

AllPhase Companies, Incorporated

404-A St. Croix Trail North, Lakeland, MN 55043
Phone: 651-436-2930 Fax: 651-436-3918

December 21, 2011

Beth Ulrich
Project Manager
Dept. of Planning and Economic Development
1400 City Hall Annex, 25 West 4th Street
Saint Paul, MN 55102

RE: Asbestos Survey
275 Bates Ave., St. Paul, MN
1596-11S-G1

Dear Ms. Ulrich:

AllPhase Companies, Incorporated, (AllPhase) performed an asbestos survey at the above referenced site in connection with a demolition in order to identify asbestos-containing material (ACM)—that is, material with greater than 1% asbestos by volume. The following report contains the results of the survey performed at the above referenced site.

In summary, 41 samples of building materials were collected and analyzed for asbestos type and amount. Asbestos was detected above 1 percent in the following **nine of the forty-one samples**:

Friable - Textured wall and ceiling - Stairway to 2 nd floor	~380 sf
Category II - Adhesive for wall paneling, dark brown - Kitchen	~200 sf
Friable - Textured wall - Center-west room	~430 sf
Friable - Textured ceiling (troweled swirls) - Center-west room	~140 sf
- Northwest room	~140 sf
- Living room	~185 sf
Friable - Textured wall - Northwest room	~420 sf
Friable - Textured wall - Bathroom	~325 sf
Category II - Counter top, tan - Kitchen	~ 20 sf
Friable - Duct insulation - Basement, by furnace	~ 7 lf
Category II - Transite siding - Building exterior	~1,400 sf

Two samples were found to contain asbestos above 0% and less than 1% asbestos.

*Textured wall and ceiling - Entry hallway
*Textured wall - Living Room

* NESHAPS states that ACM is classified as a material that has asbestos greater than 1%. Therefore, these building materials are not classified as ACM.

Friable ACM is defined by the Asbestos NESHAP, as any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. (Sec. 61.141)

Nonfriable ACM is any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry,

cannot be crumbled, pulverized, or reduced to powder by hand pressure. EPA also defines two categories of nonfriable ACM, Category I and Category II nonfriable ACM, which are described later in this guidance.

"Regulated Asbestos-Containing Material" (RACM) is (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

Refer to the asbestos Laboratory Report and chain of custody for other building materials tested and their locations.

This survey is an attempt to identify ACM. The above ACM volumes and locations are based solely upon the analytical results of the material collected from the referenced building structure and the observations made by the inspector at the time of the asbestos survey. However, there is no guarantee that all potential ACM was identified. If suspect ACM is discovered during demolition or remodeling and is not listed in this or previous surveys, work on that portion of the building should cease, the material wetted and covered, and an asbestos inspector brought to the site to collect a representative sample and submit to a certified laboratory to determine its asbestos content. Pending analytical results, an abatement crew should remove the ACM before work continues. The above ACM volumes and locations are based solely upon the analytical results of the material collected from the referenced building structure and the observations made by the inspector at the time of the asbestos survey.

INTRODUCTION

The scope of our services was to conduct an asbestos survey, which includes collecting a small portion of the building materials and submitting the sample to a certified laboratory for analysis by PLM. Analysis only assesses the portion of building material collected and submitted.

- A. Collect bulk samples of suspect ACMs for laboratory analysis.
- B. Analyze the collected samples for asbestos content.

Minnesota requires surveys to be performed by a Minnesota Certified Inspector. This survey was conducted by David Jenkin – Asbestos Inspector #AI8101.

Samples of suspect ACMs were collected by AllPhase by removing a small portion of the suspect material and then placing the individual samples into separate sealed containers.

DISCLAIMERS

Asbestos surveys do not necessarily succeed in identifying all locations and types of ACM on-site. This is because of the variety of locations and the inconsistency of asbestos occurrence in a given building material. Our survey is based solely upon the building materials that were observed and sampled for analysis. Therefore, if unsampled building materials are encountered during the demolition, they should be assessed on a material-by-material basis. If suspect ACM is observed which has not been listed in our evaluation, it should be collected and evaluated by a certified individual and laboratory, respectively. If there is a potential for that material to be ACM, work should stop until the question of asbestos content and/or abatement is resolved in a manner that protects human health and the environment and abides by regulatory guidelines.

