiling, swirl (Surfacing)	Kitchen	16	16-1	*0.5% Chrysotile	Nonfriable
Textured ceiling, swirl (Surfacing)	Kitchen	16	16-2	*0.75% Chrysotile	Nonfriable
Textured ceiling, swirl (Surfacing)	Kitchen	16	16-3	*1.2% Chrysotile	Nonfriable
Red linoleum (Miscellaneous)	Bedroom #1	17	17-1	None Detected	Nonfriable
Red linoleum (Miscellaneous)	Bedroom #1	17	17-2	None Detected	Nonfriable

*Quantified By PLM Point Count Method

Table 1-3.

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 828 Mia Avenue, Dayton, Ohio.			
Garage	II	Window glaze	4 windows
Living room	II	Drywall and associated joint compound	430 sf
Living room	RACM	Textured wall and ceiling	430 sf
Mechanical room	II	Drywall and associated joint compound	310 sf
Mechanical room	I	12"x12" Red floor tile	72 sf
Mechanical room	I	Black mastic associated with 12" red floor tile	72 sf
Hallway	II	Drywall and associated joint compound	335 sf
Hallway	I	12"x12" Green floor tile	81 sf
Kitchen	II	Drywall and associated joint compound	430 sf
Kitchen	RACM	Textured ceiling	120 sf
Bedroom #1	II	Drywall and associated joint compound	480 sf
Bathroom	II	Drywall and associated joint compound	380 sf
Bathroom	I	12"x12" Green floor tile	95 sf
Bedroom #2	II	Drywall and associated joint compound	535 sf
Bedroom #2	RACM	Textured ceiling	170 sf
Exterior	II	Window caulk	8 windows

Table 2-1

CERTIFICATE OF ANALYSIS

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

Report Date: 11/19/2013
Report No.: 319304
Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170793	Description / Location: Black Shingle			
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	20	Cellulose	80

Lab No.: 5170794	Description / Location: Black Shingle			
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	15	Cellulose	85

Lab No.: 5170795	Description / Location: White Glazing			
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 1.3	Chrysotile	None Detected	None Detected	PC 98.7

Lab No.: 5170796	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	

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

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Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

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: E. Smith

Date: 11/19/2013

CERTIFICATE OF ANALYSIS

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

Report Date: 11/19/2013
Report No.: 319304
Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170789	Description / Location: Lt Tan Floor Tile			
Client No.: 1-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 2.3	Chrysotile	None Detected	None Detected	PC 97.7

Lab No.: 5170790	Description / Location: Sample Not Analyzed			
Client No.: 1-2				
<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.: 5170791	Description / Location: Black Felt			
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	70	Cellulose	30

Lab No.: 5170792	Description / Location: Black Felt			
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	70	Cellulose	30

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

Approved By: 

Date: 11/19/2013

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

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

Report Date: 11/19/2013
Report No.: 319304
Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170797	Description / Location: Black Shingle	
Client No.: 5-1		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	None Detected	10
		<u>Type</u>
		Fibrous Glass
		<u>% Non-Fibrous Material</u>
		90

Lab No.: 5170798	Description / Location: Black Shingle	
Client No.: 5-2		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	None Detected	10
		<u>Type</u>
		Fibrous Glass
		<u>% Non-Fibrous Material</u>
		90

Lab No.: 5170799	Description / Location: Lt Tan Sheetrock	
Client No.: 6-1		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	None Detected	10
		<u>Type</u>
		Cellulose
		<u>% Non-Fibrous Material</u>
		90

Lab No.: 5170800	Description / Location: Lt Tan Sheetrock	
Client No.: 6-2		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	None Detected	10
		<u>Type</u>
		Cellulose
		<u>% Non-Fibrous Material</u>
		90

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Analysis Performed By: E. Smith

Date: 11/19/2013

CERTIFICATE OF ANALYSIS

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1041 Straight Street
Cincinnati OH 45214

Report Date: 11/19/2013
Report No.: 319304
Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170801	Description / Location: Off-White Joint Compound			
Client No.: 7-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 2.5	Chrysotile	None Detected	None Detected	PC 97.5

Lab No.: 5170802	Description / Location: Sample Not Analyzed			
Client No.: 7-2				
<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.: 5170803	Description / Location: Tan/Red/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	65	Cellulose	35

