Indoor Air Quality

OSHA Compliance

Asbestos Consulting
 Training

Lead Consulting

Industrial Hygiene

April 25th, 2017

Mrs. Carol Morrissette Residential Design Studio 21 Chestnut Street, Unit 506 Portland, Maine 04101

Re: Asbestos Demolition Impact Assessment, 86 Morning Street, Portland, Maine.

Dear Mrs. Morrissette:

Environmental Safety & Hygiene Associates, Inc. (ESHA) was retained by Residential Design Studio to conduct a MDEP and USEPA required and compliant asbestos demolition impact assessment of a two car garage located at 86 Morning Street, Portland, Maine.

The objective of the assessment was to assess and document the presence of Presumed Asbestos Containing Materials (PACM) within the boundary of structure that may be impacted by complete demolition for future development. In addition, the assessment was conducted to assure compliance with the requirements of the MDEP, USEPA National Emission Standard for Hazardous Air Pollutants (NESHAP's), and the Occupational Safety and Health Administration (OSHA).

Background

During the survey, the inspection team identified suspect PACM's for subsequent sampling and analysis. The asbestos building material survey was conducted in accordance with Maine DEP Chapter 425 Asbestos Management Regulations. The inspection included collection of bulk building material samples of suspect materials that are representative of each homogenous building material type area. The MDEP has minimum sampling requirements per building for the varying types of suspect materials they are as follows;

Surfacing materials; sprayed or applied by trowel and include fireproofing materials and various plasters. At least three bulk samples of surfacing materials were collected from each homogeneous area that was less than 1,000-square feet. Five bulk samples were collected for areas 1,000 to 5,000square feet, and seven bulk samples were collected for areas greater than 5,000-square feet

Miscellaneous ACM; includes a variety of ceiling tiles, floor tiles, and gypsum board. Sample quantities for miscellaneous ACM follow the same requirements as for the two previously mentioned ACM types.

Thermal system insulation; including boiler cover, pipe cover, and duct insulation were assessed. The materials were either assumed to be asbestos containing or were sampled as follows; At least three bulk samples of thermal system insulation from each homogenous area or at least one bulk sample from each homogeneous patched area if the section is less than six linear or square feet. 17 Patrick Drive • Westbrook, Maine 04092 • Phone: (207) 854-2711 • Fax: (207) 854-2609

Mrs. Carol Morrissette Residential Design Studio Page Two

All bulk samples collected were submitted to EMSL Analytical., Portland, Maine an independent State-licensed and NVLAP Accredited Asbestos Analytical Laboratory. Bulk samples of surfacing materials, thermal system insulation, and cementitious materials were analyzed by PLM-EPA 600/R-93/116 visual estimation method. Materials with an asbestos content of less than 10% as determined by PLM were reanalyzed by Point Count Method.

Bulk samples of non-friable organically bound materials (NOB's) such as flooring, asphalt, adhesives, coatings, and glazing were analyzed by PLM/NOB EPA 600/R-93/116 with gravimetric reduction method. Materials with an asbestos content of less than 10% as determined by PLM were reanalyzed by Point Count Method.

Summary of Findings

ESHA collected five (5) sample groups of suspect asbestos containing building materials from the interior and exterior of the structure that will be impacted by complete demolition. (See attached bulk sample summary for more details).

Based on the findings of this assessment and the analytical data the dwelling does not have any regulated asbestos containing building materials.

Hidden or Inaccessible Materials

The scope of the survey was limited to accessible spaces and areas that the survey team could access with representatives of the Owner. As with any asbestos study the limitations are typically based on the buildings history and the people familiar with it and the accessibility of areas or materials.

Other hidden materials common with this type of development that were not able to be assessed during this assessment are underground drainage pipe, underground insulated pipe, enclosed pipe chases and trenches, and other areas that are concealed by structure or in-accessible until such time demolition can occur.

