

**2nd Follow-up Inspection for Asbestos Containing Materials
Greenville County Health Department Buildings
200 University Ridge
Greenville, S.C. 29601**

Prepared for:

*Mr. Perry Swearingen
Greenville County
301 University Ridge
Greenville, S.C. 29601-3660*

by:

ENVIRONMENTAL TESTING & MANAGEMENT, INC.

**2nd Follow-up Inspection for Asbestos Containing Materials
Greenville County Health Department Buildings
200 University Ridge
Greenville, S.C. 29601**



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**Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department
Original Building
200 University Ridge
Greenville, S.C. 29601**

Prepared for:

*Mr. Perry Swearingen
Greenville County
301 University Ridge
Greenville, S.C. 29601-3660*

June 8, 2012

Prepared by:

Environmental Testing and Management, Inc.

P.O. Box 896
Mauldin, South Carolina 29662
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**Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department - Original Building
200 University Ridge
Greenville, S.C. 29601**

I. Introduction

Environmental Testing and Management Inc., (ETM) was retained by Mr. Perry Swearingen of Greenville County to conduct a limited follow-up inspection for suspect asbestos containing materials in the Greenville County Health Department building, located at 200 University Ridge, Greenville, S.C. The Health Department consists of three distinct areas, each built at a different time. This inspection focused on items not sampled during the previous inspections. This inspection was conducted by Andrew Schauder, CIH, and Roxane Schauder, MS, of ETM on May 19, 2012. Thirty (30) bulk materials were collected and (57) layers were analyzed for the presence of asbestos.

II. Observations

The inspection began in the basement. In Room B7 there is fitting mud present on hard elbows and valve bodies. This material was not sampled as it is presumed to be positive based upon prior positive results of similar material. Likewise, there are two elbows with presumed positive mud present in Room B8. Materials such as these will need to be labeled in accordance with the OSHA Asbestos Standard.

Continuing in the basement, samples (1-3) were pulled of the beige marbled floor tile and mastic present in the hallway. This is the top layer of floor tile and mastic present, and these materials returned as negative for the presence of asbestos.

Underneath the top layer of floor tile and mastic there is a bottom layer of brown floor tile and associated mastic. Three samples (4-6) were collected. Both the floor tile and mastic returned as positive for the presence of asbestos. This material is currently in good, non-friable condition underneath the top layer of negative floor tile and mastic. This material may be removed using non-friable abatement methods when the time comes for replacement. Since the negative floor tile is in effect attached to the positive floor tile, they will be removed together.

Samples (7-9) were taken of the brown cove base and mastic present in the basement. These returned as negative for the presence of asbestos upon bulk analysis. In accordance with SCDHEC regulations for non-friable organically bound (NOB) materials, a sample of each was subsequently submitted for TEM analysis. These materials were confirmed to be negative.

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Proceeding to the first floor, ceramic tile (not a suspect material) is present in the lobby area as well as in the restrooms. The hallways, waiting areas, auditorium, and some of the offices have terrazzo flooring (not a suspect material). However, some of the offices have a dark beige floor tile (ie: a different beige floor tile than is present in the basement), and some have a white flecked floor tile present. Samples (10-12) were collected of the beige floor tiles and mastic while samples (19-21) were collected of a white flecked floor tile and associated mastic. Carpet was observed in some areas on this floor and samples (22-24) were collected of the carpet mastic. All samples returned as negative for the presence of asbestos as confirmed by TEM analysis.

Also on the first floor, two different colors of cove base and mastic were observed. Samples (13-15) were collected of the grey cove base and mastic. Samples (16-18) were collected of the black cove base and mastic. All samples returned as negative for the presence upon bulk analysis. TEM analysis confirmed all to be negative, with the exception of the mastic associated with the grey cove base. However, this sample returned at less than 1% chrysotile asbestos, meaning that it can be treated as if it were non-asbestos.

On the second floor, there is grey flecked floor tile present in various areas. Three samples (25-27) were collected of this floor tile and mastic. There is also a brown/black floor tile present in several rooms on this level and three samples (28-30) were collected of this floor tile and mastic. All samples returned as negative for the presence of asbestos as confirmed by TEM analysis.

It should be noted that a flooring threshold difference was noted for specifically for room HD214 on the second floor. Upon closer inspection, carpet (mastic previously sampled as outlined above) is laid over what is suspected to be a floor that was floated over what is presumed to be terrazzo. The float floor must be considered to be suspect. There was not a place to pull the carpet without potential damage showing in this particular room, so no samples were collected of the float floor during this visit.

The last item to note as a presumed asbestos-containing material is the 9-inch floor tile (and its associated mastic) present throughout the stairwells in this building. This material is defined as a positive material. It can be removed using non-friable abatement techniques when the time comes for replacement.