Certain building materials are not considered suspect ACM and are not sampled as part of the survey. These materials include but are not limited to wood, concrete (with exceptions), plastics such as polyethylene, polystyrene and polyvinylchloride, fiberglass, rubber (natural and neoprene—black synthetic), foam insulation, metals and glass.

METHODOLOGY

Building materials were analyzed by a NVLAP-accredited laboratory, #101768-0. Laboratory analysis was conducted in accordance with Environmental Protection Agency (EPA) guidelines. The examination for the presence and identification of asbestos fibers in bulk samples is performed in the laboratory using cross-polarized light microscopy and dispersion-staining, particle-identification techniques. Analysis was performed in accordance with EPA 600/M4-82-020 and EPA 600/R-93/116 where applicable. This methodology determines the presence of asbestos varieties, which include Chrysotile, Amosite, Crocidolite, Anthophyllite, Tremolite and Actinolite.

REMARKS

Some of the rules and regulations set by the Environmental Protection Agency (EPA) may apply when the existence of ACMs is confirmed. A complete review of these rules can be found in Part 3 of the Federal Register EPA, 40 CFR Part 61. Summaries of these rules are as follows:

According to §61.145 of NESHAPS, friable ACMs must be removed from the site prior to demolition. This includes materials that were originally non-friable but have become friable—that is, Category I & II material—due to damage or deterioration—for example, floor tile that has significant chipping or cracking. The necessity for the removal of Category I and II material is evaluated on a site-by-site basis.

Disturbing ACM may require that the Minnesota Pollution Control Agency and/or the Minnesota Department of Health be notified prior to activities with asbestos.

The environmental services performed by AllPhase's survey crew and analyst for this project have been conducted in a manner consistent with the degree of care and technical skill exercised by environmental professionals currently practicing in this area under similar budget and time constraints. Recommendations contained in this report represent our professional judgment at the time the project was performed. No other warranty is intended or implied.



Rennie Smith, P.G.
Asbestos Inspector (#AI3119)



David Jenkin, P.G.
Asbestos Inspector (#AI8101)

**LABORATORY REPORT
 ASBESTOS BULK ANALYSIS**

AMENDED

Client: **AllPhase Companies, Inc.**
 404-A St. Croix Trail, Nort
 Lakeland, MN 55043

CEI Lab Code: A11-9681
 Received: 12-14-11
 Analyzed: 12-17-11
 Reported: 12-17-11
 Analyst: Lynn Burkholder

Project: 275 Bates Ave.; 1596-11S-G1

CLIENT ID	CEI LAB ID	HOMOGENEITY DESCRIPTION	% ASBESTOS	
B-1	A1232149	<u>TRANSITE SIDING</u> Heterogeneous, Grey, White, Fibrous, Bound CHRY 15% BIND 80 % PAINT 5 %	CHRY	15%
B-2	A1232150	<u>SHINGLE & FELT</u> Heterogeneous, Grey, Fibrous, Bound TAR 50 % CELL 35 % GRAV 15 %	ND	
B-3	A1232151	<u>TAR</u> Homogeneous, Tan, Fibrous, Bound TAR 95 % CELL 5 %	ND	
B-4	A1232152	<u>SHINGLE</u> Heterogeneous, Grey, Fibrous, Bound TAR 60 % CELL 25 % GRAV 15 %	ND	
B-5	A1232153A	<u>TEXTURE</u> Heterogeneous, Off-white, Fibrous, Bound CHRY <1% BIND 30 % PAINT 70 %	CHRY	<1%
	A1232153B	<u>PLASTER SKIM COAT</u> Heterogeneous, White, Fibrous, Bound PLAS 95 % CELL 5 %	ND	

CAROLINA ENVIRONMENTAL, INC.
 107 New Edition Court, Cary, NC 27511
 Phone: 919-481-1413 Fax: 919-481-1442