The possibility for hidden or un-sampled / investigated PACM is a factor to consider resulting from the accessibility of areas and inability to conduct destructive sampling. During any facility operation including general maintenance, renovations, house-keeping or general demolition should suspect PACM be encountered, the Owner should first refer to this report and if conclusive results can't be obtained, additional sampling / analysis must be conducted by a State of Maine Licensed Asbestos Inspector.

We appreciate the opportunity to assist you with your asbestos testing needs, should you require further assistance please feel free to contact us at any time.

Mass P. Coleman CIE, CMR

President



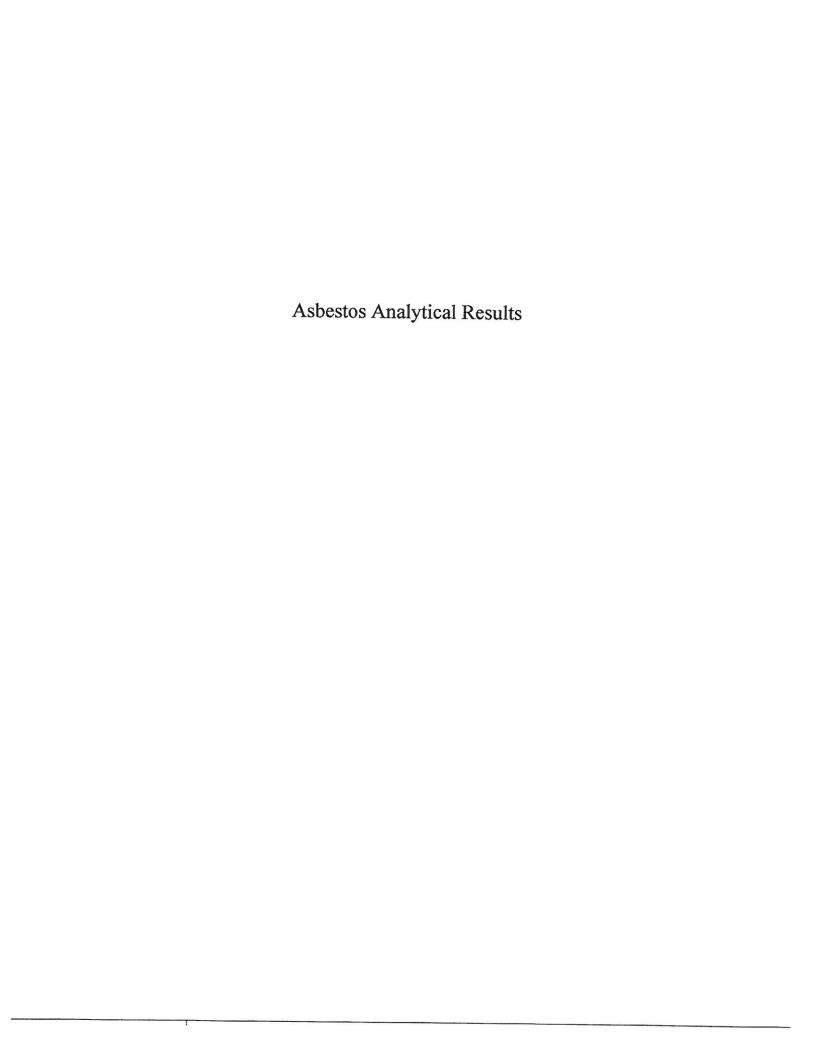
Residential Design Studio 21 Chestnut St. #506 Portland, ME 04101 Project No. 17-118 Testing Location: 86 Morning St. Portland

Testing Date: 04/24/2017

Page 1 of 1

Asbestos Bulk Sample Summary

Sample ID	Sample Location	Sample Description/Color	Sample Results No Asbestos Detected	
1-A	Exterior	Asphalt Roofing Shingles - Black		
1-B	11	u	No Asbestos Detected	
1-C	п	Ü	No Asbestos Detected	
2-A	Exterior	Roofing Felt - Black	No Asbestos Detected	
2-B		n -	No Asbestos Detected	
2-C	n .	n	No Asbestos Detected	
3-A	Exterior	Felt behind Siding - Brown	No Asbestos Detected	
3-B	11	n	No Asbestos Detected	
3-C	ii ii	u	No Asbestos Detected	
4-A	Exterior	Window Sash Glazing - Gray/Black	No Asbestos Detected	
4-B	TI .	n	No Asbestos Detected	
4-C	II .	и	No Asbestos Detected	





EMSL Analytical, Inc.