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III. Conclusions and Recommendations

The results of this survey are summarized in Table I. This Table lists the following data:

1. Sample number
2. Sample location
3. Material sampled
4. The result of the analysis of the material sampled.

As noted above, there are several areas of confirmed or presumed asbestos containing materials in the Health Department Original Building:

1. Basement: lower layer of floor tile and associated mastic: confirmed to be asbestos containing based upon current results.
2. Fitting mud present in the basement (and any other areas): presumed to be positive based upon prior positive results for the same type of material.
3. Float floor in Room HD214 on the second floor: this is a suspect material that will need to be sampled at time of a planned renovation)
4. 9-inch floor tile and mastic: this is a material that is defined as an asbestos containing material based upon the fact that it is 9-inch floor tile.

Inspector:  License: #1336 Expires: 09/21/12

Inspector:  License: #00189 Expires: 02/16/13

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 Greenville County Health Department - Original Building
 200 University Ridge
 Greenville, S.C. 29601
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TABLE I

Sample No.	Location Sampled	Material	Result
01 - 03	Basement hallway	Floor tile & mastic: top layer	ND*
04 - 06	Basement hallway	Floor tile: bottom layer	7% Chrysotile
04 - 06	Basement hallway	Mastic: bottom layer	10% Chrysotile
07 - 09	Basement room B7	Cove base & mastic	ND *
10 - 12	1 st Floor room 118	Floor tile & mastic	ND*
13 - 15	1 st Floor room 118	Cove base (grey)	ND*
13 - 15	1 st Floor room 118	Mastic associate with grey cove base	<1% Chrysotile
16 - 18	1 st Floor hallway	Cove base (black) & mastic	ND*
19 - 21	1 st Floor room 104C	Floor tile & mastic	ND*
22 - 24	1 st Floor off room 117	Carpet mastic	ND*
25 - 27	2 nd Floor lobby	Floor tile & mastic	ND*
28 - 30	2 nd Floor room 225	Floor tile & mastic	ND*

ND*: none detected

<: less than



ASBESTOS LABORATORY REPORT

Prepared for

Environmental Testing & Management, Inc.

PROJECT: Greenville County - Health Department - Original Bldg.

CEI LAB CODE: A12-4399

DATE REPORTED: 05/25/12

TOTAL SAMPLES ANALYZED: 30

SAMPLES >1% ASBESTOS: 6

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Greenville County - Health Department - CEI LAB CODE: A12-4399
Original Bldg.

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1		A1292762A	Off-white	Floor Tile	None Detected
		A1292762B	Tan	Mastic	None Detected
2		A1292763A	Off-white	Floor Tile	None Detected
		A1292763B	Tan	Mastic	None Detected
3		A1292764A	Off-white	Floor Tile	None Detected
		A1292764B	Tan	Mastic	None Detected
4		A1292765A	Off-white	Floor Tile	Chrysotile 7%
		A1292765B	Black	Mastic	Chrysotile 10%
5		A1292766A	Off-white	Floor Tile	Chrysotile 7%
		A1292766B	Black	Mastic	Chrysotile 10%
6		A1292767A	Off-white	Floor Tile	Chrysotile 7%
		A1292767B	Black	Mastic	Chrysotile 10%
7		A1292768A	Beige	Covebase	None Detected
		A1292768B	Off-white	Mastic	None Detected
8		A1292769A	Beige	Covebase	None Detected
		A1292769B	Off-white	Mastic	None Detected
9		A1292770A	Beige	Covebase	None Detected
		A1292770B	Off-white	Mastic	None Detected
10		A1292771A	Off-white	Floor Tile	None Detected
		A1292771B	Tan	Mastic	None Detected
11		A1292772A	Off-white	Floor Tile	None Detected
		A1292772B	Tan	Mastic	None Detected
12		A1292773A	Off-white	Floor Tile	None Detected
		A1292773B	Tan	Mastic	None Detected
13		A1292774A	Beige	Covebase	None Detected
		A1292774B	Off-white	Mastic	None Detected
14		A1292775A	Beige	Covebase	None Detected
		A1292775B	Off-white	Mastic	None Detected
15		A1292776A	Beige	Covebase	None Detected
		A1292776B	Off-white	Mastic	None Detected
16		A1292777A	Beige	Covebase	None Detected



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Greenville County - Health Department - CEI LAB CODE: A12-4399
Original Bldg.