Lab No.: 5170804	Description / Location: Tan/Red/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	65	Cellulose	35

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

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Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

Comments: Quantification at $\leq 0.25\%$ 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: E. Smith

Date: 11/19/2013

CERTIFICATE OF ANALYSIS

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

Report Date: 11/19/2013
Report No.: 319304
Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170805	Description / Location: Tan/Brown Vinyl Sheet Flooring			
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	40	Cellulose	60

Lab No.: 5170806	Description / Location: Tan/Brown Vinyl Sheet Flooring			
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	40	Cellulose	60

Lab No.: 5170807	Description / Location: Lt Green Compound Material			
Client No.: 10-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.2	Chrysotile	None Detected	None Detected	PC 98.8

Lab No.: 5170808	Description / Location: Sample Not Analyzed			
Client No.: 10-2				
<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	

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170809	Description / Location: Sample Not Analyzed			
Client No.: 10-3				
<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.: 5170810	Description / Location: Sample Not Analyzed			
Client No.: 10-4				
<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.: 5170811	Description / Location: Sample Not Analyzed			
Client No.: 10-5				
<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.: 5170812	Description / Location: Green Floor Tile			
Client No.: 11-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1,2	Chrysotile	None Detected	None Detected	PC 98.8

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

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Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170813	Description / Location: Sample Not Analyzed			
Client No.: 11-2				
<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.: 5170814	Description / Location: Tan Mastic			
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	3	Cellulose	97

Lab No.: 5170815	Description / Location: Tan Mastic			
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	1	Cellulose	99

Lab No.: 5170816	Description / Location: Red Floor Tile			
Client No.: 13-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 2.1	Chrysotile	None Detected	None Detected	PC 97.9

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

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: E. Smith

Date: 11/19/2013

CERTIFICATE OF ANALYSIS

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

Report Date: 11/19/2013
Report No.: 319304
Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170817	Description / Location: Sample Not Analyzed			
Client No.: 13-2				
<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.: 5170818	Description / Location: Black Mastic			
Client No.: 14-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.8	Chrysotile	None Detected	None Detected	PC 98.2

Lab No.: 5170819	Description / Location: Sample Not Analyzed			
Client No.: 14-2				
<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.: 5170820	Description / Location: Lt Tan Vinyl Sheet Flooring			
Client No.: 15-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	4	Cellulose	95
		1	Fibrous Glass	

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

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Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

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: E. Smith

Date: 11/19/2013

CERTIFICATE OF ANALYSIS

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

Report Date: 11/19/2013
Report No.: 319304
Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170821	Description / Location: Lt Tan Vinyl Sheet Flooring			
Client No.: 15-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	4	Cellulose	95
		1	Fibrous Glass	

Lab No.: 5170822	Description / Location: Off-White Compound Material			
Client No.: 16-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 0.5	Chrysotile	None Detected	None Detected	PC 99.5

Lab No.: 5170823	Description / Location: Off-White Compound Material			
Client No.: 16-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 0.75	Chrysotile	None Detected	None Detected	PC 99.25

Lab No.: 5170824	Description / Location: Off-White Compound Material			
Client No.: 16-3				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.2	Chrysotile	None Detected	None Detected	PC 98.8

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

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Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

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: E. Smith

Date: 11/19/2013

CERTIFICATE OF ANALYSIS

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

Report Date: 11/19/2013
Report No.: 319304
Project: 828 Mia Ave
Project No.: CD 029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5170825	Description / Location: Brown Vinyl Sheet Flooring			
Client No.: 17-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	40	Cellulose	60

Lab No.: 5170826	Description / Location: Brown Vinyl Sheet Flooring			
Client No.: 17-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	40	Cellulose	60

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

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Analytical Method: EPA 600/R-93/116, by Polarized Light Microscopy

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: E. Smith

Date: 11/19/2013

IATL

9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

E-MAILED
11-19-13

Chain of Custody

Contact Information		Project Number:	CD 029
Client Company:	Sierra Environmental Group, Inc.	Project Name:	818 MILA AVE
Office Address:	1041 Straight Street	Primary Contact:	Todd Taylor
City, State, Zip:	Cincinnati, OH 45214	Office Phone:	(513) 542-5323
Fax Number:	(513) 542-6653	Cell Phone:	(513) 200-2918
Email Address:	ttsierra@fuse.net		

Matrix:

<input type="checkbox"/> Air	<input type="checkbox"/> Soil	<input checked="" type="checkbox"/> Bulk	<input type="checkbox"/> Other
<input type="checkbox"/> Water	<input type="checkbox"/> Paint	<input type="checkbox"/> Surface Dust	<input type="checkbox"/> Wipe

Analysis Method:

PLM Use Bulk Asbestos Sample Log

<input checked="" type="checkbox"/> PLM: Bulk Asbestos EPA 600	TEM: AHERA
PLM: Point Counting 198.1	TEM: NIOSH 7402
PLM: NOB via 198.6 (PLM only)	TEM: ISO 10312
If 1 st by PLM, to TEM via 198.4:	TEM: ISO 13794
	TEM: Wipe ASTM 6480
	TEM: Microvac ASTM D5755
	TEM: Microvac ASTM D5756
	TEM: NOB 198.4
	TEM: Bulk Analysis
	TEM: Potable Water
	TEM: Non-Potable Water
	TEM: Other
	Soil: Call for Available Methods

IAQ Use Mold Sample Log

IAQ: I Bioaerosol Fungal Spore Trap;	
IAQ: II Bioaerosol Fungal Spore	
IAQ: Tape, Bulk, Misc. Qualitative;	
IAQ: Tape, Bulk, Misc. Quantitative;	
IAQ: Other Culturable ID;	

AAS: Lead in Air
AAS: Lead in Water
AAS: Lead in Paint
AAS: Lead Dust/Wipe;
AAS: Lead in Soil
AAS: TCLP
AAS: Metals [Cd, Zn, Cr-circle]
1- Requires ASTM acceptable mineral 2- Call to confirm TAT 3- Non-culturable 4- With Non-fungal Microscopic Exam

Special Instructions:

Turnaround Time

Preliminary Results Requested Date: _____ Verbal Email Fax

Specific date - time

10 Day 5 Day 3 Day 2 Day 1 Day* 12 Hour** 6 Hour** RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Shipping Method

FedEx UPS USPS Other

Chain of Custody

Relinquished (Name/Organization):	Chris Kuttner	Date:	11-14-13	Time:	7PM
Received (Name / IATL):		Date:	11/18/13	Time:	NOV 15 2013
Sample Log in (Name / IATL):		Date:	11/19/13	Time:	
Analyst (Name(s) / IATL):		Date:	11/19/13	Time:	
QA/QC Review (Name / IATL):		Date:	11/19/13	Time:	
Archived / Released:		Date:		Time:	By [Signature]

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Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: _____ Address: _____ City/State/Zip: _____ Acct. Number: _____
 Phone: () _____ Fax: () _____ E-mail: _____
 Project Name / Testing Address: CD 029. 828 MIA AVE City/State (Required): _____
 Collected by: S. Krothor Purchase Order Number: _____
 Turn Around Times: 1 - 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			Volume (Total Liters)	COMMENTS	
			PLM Count 400	PLM Count 1000	PLM Nv Protocol	PCM	TEM Unfilt (Ballo)	TEM AHERA (A9)	Time On	Time Off	Flow Rate (L/min)			Total Time (minutes)
1	1-1	11-14-13	X									5170789	Stop @ 1st +	
2	1-2											5170790	↓	
3	2-1											5170791	Stop @ 1st +	
4	2-2											5170792	↓	
5	3-1											5170793	Stop @ 1st +	
6	3-2											5170794	↓	
7	4-1											5170795	Stop @ 1st +	
8	4-2											5170796	↓	
9	5-1											5170797	Stop @ 1st +	
10	5-2											5170798	↓	
Released by: <u>S. Krothor</u>		Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>		Date/Time: <u>11-14-13 @ 7PM</u>
Received by:		Signature: _____		Signature: _____		Signature: _____		Signature: _____		Signature: _____		Signature: _____		Date/Time: _____

Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: _____ Address: _____ City/State/Zip: _____
 Phone: () _____ Fax: () _____ E-mail: _____ Acct Number: _____
 Project Name / Testing Address: SP 029 - 828 Mia Ave City/State (Required): _____
 Collected by: S. Kostlin 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 3 - Day _____ Same Day (Must Call Ahead) _____ Weekend (Must Call Ahead) _____

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			Volume (Total Liters)	COMMENTS
			PLM	PLM Count 400	PLM Count 1000	PLM w/ Protocol	PCM	TEM (Certified Bulk)	TEM (AHERA #)	Time On	Time Off		
1	9.1	11.14.13	X									5170799	Stop @ 15th
2	9.2											5170800	→ Stop @ 15th
3	7.1											5170801	→ Stop @ 15th
4	7.2											5170802	→ Stop @ 15th
5	8.1											5170803	→ Stop @ 15th
6	8.2											5170804	→ Stop @ 15th
7	9.1											5170805	→ Stop @ 15th
8	9.2											5170806	→ Stop @ 15th
9	10.1											5170807	→ Stop @ 15th
10	10.2											5170808	→ Stop @ 15th
Released by: <u>S. Kostlin</u>		Signature: 		Date/Time: <u>11.14.13 @ 7PM</u>		Signature: _____		Date/Time: _____		Signature: _____		Date/Time: _____	
Received by: _____		Signature: _____		Date/Time: _____		Signature: _____		Date/Time: _____		Signature: _____		Date/Time: _____	

Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: _____ Address: _____ City/State/Zip: _____
 Phone: () _____ Fax: () _____ E-mail: _____ Acct. Number: _____
 Project Name / Testing Address: CD 099, 828 Mia Ave City/State (Required): _____
 Collected by: C. Kwaithon Purchase Order Number: _____

Turn Around Times: 1 - 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			Volume (Total Liters)	COMMENTS
			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM (Grid) (Bulb)	TEM/HERA (Ag)	Time On	Time Off		
1	10.3	11.14.13	X									5170809	Stop @ 1st
2	10.4											5170810	
3	10.5											5170811	Stop @ 1st
4	11.1											5170812	Stop @ 1st
5	11.2											5170813	Stop @ 1st
6	12.1											5170814	Stop @ 1st
7	12.2											5170815	Stop @ 1st
8	12.1											5170816	Stop @ 1st
9	12.2											5170817	Stop @ 1st
10	14.1											5170818	Stop @ 1st

Released by: Chris Anthony Signature: [Signature] Date/Time: 11.14.13 @ 7PM
 Received by: _____ Signature: _____ Date/Time: _____

Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: _____ Address: _____ City/State/Zip: _____
 Phone: () _____ Fax: () _____ E-mail: _____ Acct. Number: _____
 Project Name / Testing Address: SD 019. 828 Mia Ave City/State (Required): _____
 Collected by: C. Kestner Purchase Order Number: _____

Turn Around Times: 1 - Day 2 - Day 3 - Day Same Day (Must Call Ahead) 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			Volume (Total Liters)	COMMENTS
			PCM	PLM/Protol	PCM	TEM (air)	TEM (air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)		
1	14.2	11-14-13	X									5170819	Stop @ 1054
2	15.1											5170820	Stop @ 1054
3	18.2											5170821	Stop @ 1054
4	16.1											5170822	Stop @ 1054
5	16.2											5170823	Stop @ 1054
6	16.3											5170824	Stop @ 1054
7	17.1											5170825	Stop @ 1054
8	17.2											5170826	
9													
10													

Released by: C. Kestner Signature: _____ Date/Time: 11-14-13 11pm
 Received by: _____ Signature: _____ Date/Time: _____



OHIO DEPARTMENT OF HEALTH

246 North High Street
Columbus, Ohio 43215

614/466-3543
www.odh.ohio.gov

John R. Kasich/Governor

Theodore E. Wymyslo, M.D./Director of Health

September 13, 2013

Christopher P Kuettner
Sierra Environmental Group, Inc.
1041 Straight Street
Cincinnati OH 45214

RE: Asbestos Hazard Evaluation Specialist
Certification Number: ES33689
Expiration Date: 10/14/2014

Dear Christopher P Kuettner:

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 Charlene W. Valentine, Licensure Specialist, at 614-644-0226.

Sincerely,

Bridgette C. Smith
Licensure Program Administrator
Bureau of Information and Operational Support

State of Ohio
Department of Health
Division of Quality Assurance - Asbestos Program

Asbestos Hazard Evaluation Specialist

Christopher P Kuettner
Sierra Environmental Group, Inc.
1041 Straight Street
Cincinnati OH 45214

 Certification Number: **ES33689** Expiration Date: **10/14/2014**

DOB: 11/17/1956

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.