Project: 275 Bates Ave.; 1596-11S-G1

Lab Code: A11-9681

AMENDED

CLIENT ID	CEI LAB ID	HOMOGENEITY DESCRIPTION	% ASBESTOS	
	A1232153C	<u>PLASTER BASE COAT</u> Homogeneous, Grey, Fibrous, Bound PLAS 100 % HAIR <1 %	ND	
B-6	A1232154	<u>TEXTURE</u> Heterogeneous, Off-white, Fibrous, Bound CHRY 2% BIND 78 % PAINT 20 %	CHRY	2%
B-7	A1232155	<u>SHEET FLOORING</u> Heterogeneous, Green, Fibrous, Bound VINYL 18 % CELL 60 % TAR 20 % MAST 2 %	ND	
B-8	A1232156	<u>FELT</u> Homogeneous, Black, Fibrous, Bound TAR 20 % CELL 80 %	ND	
B-9	A1232157	<u>ADHESIVE</u> Homogeneous, Brown, Fibrous, Bound MAST 100 % CELL <1 %	ND	
B-10	A1232158	<u>ADHESIVE</u> Homogeneous, Dk. Fibrous, Bound CHRY 5% MAST 95 %	CHRY	5%
B-11	A1232159A	<u>FLOOR TILE</u> Homogeneous, White, Non-fibrous, Bound VINYL 100 %	ND	

CAROLINA ENVIRONMENTAL, INC.
 107 New Edifion Court, Cary, NC 27511
 Phone: 919-481-1413 Fax: 919-481-1442

Project: 275 Bates Ave.; 1596-11S-G1

Lab Code: A11-9681

AMENDED

CLIENT ID	CEI LAB ID	HOMOGENEITY DESCRIPTION	% ASBESTOS
	A1232159B	<u>MASTIC</u> Homogeneous, Yellow, Non-fibrous, Bound VINYL 100 %	ND
	A1232159C	<u>FLOOR TILE</u> Homogeneous, Off-white, Black, Non-fibrous, Bound VINYL 100 %	ND
	A1232159D	<u>MASTIC</u> Homogeneous, Yellow, Non-fibrous, Bound VINYL 100 %	ND
B-12	A1232160	<u>FLOORING</u> Heterogeneous, Tan, Fibrous, Bound VINYL 20 % CELL 60 % TAR 20 % MAST <1 %	ND
B-13	A1232161	<u>FLOORING</u> Homogeneous, Off-white, Fibrous, Bound VINYL 90 % FBGL 10 %	ND
B-14	A1232162	<u>CEILING TILE</u> Heterogeneous, White, Fibrous, Bound PERL 25 % CELL 35 % PAINT 5 % FBGL 35 %	ND
B-15	A1232163	<u>TEXTURE</u> Homogeneous, Brown, Non-fibrous, Bound PAINT 100 %	ND

CAROLINA ENVIRONMENTAL, INC.
 107 New Edition Court, Cary, NC 27511
 Phone: 919-481-1413 Fax: 919-481-1442

Project: 275 Bates Ave.; 1596-11S-G1

Lab Code: A11-9681

AMENDED

CLIENT ID	CEI LAB ID	HOMOGENEITY DESCRIPTION	% ASBESTOS	
B-16	A1232164A	<u>TEXTURE</u> Heterogeneous, Off-white, Fibrous, Bound	CHRY	2%
			BIND	78%
			PAINT	20%
	A1232164B	<u>PLASTER SKIM COAT</u> Homogeneous, White, Non-fibrous, Bound		ND
			PLAS	100%
	A1232164C	<u>PLASTER BASE COAT</u> Homogeneous, Grey, Fibrous, Bound		ND
			PLAS	100%
			HAIR	<1%
B-17	A1232165A	<u>TEXTURE</u> Heterogeneous, Off-white, Fibrous, Bound	CHRY	5%
			BIND	95%
	A1232165B	<u>PLASTER SKIM COAT</u> Homogeneous, White, Non-fibrous, Bound		ND
			PLAS	100%
	A1232165C	<u>PLASTER BASE COAT</u> Homogeneous, Grey, Fibrous, Bound		ND
			PLAS	100%
			HAIR	<1%
B-18	A1232166	<u>TEXTURE</u> Heterogeneous, Off-white, Fibrous, Bound	CHRY	2%
			BIND	93%
			PAINT	5%

CAROLINA ENVIRONMENTAL, INC.
 107 New Edition Court, Cary, NC 27511
 Phone: 919-481-1413 Fax: 919-481-1442