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
		A1292777B	Off-white	Mastic	None Detected
17		A1292778A	Beige	Covebase	None Detected
		A1292778B	Off-white	Mastic	None Detected
18		A1292779A	Beige	Covebase	None Detected
		A1292779B	Off-white	Mastic	None Detected
19		A1292780A	Off-white	Floor Tile	None Detected
		A1292780B	Tan	Mastic	None Detected
20		A1292781A	Off-white	Floor Tile	None Detected
		A1292781B	Tan	Mastic	None Detected
21		A1292782A	Off-white	Floor Tile	None Detected
		A1292782B	Tan	Mastic	None Detected
22		A1292783	Tan	Mastic	None Detected
23		A1292784	Tan	Mastic	None Detected
24		A1292785	Tan	Mastic	None Detected
25		A1292786A	Off-white	Floor Tile	None Detected
		A1292786B	Tan	Mastic	None Detected
26		A1292787A	Off-white	Floor Tile	None Detected
		A1292787B	Tan	Mastic	None Detected
27		A1292788A	Off-white	Floor Tile	None Detected
		A1292788B	Tan	Mastic	None Detected
28		A1292789A	Off-white	Floor Tile	None Detected
		A1292789B	Tan	Mastic	None Detected
29		A1292790A	Off-white	Floor Tile	None Detected
		A1292790B	Tan	Mastic	None Detected
30		A1292791A	Off-white	Floor Tile	None Detected
		A1292791B	Tan	Mastic	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
 P.O. Box 896
 Mauldin, SC 29662

CEI Lab Code: A12-4399

Date Received: 05-22-12

Date Reported: 05-25-12

Project: Greenville County - Health Department - Original Bldg.

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
1 A1292762A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292762B	Mastic Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
2 A1292763A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292763B	Mastic Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
3 A1292764A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292764B	Mastic Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
4 A1292765A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	93%	Vinyl	7% Chrysotile
	A1292765B	Mastic Homogeneous Black Non-fibrous Bound	90%	Mastic	10% Chrysotile



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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
5 A1292766A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	93%	Vinyl	7% Chrysotile
	A1292766B	Mastic	Homogeneous Black Non-fibrous Bound	90%	Mastic
6 A1292767A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	93%	Vinyl	7% Chrysotile
	A1292767B	Mastic	Homogeneous Black Non-fibrous Bound	90%	Mastic
7 A1292768A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
	A1292768B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic
8 A1292769A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
	A1292769B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic



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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
9 A1292770A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
	A1292770B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic
10 A1292771A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292771B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic
11 A1292772A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292772B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic
12 A1292773A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292773B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic



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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
13 A1292774A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
A1292774B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic	None Detected
14 A1292775A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
A1292775B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic	None Detected
15 A1292776A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
A1292776B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic	None Detected
16 A1292777A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
A1292777B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic	None Detected



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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
17 A1292778A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
A1292778B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic	None Detected
18 A1292779A	Covebase	Homogeneous Beige Non-fibrous Bound	100%	Vinyl	None Detected
A1292779B	Mastic	Homogeneous Off-white Non-fibrous Bound	100%	Mastic	None Detected
19 A1292780A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
A1292780B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
20 A1292781A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
A1292781B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected



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CEI Lab Code: A12-4399

Date Received: 05-22-12

Date Reported: 05-25-12

Project: Greenville County - Health Department - Original Bldg.

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
21 A1292782A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
A1292782B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
22 A1292783	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
23 A1292784	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
24 A1292785	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
25 A1292786A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
A1292786B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
26 A1292787A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
 P.O. Box 896
 Mauldin, SC 29662

CEI Lab Code: A12-4399

Date Received: 05-22-12

Date Reported: 05-25-12

Project: Greenville County - Health Department - Original Bldg.

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
A1292787B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
27 A1292788A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
A1292788B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
28 A1292789A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
A1292789B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
29 A1292790A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected
A1292790B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
30 A1292791A	Floor Tile	Homogeneous Off-white Non-fibrous Tightly Bound	100%	Vinyl	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
P.O. Box 896
Mauldin, SC 29662

CEI Lab Code: A12-4399

Date Received: 05-22-12

Date Reported: 05-25-12

Project: Greenville County - Health Department - Original Bldg.

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
A1292791B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

The detection limit for the method is <1% by visual estimation and 0.25% by 400 point counts or 0.1% by 1,000 point counts.

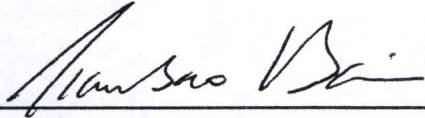
Due to the limitations of the EPA 600 Method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarizing light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation.

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ANALYST: _____


Madison M. Roberts

APPROVED BY: _____


Tianbao Bai, Ph.D.
Laboratory Director





ASBESTOS BULK ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: Environmental Testing & Management, Inc.
 P.O. Box 896
 Mauldin, SC 29662

CEI Lab Code: T12-0190

Date Received: 05-30-12

Date Reported: 05-31-12

Project: Greenville County - Health Department - Original Bldg.

TEM BULK CHATFIELD

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
7 T00821	Cove Base	0.4594	40.2	1.5	58.3	None Detected
7 T00822	Mastic	0.7569	77.8	19.4	2.8	None Detected
10 T00823	Floor Tile	0.4296	15.1	84.1	.8	None Detected
10 T00824	Mastic	0.257	56.9	17.7	25.4	None Detected
13 T00825	Cove Base	0.3243	42.1	56.9	1	None Detected
13 T00826	Mastic	0.2783	51.9	8.9	39.2	<1% Chrysotile
16 T00827	Cove Base	0.3724	34.7	64.5	.8	None Detected
21 T00828	Floor Tile	0.4269	15.3	81.9	2.8	None Detected
24 T00829	Carpet Mastic	0.3347	55.6	5.3	39.1	None Detected
26 T00830	Floor Tile	0.4511	19.8	78.3	1.9	None Detected
29 T00831	Floor Tile	0.2886	20.3	77.6	2.1	None Detected



ASBESTOS BULK ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: Environmental Testing & Management, Inc.
P.O. Box 896
Mauldin, SC 29662

CEI Lab Code: T12-0190

Date Received: 05-30-12

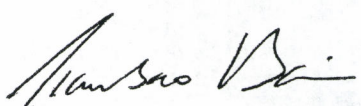
Date Reported: 05-31-12

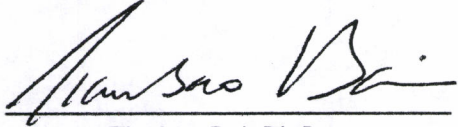
Project: Greenville County - Health Department - Original Bldg.

TEM BULK CHATFIELD

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
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ANALYST: 
Tianbao Bai

APPROVED BY: 
Tianbao Bai, Ph.D.
Laboratory Director

**Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department
4 Story Tower
200 University Ridge
Greenville, S.C. 29601**

Prepared for:

***Mr. Perry Swearingen
Greenville County
301 University Ridge
Greenville, S.C. 29601-3660***

June 8, 2012

Prepared by:

Environmental Testing and Management, Inc.

P.O. Box 896
Mauldin, South Carolina 29662
Phone (864) 213-4408 Fax (864) 213-4409

**Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department - 4 Story Tower
200 University Ridge
Greenville, S.C. 29601**

I. Introduction

Environmental Testing and Management Inc., (ETM) was retained by Mr. Perry Swearingen of Greenville County to conduct a limited follow-up inspection for suspect asbestos containing materials in the Greenville County Health Department building, located at 200 University Ridge, Greenville, S.C. The Health Department consists of three distinct areas, each built at a different time. This inspection focused on suspect materials not previously sampled in the 4 story tower. This inspection was conducted by Andrew Schauder, CIH, and Roxane Schauder, MS, of ETM on May 19, 2012. Eighteen (18) bulk materials were collected and (33) layers were analyzed for the presence of asbestos.

II. Observations

The inspection began in the basement lobby area. Samples (1-3) were collected of the visible, top layer of grey flecked floor tile present and its associated mastic. This flooring extends throughout the basement level, except where floors are ceramic (bathrooms) or concrete (mechanical rooms, storage). This grey floor tile and its mastic both returned as negative for the presence of asbestos. In accordance with SCDHEC regulations for non-friable organically bound (NOB) materials, a sample of the floor tile and mastic was subsequently submitted for TEM analysis. The floor tile was confirmed to be negative while the mastic returned as less than 1% chrysotile asbestos (meaning it may be treated as if it were a non-asbestos material)..

Underneath this top, visible layer of floor tile is a lower layer of biege floor tile and its associated mastic. Samples (4-6) were collected of these materials as well. Both of these materials returned as positive for the presence of asbestos. The floor tile contains 2% chrysotile asbestos, while the mastic contains 10% chrysotile asbestos. This material can be removed using non-friable abatement techniques when the time comes for replacement.

Above the ceiling tiles in the basement (previously sampled; all types are negative for the presence of asbestos), there is black mastic on HVAC duct. Three samples (7-9) were collected of this material, which returned positive for the presence of asbestos (10% chrysotile). This material is currently in good condition and can be removed using non-friable abatement techniques when the time comes for removal.

*Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department - 4 Story Tower
200 University Ridge
Greenville, S.C. 29601
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Proceeding to the first floor, it was noted that the same grey flecked floor tile seen in the basement lobby is present in the first floor lobby. Several different rooms have a white tile and yellow mastic. Samples (10-12) were collected of this tile and mastic. Samples (13-15) were also collected of the brown cove base and mastic on this floor. All of these materials returned as negative for the presence of asbestos as confirmed by TEM analysis.

On the second floor, a different type of flooring (it appears to be 16" floor tile) has been installed. There was no good place to sample this material without marring the new installation and therefore no samples were pulled. For now this material can be presumed to be asbestos containing and samples can be taken when the floor needs to be replaced. Carpet is present throughout the office area on this floor, as well as on the 3rd and 4th floors. Samples (16-18) were collected of the carpet mastic. These returned as negative for the presence of asbestos as confirmed by TEM analysis.

III. Conclusions and Recommendations

The results of this survey are summarized in Table I. This Table lists the following data:

1. Sample number
2. Sample location
3. Material sampled
4. The result of the analysis of the material sampled.

As noted above, all samples collected were negative for the presence of asbestos with the exception of the black HVAC duct mastic and the lower layer of floor tile and mastic present in the basement. These materials are currently in good, non-friable condition. The positive floor tile and mastic are underneath the top (negative) layer of grey floor tile and black mastic. When the time comes to replace flooring in this area, it can be removed as a unit using non-friable abatement techniques.

It was noted that the same grey flecked floor tile present in the basement is also present in the first floor lobby. Since the installation of this floor tile was over positive floor tile in the basement, it is possible that the same condition exists wherever this grey flecked floor tile is present. Should the grey flecked flooring need to be replaced, care must be taken to ensure positive floor tile is not randomly disturbed if it is indeed under the grey tile.

Inspector: *OG Schauder* License: #1336 Expires: 09/21/12

Inspector: *Rorane Schauder* License: #00189 Expires: 02/16/13

*Follow-up Limited Inspection for Asbestos Containing Materials
 Greenville County Health Department - 4 Story Tower
 200 University Ridge
 Greenville, S.C. 29601
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TABLE I

Sample No.	Location Sampled	Material	Result
01 - 03	Basement lobby	Floor tile: top layer Grey, flecked	ND*
01 - 03	Basement lobby	Brown mastic (Under 01-03 and on top of 04-05)	< 1% Chrysotile
04 - 05	Basement lobby	Floor tile: bottom layer Beige	2% Chyrstotile
04 - 05	Basement lobby	Black mastic (Under 04-05)	10% Chyrstotile
06 - 09	Basement lobby: Above ceiling	HVAC duct mastic	10% Chrysotile
10 - 12	1 st Floor: room 125	Floor tile and mastic	ND*
13 - 15	1 st Floor: room 125	Cove base and mastic	ND*
16 - 18	2 nd Floor: room 255	Carpet mastic	ND*
N/A	2 nd Floor: lobby	16" floor tile	None: presume and test at time of removal

ND*: none detected

<: less than



AMENDED

ASBESTOS LABORATORY REPORT

Prepared for

Environmental Testing & Management, Inc.

PROJECT: Greenville County - Health Department - 4 Story Tower

CEI LAB CODE: A12-4398

DATE REPORTED: 05/29/12

TOTAL SAMPLES ANALYZED: 18

SAMPLES >1% ASBESTOS: 9

TEL: 866-481-1412

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AMENDED

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Greenville County - Health Department - 4 CEI LAB CODE: A12-4398
 Story Tower

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1		A1292744A	Grey	Floor Tile	None Detected
		A1292744B	Brown	Mastic	None Detected
2		A1292745A	Grey	Floor Tile	None Detected
		A1292745B	Brown	Mastic	None Detected
3		A1292746A	Grey	Floor Tile	None Detected
		A1292746B	Brown	Mastic	None Detected
4	Layer 1	A1292747A	Brown	Mastic	None Detected
	Layer 2	A1292747A	Tan	Floor Tile	Chrysotile 2%
		A1292747B	Black	Mastic	Chrysotile 10%
5	Layer 1	A1292748A	Brown	Mastic	None Detected
	Layer 2	A1292748A	Tan	Floor Tile	Chrysotile 2%
		A1292748B	Black	Mastic	Chrysotile 10%
6	Layer 1	A1292749A	Brown	Mastic	None Detected
	Layer 2	A1292749A	Tan	Floor Tile	Chrysotile 2%
		A1292749B	Black	Mastic	Chrysotile 10%
7		A1292750	Black	Hvac Duct	Chrysotile 10%
8		A1292751	Black	Hvac Duct	Chrysotile 10%
9		A1292752	Black	Hvac Duct	Chrysotile 10%
10		A1292753A	Off-white	Floor Tile	None Detected
		A1292753B	Yellow	Mastic	None Detected
11		A1292754A	Off-white	Floor Tile	None Detected
		A1292754B	Yellow	Mastic	None Detected
12		A1292755A	Off-white	Floor Tile	None Detected
		A1292755B	Yellow	Mastic	None Detected
13		A1292756A	Brown	Covebase	None Detected
		A1292756B	Tan	Mastic	None Detected
14		A1292757A	Brown	Covebase	None Detected
		A1292757B	Tan	Mastic	None Detected
15		A1292758A	Brown	Covebase	None Detected
		A1292758B	Tan	Mastic	None Detected
16		A1292759	Yellow	Mastic	None Detected



AMENDED

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Greenville County - Health Department - 4 CEI LAB CODE: A12-4398
Story Tower

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
17		A1292760	Yellow	Mastic	None Detected
18		A1292761	Yellow	Mastic	None Detected



AMENDED ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
 P.O. Box 896
 Mauldin, SC 29662

CEI Lab Code: A12-4398

Date Received: 05-22-12

Date Reported: 05-25-12

Project: Greenville County - Health Department - 4 Story Tower

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous		Non-Fibrous		
1 A1292744A	Floor Tile	Heterogeneous Grey Non-fibrous Bound	70%	Vinyl	30%	Calc Carb	None Detected
	A1292744B	Mastic	Heterogeneous Brown Non-fibrous Bound	10%	Cellulose	90%	Mastic
2 A1292745A	Floor Tile	Heterogeneous Grey Non-fibrous Bound	70%	Vinyl	30%	Calc Carb	None Detected
	A1292745B	Mastic	Heterogeneous Brown Non-fibrous Bound	10%	Cellulose	90%	Mastic
3 A1292746A	Floor Tile	Heterogeneous Grey Non-fibrous Bound	70%	Vinyl	30%	Calc Carb	None Detected
	A1292746B	Mastic	Heterogeneous Brown Non-fibrous Bound	10%	Cellulose	90%	Mastic
4 Layer 1 A1292747A	Mastic	Heterogeneous Brown Non-fibrous Bound	10%	Cellulose	90%	Mastic	None Detected
	Layer 2 A1292747A	Floor Tile	Heterogeneous Tan Non-fibrous Bound	70%	Vinyl	28%	Calc Carb



AMENDED ASBESTOS BULK ANALYSIS

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 P.O. Box 896
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CEI Lab Code: A12-4398

Date Received: 05-22-12

Date Reported: 05-25-12

Project: Greenville County - Health Department - 4 Story Tower

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
A1292747B	Mastic	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile
5 Layer 1 A1292748A	Mastic	Heterogeneous Brown Non-fibrous Bound	10%	Cellulose	90% Mastic None Detected
Layer 2 A1292748A	Floor Tile	Heterogeneous Tan Non-fibrous Bound	70%	Vinyl 28% Calc Carb	2% Chrysotile
A1292748B	Mastic	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile
6 Layer 1 A1292749A	Mastic	Heterogeneous Brown Non-fibrous Bound	10%	Cellulose	90% Mastic None Detected
Layer 2 A1292749A	Floor Tile	Heterogeneous Tan Non-fibrous Bound	70%	Vinyl 28% Calc Carb	2% Chrysotile
A1292749B	Mastic	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile
7 A1292750	Hvac Duct	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile



AMENDED ASBESTOS BULK ANALYSIS
 By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
 P.O. Box 896
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CEI Lab Code: A12-4398
Date Received: 05-22-12
Date Reported: 05-25-12

Project: Greenville County - Health Department - 4 Story Tower

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
8 A1292751	Hvac Duct	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile
9 A1292752	Hvac Duct	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile
10 A1292753A	Floor Tile	Heterogeneous Off-white Non-fibrous Bound	70%	Vinyl Calc Carb	None Detected
A1292753B	Mastic	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected
11 A1292754A	Floor Tile	Heterogeneous Off-white Non-fibrous Bound	70%	Vinyl Calc Carb	None Detected
A1292754B	Mastic	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected
12 A1292755A	Floor Tile	Heterogeneous Off-white Non-fibrous Bound	70%	Vinyl Calc Carb	None Detected
A1292755B	Mastic	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected



AMENDED ASBESTOS BULK ANALYSIS
 By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
 P.O. Box 896
 Mauldin, SC 29662

CEI Lab Code: A12-4398
Date Received: 05-22-12
Date Reported: 05-25-12

Project: Greenville County - Health Department - 4 Story Tower

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
13 A1292756A	Covebase	Heterogeneous Brown Non-fibrous Bound	100%	Vinyl	None Detected
A1292756B	Mastic	Heterogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
14 A1292757A	Covebase	Heterogeneous Brown Non-fibrous Bound	100%	Vinyl	None Detected
A1292757B	Mastic	Heterogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
15 A1292758A	Covebase	Heterogeneous Brown Non-fibrous Bound	100%	Vinyl	None Detected
A1292758B	Mastic	Heterogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
16 A1292759	Mastic	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected
17 A1292760	Mastic	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected



AMENDED

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
P.O. Box 896
Mauldin, SC 29662

CEI Lab Code: A12-4398

Date Received: 05-22-12

Date Reported: 05-25-12

Project: Greenville County - Health Department - 4 Story Tower

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
18 A1292761	Mastic	Heterogeneous Yellow Non-fibrous Bound	100%	Mastic	None Detected



AMENDED

LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

The detection limit for the method is <1% by visual estimation and 0.25% by 400 point counts or 0.1% by 1,000 point counts.

Due to the limitations of the EPA 600 Method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarizing light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation.

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ANALYST: Megan Fisher
Megan Fisher

APPROVED BY: Tianbao Bai
Tianbao Bai, Ph.D.
Laboratory Director





ASBESTOS BULK ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: Environmental Testing & Management, Inc.
P.O. Box 896
Mauldin, SC 29662

CEI Lab Code: T12-0184

Date Received: 05-29-12

Date Reported: 05-31-12

Project: Greenville County - Health Department - 4 Story Tower

TEM BULK CHATFIELD

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
1 T00796	Floor Tile	0.3422	19.9	78	2.1	None Detected
1, 2, 3 Combined T00797	Mastic	0.0992	41.6	56.4	2	<1% Chrysotile
10 T00798	Floor Base	0.41	15.5	81.6	2.9	None Detected
40 T00799	Mastic	0.2223	67.5	9.2	23.3	None Detected
13 T00800	Floor Tile	0.3858	40.5	5	54.5	None Detected
13 T00801	Mastic	0.4274	39	48.4	12.6	None Detected
16 T00802	Carpet Mastic	0.3716	58	8	34	None Detected

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ANALYST:

Tianbao Bai

APPROVED BY:

Tianbao Bai, Ph.D.
Laboratory Director

**Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department
Original Building Addition
200 University Ridge
Greenville, S.C. 29601**

Prepared for:

*Mr. Perry Swearingen
Greenville County
301 University Ridge
Greenville, S.C. 29601-3660*

June 8, 2012

Prepared by:

Environmental Testing and Management, Inc.

P.O. Box 896
Mauldin, South Carolina 29662
Phone (864) 213-4408 Fax (864) 213-4409

**Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department - Original Building Addition
200 University Ridge
Greenville, S.C. 29601**

I. Introduction

Environmental Testing and Management Inc., (ETM) was retained by Mr. Perry Swearingen of Greenville County to conduct a limited follow-up inspection for suspect asbestos containing materials in the Greenville County Health Department building, located at 200 University Ridge, Greenville, S.C. The Health Department consists of three distinct areas, each built at a different time. This inspection focused on materials not previously sampled in the original building addition. This inspection was conducted by Andrew Schauder, CIH, and Roxane Schauder, MS, of ETM on May 19, 2012. Twelve (12) bulk materials were collected and (21) layers were analyzed for the presence of asbestos.

II. Observations

The inspection began in the hallway. Two layers of floor tile and mastic are present here. Samples (1-3) were collected of the top layer (a white, flecked floor tile) and three samples (4-6) were collected of the bottom layer (a tan, flecked floor tile). All samples returned as negative for the presence of asbestos. In accordance with SCDHEC regulations for non-friable organically bound (NOB) materials, a sample of each floor tile and its associated mastic was subsequently submitted for TEM analysis. All were confirmed to be negative.

Next, three samples (7-9) were collected of the cove base and mastic. Finally, three samples (10-12) were collected of carpet mastic. All returned as negative for the presence of asbestos as confirmed by TEM analysis.

III. Conclusions and Recommendations

The results of this survey are summarized in Table I. This Table lists the following data:

1. Sample number
2. Sample location
3. Material sampled
4. The result of the analysis of the material sampled.

*Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department - Original Building Addition
200 University Ridge
Greenville, S.C. 29601
Page Two*

As noted above, all samples collected were negative for the presence of asbestos.

Inspector: *Og Schauder* License: #1336 Expires: 09/21/12

Inspector: *Roxane Schauder* License: #00189 Expires: 02/16/13

*Follow-up Limited Inspection for Asbestos Containing Materials
Greenville County Health Department - Original Building Addition
200 University Ridge
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Page Three*

TABLE I

Sample No.	Location Sampled	Material	Result
01 - 03	Lobby	Floor tile & mastic: top layer	ND*
04 - 06	Lobby	Floor tile & mastic: bottom layer	ND*
07 - 09	Hallway closet	Cove base & mastic	ND*
10 - 12	Hallway closet	Carpet mastic	ND *

ND*: none detected



ASBESTOS LABORATORY REPORT

Prepared for

Environmental Testing & Management, Inc.

PROJECT: Greenville County - Health Department - Original
Bldg. Add.

CEI LAB CODE: A12-4400

DATE REPORTED: 05/25/12

TOTAL SAMPLES ANALYZED: 12

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Greenville County - Health Department - CEI LAB CODE: A12-4400
Original Bldg. Add.

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1		A1292792A	White	Floor Tile	None Detected
		A1292792B	Tan	Mastic	None Detected
2		A1292793A	White	Floor Tile	None Detected
		A1292793B	Tan	Mastic	None Detected
3		A1292794A	White	Floor Tile	None Detected
		A1292794B	Tan	Mastic	None Detected
4		A1292795A	White	Floor Tile	None Detected
		A1292795B	Tan	Mastic	None Detected
5		A1292796A	White	Floor Tile	None Detected
		A1292796B	Tan	Mastic	None Detected
6		A1292797A	White	Floor Tile	None Detected
		A1292797B	Tan	Mastic	None Detected
7		A1292798A	Brown	Covebase	None Detected
		A1292798B	Tan	Mastic	None Detected
8		A1292799A	Brown	Covebase	None Detected
		A1292799B	Tan	Mastic	None Detected
9		A1292800A	Brown	Covebase	None Detected
		A1292800B	Tan	Mastic	None Detected
10		A1292801	Tan	Mastic	None Detected
11		A1292802	Tan	Mastic	None Detected
12		A1292803	Tan	Mastic	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
 P.O. Box 896
 Mauldin, SC 29662

CEI Lab Code: A12-4400

Date Received: 05-22-12

Date Reported: 05-25-12

Project: Greenville County - Health Department - Original Bldg. Add.

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
1 A1292792A	Floor Tile	Homogeneous White Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292792B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic
2 A1292793A	Floor Tile	Homogeneous White Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292793B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic
3 A1292794A	Floor Tile	Homogeneous White Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292794B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic
4 A1292795A	Floor Tile	Homogeneous White Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292795B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic



ASBESTOS BULK ANALYSIS

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 P.O. Box 896
 Mauldin, SC 29662

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Date Received: 05-22-12

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Project: Greenville County - Health Department - Original Bldg. Add.

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
5 A1292796A	Floor Tile	Homogeneous White Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292796B	Mastic Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
6 A1292797A	Floor Tile	Homogeneous White Non-fibrous Tightly Bound	100%	Vinyl	None Detected
	A1292797B	Mastic Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
7 A1292798A	Covebase	Homogeneous Brown Non-fibrous Bound	100%	Vinyl	None Detected
	A1292798B	Mastic Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
8 A1292799A	Covebase	Homogeneous Brown Non-fibrous Bound	100%	Vinyl	None Detected
	A1292799B	Mastic Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Environmental Testing & Management, Inc.
P.O. Box 896
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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
9 A1292800A	Covebase	Homogeneous Brown Non-fibrous Bound	100%	Vinyl	None Detected
A1292800B	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
10 A1292801	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
11 A1292802	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
12 A1292803	Mastic	Homogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

The detection limit for the method is <1% by visual estimation and 0.25% by 400 point counts or 0.1% by 1,000 point counts.

Due to the limitations of the EPA 600 Method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarizing light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation.

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ANALYST: _____

Madison M. Roberts

APPROVED BY: _____

Tianbao Bai, Ph.D.
Laboratory Director





ASBESTOS BULK ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: Environmental Testing & Management, Inc.
P.O. Box 896
Mauldin, SC 29662

CEI Lab Code: T12-0189

Date Received: 05-30-12

Date Reported: 06-01-12

Project: Greenville County - Health Department - Original Bldg. Add.

TEM BULK CHATFIELD

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
1 T00814	Floor Tile	0.2958	15.2	81.4	3.4	None Detected
1 T00815	Mastic	0.1371	54	36	10	None Detected
4 T00816	Floor Tile	0.3788	14.5	84.2	1.3	None Detected
4 T00817	Mastic	0.1643	46.9	30	23.1	None Detected
7 T00818	Cove Base	0.2866	40.6	2.8	56.6	None Detected
7 T00819	Mastic	0.401	38.5	52.7	8.8	None Detected
12 T00820	Carpet Mastic	0.4275	57.9	-7	42.8	None Detected

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ANALYST:

Tianbao Bai

APPROVED BY:

Tianbao Bai, Ph.D.
Laboratory Director