161 John Roberts Road South Portland, ME 04106 Tel/Fax: (207) 517-6921 / (207) 517-6922 http://www.EMSL.com/portlandlab@emsl.com EMSL Order: 621700620 Customer ID: ESH50

Customer PO: Project ID:

Attention: Mark Coleman

Environmental Safety & Hygiene Assoc.

91 Larrabee Rd Westbrook, ME 04092 Phone: (207) 756-9429

Fax:

Received Date: 04/25/2017 4:13 PM

Analysis Date: 04/26/2017 **Collected Date:** 04/25/2017

Project: 86 MORNING STREET

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by PLM via EPA 600/R-93/116 section 2.3

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
1A	ASPHALT ROOFING	Black	100	None	No Asbestos Detected
621700620-0001	SHINGLES	Fibrous			
		Homogeneous			
1B	ASPHALT ROOFING	Black	100	None	No Asbestos Detected
621700620-0002	SHINGLES	Fibrous			
		Homogeneous			
1C	ASPHALT ROOFING	Black	100	None	No Asbestos Detected
621700620-0003	SHINGLES	Fibrous			,,
		Homogeneous			
2A	BLACK ROOFING FELT	Black	100	None	No Asbestos Detected
621700620-0004		Fibrous	0.757		110 / Specifical Defection
		Homogeneous			
2B	BLACK ROOFING FELT	Black	100	None	No Asbestos Detected
621700620-0005		Fibrous		Hone	No Aspesios Delected
		Homogeneous			
2C	BLACK ROOFING FELT	Black	100	None	No Ashartas Data dad
621700620-0006		Fibrous	100	None	No Asbestos Detected
		Homogeneous			
3A	BROWN FELT BEHIND	Brown	100	A1	
621700620-0007	SIDING	Fibrous	100	None	No Asbestos Detected
22.700025.0007		Homogeneous			
3B	BROWN FELT BEHIND				
621700620-0008	SIDING	Brown	100	None	No Asbestos Detected
021100020-0000	SIDING	Fibrous			
		Homogeneous			
3C	BROWN FELT BEHIND	Brown	100	None	No Asbestos Detected
621700620-0009	SIDING	Fibrous			
		Homogeneous			
4A	WINDOW SASH	Gray/Black	100	None	No Asbestos Detected
621700620-0010	GLAZING	Non-Fibrous			
		Homogeneous			
4B	WINDOW SASH	Gray/Black	100	None	No Asbestos Detected
621700620-0011	GLAZING	Non-Fibrous			www.mydd.com.com.com.com.com.com.com.com.com.com
		Homogeneous			
4C	WINDOW SASH	Gray/Black	100	None	No Asbestos Detected
621700620-0012	GLAZING	Non-Fibrous	93/3	117117	The Proposition Detected
		Homogeneous			

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. This report contains data that is (are) not covered by the NVLAP accreditation. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from: 04/26/2017 11:32:21



EMSL Analytical, Inc.

161 John Roberts Road South Portland, ME 04106 Tel/Fax: (207) 517-6921 / (207) 517-6922 http://www.EMSL.com/portlandlab@emsl.com EMSL Order: 621700620 Customer ID: ESH50

Customer PO: Project ID:

Attention: Mark Coleman

Environmental Safety & Hygiene Assoc.

91 Larrabee Rd Westbrook, ME 04092 Fax:

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Received Date: 04/25/2017 4:13 PM

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Analysis Date: 04/26/2017 **Collected Date:** 04/25/2017

Project: 86 MORNING STREET

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by PLM via EPA 600/R-93/116 section 2.3

Sample ID Description Appearance % Matrix Material % Non-Asbestos Fibers Asbestos Types

Maine Analyst Certification # BA-0174, BA-0178

Analyst(s)

Stephen Sevem (8) Zackary Carbee (4) Christina Walker, Laboratory Manager or other approved signatory

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Initial report from: 04/26/2017 11:32:21

OrderID: 621700620



Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

6217001020

EMSL Analytical, Inc. 161 John Roberts Road

South Portland, ME 04106

PHONE: (207) 517-6921 FAX: (207) 517-6922

Company Name : Environmental Safety & Hygiene Assoc.			EMSL Customer ID:					
Street: 91 Larrabee Rd			City: Westbrook		State/Provi	nce: ME		
Zip/Postal Code: 04092		Country: US	Telephone #: 207-756-9429		Fax#:			
Report To (Name): Mark			Please Prov	ide Results: 🔲 Fa	x			
Email Address: mark@e			Purchase Order:					
Project Name/Number:	86 MORNI	WE STREET	EMSL Project ID (Internal Use Only):					
U.S. State Samples Taken: ME CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exem								
EMSL-Bill to: Same Different - If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party								
,		Turnaround Time (TAT)			T d Mr. al	I D AW-1		
		24 Hour 48 Hour 4 dto schedule. *There is a premium	charge for 3 Ho		evel II TAT. You			
authorization form-	for this service. ' A	Analysis completed in accordance v	with EMSL's Terr	ns and Conditions located	in the Analytical	Price Guide.		
PCM - Air Check if sar from NY	mpies are	TEM - Air 4-4.5hr TAT (AHERA only) TEM- Dust		TEM- Dust				
☐ NIOSH 7400		AHERA 40 CFR, Part 763		☐Microvac - ASTM D 5755				
w/ OSHA 8hr. TWA		NIOSH 7402		☐Wipe - ASTM D6	3480			
PLM - Bulk (reporting lim		EPA Level II		Carpet Sonication (EPA 600/J-93/167)				
PLM EPA 600/R-93/116	· · -	☐ ISO 10312		Soil/Rock/Vermiculite				
PLM EPA NOB (<1%)	1	TEM - Bulk		PLM EPA 600/R-93/116 with milling prep (<1%)				
Point Count	(=0 40()	TEM EPA NOB	LI- NA	PLM EPA 600/R-93/116 with milling prep (<0.25%)				
☐400 (<0.25%) ☐1000 Point Count w/Gravimetric	ON S 1 1	NYS NOB 198.4 (non-friable-NY) Chatfield SOP		TEM EPA 600/R-93/116 with milling prep (<0.1%) TEM Qualitative via Filtration Prep				
400 (<0.25%) 1000		TEM Mass Analysis-EPA 600 sec. 2.5		TEM Qualitative via Drop Mount Prep				
NYS 198.1 (friable in N		TEM - Water: EPA 100.2		Cincinnati Method EPA 600/R-04/004 PLM/TEM				
		Fibers >10µm Waste Drinking		(BC only) Other:				
NYS 198.6 NOB (non-friable-NY)								
☐ NIOSH 9002 (<1%)		All Fiber Sizes Waste						
Check For Positive St	op – Clearly Id	dentify Homogenous Group	Filter	Pore Size (Air Samp	(8.0 T	ım □0.45µm		
Samplers Name: Mari	k Colema	an	Samplers	Signature:	1			
			1		e/Area (Air)	Date/Time		
Sample #		Sample Description	on		# (Bulk)	Sampled		
1 A-C	ASPHOLT	- ROOFING SHIR	KLES			4-24.17		
ZAC	BLACK ROOFING FELT							
3A-6	BRUZIN FO	ELT BEHIND SIDIA	14					
4A-C	unner	soul bloans	۷.					
SAT								
Client Sample # (s): - Total # of Samples:								
Relinquished (Client): Date: 4.75-17 Time: 4:(U								
Received (Lab): 04.25.2017 Time: 10'10								
Comments/Special Instructions:								
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Page 1 of _____ pages

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