Project: 275 Bates Ave.; 1596-11S-G1

Lab Code: A11-9681

AMENDED

CLIENT ID	CEI LAB ID	HOMOGENEITY DESCRIPTION	% ASBESTOS
B-19	A1232167A	<u>TEXTURE</u> Heterogeneous, Off-white, Fibrous, Bound CHRY <1% BIND 30 % PAINT 70 %	CHRY <1%
	A1232167B	<u>PLASTER SKIM COAT</u> Homogeneous, White, Non-fibrous, Bound PLAS 100 %	ND
	A1232167C	<u>PLASTER BASE COAT</u> Homogeneous, Grey, Fibrous, Bound PLAS 100 % HAIR <1 %	ND
B-20	A1232168A	<u>FLOOR TILE</u> Homogeneous, Off-white, Tan, Non-fibrous, Bound VINYL 100 %	ND
	A1232168B	<u>MASTIC</u> Homogeneous, Yellow, Non-fibrous, Bound VINYL 100 %	ND
B-21	A1232169A	<u>FLOOR TILE</u> Homogeneous, Brown, Non-fibrous, Bound VINYL 100 %	ND
	A1232169B	<u>MASTIC</u> Homogeneous, Clear, Non-fibrous, Bound VINYL 100 %	ND

CAROLINA ENVIRONMENTAL, INC.
 107 New Edition Court, Cary, NC 27511
 Phone: 919-481-1413 Fax: 919-481-1442

Project: 275 Bates Ave.; 1596-11S-G1

Lab Code: A11-9681

AMENDED

CLIENT ID	CEI LAB ID	HOMOGENEITY DESCRIPTION	% ASBESTOS	
B-22	A1232170	<u>TEXTURE</u> Heterogeneous, Off-white, Fibrous, Bound	CHRY 2%	93 % 5 %
B-23	A1232171A	<u>FLOORING</u> Heterogeneous, Green, Fibrous, Bound		20 % 20 %
	A1232171B	<u>FLOORING</u> Heterogeneous, Tan, Black, Fibrous, Bound	CHRY 25%	50 % 20 %
B-24	A1232172	<u>TEXTURE</u> Heterogeneous, White, Non-fibrous, Bound		95 % 5 %
B-25	A1232173	<u>CEILING TILE</u> Heterogeneous, White, Fibrous, Bound		5 % 95 %
B-26	A1232174	<u>WINDOW GLAZING</u> Heterogeneous, White, Non-fibrous, Bound		5 % 95 %
B-27	A1232175	<u>DUCT INSULATION</u> Homogeneous, Grey, Fibrous, Loosely Bound	CHRY 65%	35 %

The following definitions apply to the abbreviations used in the ASBESTOS BULK ANALYSIS REPORT:

CHRY = Chrysotile	CELL = Cellulose	DEBR = Debris
AMOS = Amosite	FBGL = Fibrous Glass	BIND = Binder
CROC = Crocidolite	CACO = Calcium Carbonate	SILI = Silicates
TREM = Tremolite	SYNT = Synthetics	GRAV = Gravel
ANTH = Anthophyllite	WOLL = Wollastonite	MAST = Mastic
ACTN = Actinolite	CERWL = Ceramic Wool	PLAS = Plaster
ND = None Detected	NTREM = Non-Asbestiform Tremolite	PERL = Perlite
NANTH = Non-Asbestiform Anthophyllite	FBGY = Fibrous Gypsum	RUBR = Rubber
		VER = Vermiculite

CLIENT: AllPhase Companies, Inc.

PROJECT: 275 Bates Ave.; 1596-11S-G1

CEI LAB CODE: A11-9681 **AMENDED**

Stereoscopic microscopy and polarized light microscopy coupled with dispersion staining is the analytical technique used for sample identification. The percentage of each component is visually estimated by volume. These results pertain only to the samples analyzed. The samples were analyzed as submitted by the client and may not be representative of the larger material in question. Unless notified in writing to return samples, Carolina Environmental, Inc. will discard all bulk samples after 30 days.

Many vinyl floor tiles have been manufactured using greater than 1% asbestos. Often the asbestos was milled to a fiber size below the detection limit of polarized light microscopy. Therefore, a "None Detected" (ND) reading on vinyl floor tile does not necessarily exclude the presence of asbestos. Transmission electron microscopy provides a more conclusive form of analysis for vinyl floor tiles.

It is certified by the signature below that Carolina Environmental, Inc. is accredited by the National Voluntary Accreditation Program (NVLAP) for the analysis of asbestos in bulk materials. The accredited test method is EPA / 600 / M4-82 / 020 for the analysis of asbestos in building materials. Procedures described in EPA / 600 / R-93 / 116 have been incorporated where applicable. The detection limit for the method is 0.1% (trace amount). Carolina Environmental, Inc.'s NVLAP accreditation number is #101768-0. This report is not to be used to claim product endorsement by NVLAP or any agency of the U. S. Government. This report and its contents are only valid when reproduced in full. Dust and soil analyses for asbestos using PLM are not covered under NVLAP accreditation.

ANALYST



REVIEWED BY



Tianbao Bai, Ph.D.
Laboratory Director

End of Report



CAROLINA ENVIRONMENTAL, INC.

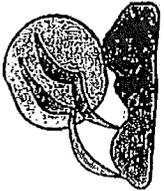
107 New Edition Court, Cary, NC 27511
 Tel: 866-481-1412; Fax: 919-481-1442

A11. 9681 (27)
 A/232149. A/232175

**CHAIN OF CUSTODY RECORD
 ASBESTOS/LEAD ANALYSIS**

pg 1 of 3

Client: <i>AllPhase Companies, Inc.</i>	Project Manager: <i>David Jenkin</i>				
Address: <i>404-A St. Croix Trl N. Lakeland, MN 55043</i>	Phone: <i>651-436-2930</i>				
E-Mail: <i>allphasecompany@guestoffice.net</i>	Fax: <i>-3918</i>				
PO #: <i>275 Bates Ave.</i>					
PROJECT DESCRIPTION	PROJECT CODE	LEAD PAINT	ASBESTOS	TURN AROUND TIME	REMARKS
<i>Exterior, 1st level</i>	<i>B-1 Transit siding</i>				
<i>Roof N. wall 2nd level</i>	<i>2 Shingle + Felt</i>				
<i>Canopy at entry</i>	<i>3 Tar</i>				
<i>Canopy roof</i>	<i>4 Shingle</i>				
<i>Interior, Entry hall 1st Fl.</i>	<i>5 Wall text. plaster</i>				
<i>1st Fl. Base of stairs</i>	<i>6 Wall text.</i>				
<i>" Entry</i>	<i>7 Floor sheathing</i>				
<i>" N-S running hall</i>	<i>8 Felt</i>				
<i>" " " paneling</i>	<i>9 Adh., brown</i>				
<i>" SE Rm (Kitchen) paneling</i>	<i>10 Adh., dk brown</i>				
REMARKS:					
<input type="checkbox"/> 5 DAYS <input type="checkbox"/> 3 DAYS <input checked="" type="checkbox"/> 48 HOURS <input type="checkbox"/> 24 HOURS* <input type="checkbox"/> 4 HOURS*					
CLIENT ID# 1596-115-G1					
Samples will be disposed of 30 days after analysis, unless otherwise requested.					
Relinquished By: <i>David Jenkin</i>	Received By: <i>Christy Parvett</i>				Date / Time: <i>12/12/11</i>
Relinquished By:	Received By:				Date / Time:



CAROLINA ENVIRONMENTAL, INC.

107 New Edition Court, Cary, NC 27511
 Tel: 866-481-1412; Fax: 919-481-1442

A11-9681

CHAIN OF CUSTODY RECORD ASBESTOS/LEAD ANALYSIS

pg 3 of 3

Client: AllPhase Companies, Inc.		Project Manager: David Jenkin		
Address: 404-A St. Croix Trl N.		Phone: 651-436-2930		
Lakeland, MN 55043		Fax: -3918		
Email: allphasecompany @questoffice.net				
PO #: 275 Bates Ave.				
PROJECT DESCRIPTION	PROJECT CODE	ASBESTOS	LEAD PAINT	TURN-AROUND TIME
2 nd Fl., Kitchen, under 8-20	B-21 Flooring			<input type="checkbox"/> 5 DAYS <input type="checkbox"/> 3 DAYS <input checked="" type="checkbox"/> 48 HOURS <input type="checkbox"/> 24 HOURS* <input type="checkbox"/> 4 HOURS*
" , Bathroom	22 Wall Lst.			
" , Kitchen counter top	23 Flooring-2 Types			
" , " ,	24 Cail. Lst.			
" , Lvgrm	25 Cail. Tile, 12"x12"			
" , E. window, off Lvgrm	26 Window glazing			
Basement, duct	27 Duct insul.			
REMARKS:				CLIENT ID# 1596-115-G1
Relinquished By: David Jenkin				Samples will be disposed of 30 days after analysis, unless otherwise requested.
Relinquished By:		Received By:	Date / Time:	Date / Time:
		Received By:	Date / Time:	Date / Time: