

**Limited Inspection for Asbestos Containing Materials
Greenville County Square
301 University Ridge
Greenville, S.C. 29601**

Prepared for:

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

August 30, 2012

Prepared by:

Environmental Testing and Management, Inc.

**Limited Inspection for Asbestos Containing Materials
Greenville County Square
301 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 inspection for suspect asbestos containing materials in Greenville County Square, located at 301 University Ridge, Greenville, S.C. This inspection focused on identifying and, where possible, sampling suspect asbestos containing materials in this pre-1981 building. This inspection was conducted by Andrew Schauder, CIH, and Roxane Schauder, MS, of ETM on August 13, 2012. Thirty-six (36) bulk materials were collected and (50) layers were analyzed for the presence of asbestos.

II. Observations

The inspection began in the lobby to the County Council area, which is just adjacent the security station. Samples (1-3) were collected of the ceiling tile style present in this area (Armstrong 770, see photo #2). These returned as negative for the presence of asbestos. Above these ceiling tiles, there is un-insulated metal deck and fiberglass pipe insulation. White mastic is present on the main trunk lines. This mastic is similar in appearance to the white mastic sampled previously (see report dated July 16, 2012 entitled "Limited Inspection for Asbestos Containing Materials - Selected Areas - Greenville County Square) and found to be non-asbestos containing.

Looking into a storage closet (which also contains a copier) for the County Council area, three samples (4-6) were next collected of the grey cove base and mastic. These were also found to be negative for the presence of asbestos upon bulk analysis. In accordance with SCDHEC regulations for non-friable organically bound (NOB) materials, a sample of the cove base and its associated mastic was subsequently submitted for TEM analysis. The floor tile was confirmed to be negative, while the mastic returned at less than 1% asbestos (meaning it can be treated as if it were a non-asbestos material). However, there is carpeting on the floor. Pulling this carpet back, we observe black mastic which is presumed to be asbestos-containing based upon prior results for this mastic in this building.

Proceeding to the assembly room for County Council meetings, carpet is present here as well but appears to be over ceramic tile in some areas. In the hallway behind Council chambers, the same white mastic as noted above is on the HVAC ductwork. A different

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type of ceiling tile is present here (see photo #1) and so three samples (7-9) were collected of this tile. Results returned as negative.

Two samples (10-11) were collected of sheetrock and joint compound here. These were found to be negative as well. Please note this brings the total number of sheetrock and joint compound samples collected to seven (five samples were previously collected and reported in the July 16, 2012 report). All sheetrock and joint compound samples have returned as negative for the presence of asbestos.

Proceeding into Suite 2500 (Greenville County Redevelopment Authority), the same brown cove base was observed that has been previously sampled (see report dated July 16, 2012) and found to be non-asbestos containing. One sample (12) was collected of carpet mastic in this area. This mastic is a mixture of yellow mastic (which is most likely the carpet mastic) and black mastic (which is most likely left over from a floor tile removal project conducted sometime in the past). This mixture has been tested previously and found in some locations to be asbestos containing (see report dated July 16, 2012). This sample was collected to confirm the hypothesis that a positive result may be obtained for this mixture of mastics found randomly throughout the building. As expected, the mixture proved to be asbestos containing.

In Voter Registration, there is a storage area where the floor tile has been removed and remaining black mastic can be visually observed (photo #3). This mastic should be treated as an asbestos containing material. In the adjacent room, there is 12" floor tile (photo #4) with the same black mastic underneath. In the bathroom, there is 9" floor tile and mastic which is presumed to be positive. Across the hallway there are some additional bathrooms, but no new suspect materials are present in them (ceramic floor tile, sheetrock walls with ceramic tile present on the lower half, and sheetrock ceiling).

In the Administration area, there are no new suspect materials. Materials here included the same Armstrong ceiling tiles, sheetrock walls, carpeting and cove base as previously sampled. The same is true with Conference Room C and the Training Room.

In Conference Room D there is a different type of ceiling tile (Armstrong 704A). Three samples (13-15) were collected of this ceiling tile (see photo #5), which returned as negative for the presence of asbestos.

In the Clinic area, two additional samples (16-17) were collected of the sheetrock panels (no joint compound is associated with the sheetrock panels). These samples returned as negative, as did the five samples collected and reported with the July 16, 2012 survey.

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There were no other new suspect materials located in the Clinic.

In Suite 3800 (Public Works), most building materials are the same as previously sampled. In the storage room, the carpet was pulled back revealing only yellow mastic in the area we could observe. The yellow mastic has been found previously to be negative. In the break room there is 12" grey, mottled floor tile over black mastic. The floor tile and mastic here are assumed to be positive. All other materials (sheetrock, ceiling tile, carpet mastic, and brown cove base with associated mastic) have been previously sampled and found to be negative.

In the canteen, four different colors of floor tile are present and all are over suspect black mastic. The floor tile and the black mastic are presumed to be asbestos containing. Three samples (18-20) were collected of the light grey cove base and mastic in the canteen. These were found to be negative for the presence of asbestos as confirmed by TEM analysis. No other new suspect materials were observed in the canteen.

No new suspect materials were observed in the lobby area just outside the canteen nor in the restrooms. In the Shop area, no new suspect materials were noted to be present (un-insulated metal deck, fiberglass insulation with PVC elbows on piping, un-insulated HVAC ductwork, concrete floor, and sheetrock walls).

No new suspect materials were noted in Code Enforcement, Suite 4800 (Greenville Soil & Water), or Suite 4900. Carpet was pulled back in a section of Suite 4900 and only yellow non-asbestos mastic was observed.

In Suite 4300, the only new suspect material noted were the floor tiles (and associated mastic) present on a raised platform in the Clemson Extension kitchen area, as well as a stone veneer backsplash along the back wall. Samples were not collected at this time so the floor tile/mastic and the adhesive, if any, used to adhere the stone board to the wall must be presumed to be asbestos containing and tested prior to any renovation.

No new suspect materials were noted in Conference Room F (also marked as room 3950).

Suite 4000 (Probation & Parole) has the original high ceilings, which have two different types of ceiling tile present. Above the ceiling tiles, there is fiberglass insulated HVAC duct, un-insulated metal decking and metal roof joists. No mastic was visible from our vantage point. Three samples (21-23; see photo #6 and 24-26; see photo #7) were collected of each type of ceiling tile. All results returned as negative.

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In the back of this Suite, there is a conference/break room and two layers of floor tile and mastic are present. The top layer is a 12" grey tile and the bottom layer is a beige floor tile of indeterminate size. Samples (27-30) were collected of the top layer of floor tile and mastic (see photo #8), while samples (31-33) were collected of the bottom layer. The top layer was found to be negative upon bulk analysis, but the bottom layer of both floor tile and mastic were found to be positive. Since the floor tile and mastic will all be removed at the time of renovation as a unit, all layers will be abated and disposed of as asbestos containing material. This bottom layer of tile appears to extend beyond the conference/break room into the carpeted hallway up to about the second office on the left.

In the Equipment room, there is fiberglass insulation on the HVAC ductwork and aluminum metal jacket over fiberglass on chill water lines. White mastic is present on the chill water lines and so three samples (34-36) were collected of the mastic. These samples returned as negative for the presence of asbestos as confirmed by TEM analysis.

In Suite 5800 (DHEC) there is ceiling tile (same as previously sampled), sheetrock panels, and 12" grey mottled floor tile over black mastic. Some rooms have white floor tile over black mastic. Some rooms do have carpeting present which appears, based upon threshold differences, to be over floor tile and mastic. For purposes of this survey, all floor tile is presumed to be over suspect black mastic. Laboratory bench tops appear to be a laminate over press board. There is no asbestos cement board located in the laboratory hoods.

No new suspect materials were observed in the following areas:

- Veteran's Affairs
- Suite 5000
- Suite 5050
- Suite 5200
- Conference Room G
- Conference Room H
- Suite 5600
- DSS Legal Area
- Suite 5700 (also part of DSS)
- Suite 5200 (Workers' Compensation)

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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.

Materials found to definitively test positive for the presence of asbestos include the mixed (black and yellow) mastic present under carpeting, as well as the floor tile and mastic found in Suite 4000 (Probation & Parole) in the conference/break room and extending somewhat out into the hallway underneath the carpeting.

Insofar as the mixed mastic is concerned, areas of carpeting in County Square will need to be addressed on a case by case basis as renovation projects come up. There is no way to tell, short of removing all of the carpeting, where there is mixed mastic (which is positive) versus yellow mastic (which is negative).

The only other item found to be asbestos containing in this building is the black mastic located under floor tile. However, it is not known if ALL of the black mastic under various patterns/colors of floor tile is positive. Therefore, as is the case with the mixed mastic located under carpeting, areas of floor tile renovation should be sampled prior to renovation to see if the floor tile/mastic to be impacted is actually asbestos containing or not.

Certain materials (the grey 12" floor tile in Voter Registration, the various floor tiles present in the canteen) were not tested at this time in order to preserve the continuity of the flooring. Once a renovation is scheduled for these areas, the floor tile and mastic can be tested to determine whether or not they are asbestos containing materials.

Inspector: *Cory Schuder* License: #1336 Expires: 09/21/12

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

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TABLE I

Sample No.	Location Sampled	Material	Result
01 - 03	County Council: Lobby Area	Ceiling tile (Armstrong 770)	ND*
04 - 06	County Council: Storage/copier room	Cove base & mastic: Dark grey	ND*
07 - 09	County Council: Receptionist area	Ceiling tile	ND*
10 - 11	County Council: Hallway behind	Sheetrock & joint compound	ND *
12	Suite 2500	Mixed mastic under carpet	2% Chrysotile
13 - 15	Suite 2500	Ceiling tile (Armstrong 704A)	ND*
16 - 17	Clinic	Sheetrock panel	ND*
18 - 20	Canteen	Cove base & mastic: Light grey	ND*
21 - 23	Suite 4000	Ceiling tile	ND*
24 - 26	Suite 4000	Ceiling tile	ND*
27 - 30	Suite 4000	Floor tile & mastic: Top layer	ND*
31 - 33	Suite 4000	Floor tile: Bottom layer	5% Chrysotile
31 - 33	Suite 4000	Mastic: Bottom layer	10% Chrysotile
34 - 36	Equipment Room	Mastic	ND*

ND*: none detected

Photo #2



Photo #1



Photo #4

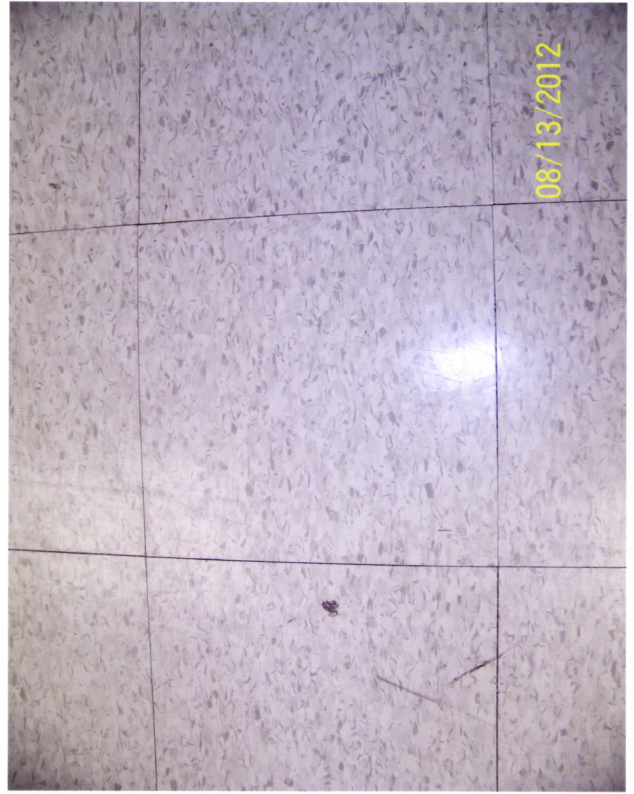


Photo #3



Photo #6



Photo #5



Photo #8



Photo #7





ASBESTOS LABORATORY REPORT

Prepared for

Environmental Testing & Management, Inc.

PROJECT: Greenville County - County Square

CEI LAB CODE: A12-7209

DATE REPORTED: 08/16/12

TOTAL SAMPLES ANALYZED: 36

SAMPLES >1% ASBESTOS: 7

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Greenville County - County Square

CEI LAB CODE: A12-7209

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

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1		A1328394	White,Tan	Ceiling Tile	None Detected
2		A1328395	White,Tan	Ceiling Tile	None Detected
3		A1328396	White,Tan	Ceiling Tile	None Detected
4		A1328397A	Brown	Covebase	None Detected
		A1328397B	Tan	Mastic	None Detected
5		A1328398A	Brown	Covebase	None Detected
		A1328398B	Tan	Mastic	None Detected
6		A1328399A	Brown	Covebase	None Detected
		A1328399B	Tan	Mastic	None Detected
7		A1328400	White,Silver	Ceiling Tile	None Detected
8		A1328401	White,Silver	Ceiling Tile	None Detected
9		A1328402	White,Silver	Ceiling Tile	None Detected
10	Layer 1	A1328403	White,Tan	Sheetrock	None Detected
	Layer 2	A1328403	White	Joint Compound	None Detected
11	Layer 1	A1328404	White,Tan	Sheetrock	None Detected
	Layer 2	A1328404	White	Joint Compound	None Detected
12		A1328405	Black,Yellow	Mastic	Chrysotile 2%
13		A1328406	White,Tan	Ceiling Tile	None Detected
14		A1328407	White,Tan	Ceiling Tile	None Detected
15		A1328408	White,Tan	Ceiling Tile	None Detected
16		A1328409	White,Tan	Sheetrock	None Detected
17		A1328410	White,Tan	Sheetrock	None Detected
18		A1328411A	Grey	Covebase	None Detected
		A1328411B	Grey	Mastic	None Detected
19		A1328412A	Grey	Covebase	None Detected
		A1328412B	Grey	Mastic	None Detected
20		A1328413A	Grey	Covebase	None Detected
		A1328413B	Grey	Mastic	None Detected
21		A1328414	White,Tan	Ceiling Tile	None Detected
22		A1328415	White,Tan	Ceiling Tile	None Detected
23		A1328416	White,Tan	Ceiling Tile	None Detected



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Greenville County - County Square

CEI LAB CODE: A12-7209

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

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
24		A1328417	White,Tan	Ceiling Tile	None Detected
25		A1328418	White,Tan	Ceiling Tile	None Detected
26		A1328419	White,Tan	Ceiling Tile	None Detected
27		A1328420	White	Joint Compound	None Detected
28		A1328421A	Grey	Floor Tile	None Detected
		A1328421B	Tan	Mastic	None Detected
29		A1328422A	Grey	Floor Tile	None Detected
		A1328422B	Tan	Mastic	None Detected
30		A1328423A	Grey	Floor Tile	None Detected
		A1328423B	Tan	Mastic	None Detected
31		A1328424A	Tan	Floor Tile	Chrysotile 5%
		A1328424B	Black	Mastic	Chrysotile 10%
32		A1328425A	Tan	Floor Tile	Chrysotile 5%
		A1328425B	Black	Mastic	Chrysotile 10%
33		A1328426A	Tan	Floor Tile	Chrysotile 5%
		A1328426B	Black	Mastic	Chrysotile 10%
34		A1328427	White	TSI	None Detected
35		A1328428	White	TSI	None Detected
36		A1328429	White	TSI	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

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

CEI Lab Code: A12-7209

Date Received: 08-14-12

Date Reported: 08-15-12

Project: Greenville County - County Square

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1 A1328394	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Tan	20%	Fiberglass	5%	Paint	
		Fibrous			10%	Perlite	
		Loosely Bound					
2 A1328395	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Tan	20%	Fiberglass	5%	Paint	
		Fibrous			10%	Perlite	
		Loosely Bound					
3 A1328396	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Tan	20%	Fiberglass	5%	Paint	
		Fibrous			10%	Perlite	
		Loosely Bound					
4 A1328397A	Covebase	Heterogeneous			100%	Binder	None Detected
		Brown Non-fibrous Bound					
A1328397B	Mastic	Heterogeneous			100%	Mastic	None Detected
		Tan Non-fibrous Bound					
5 A1328398A	Covebase	Heterogeneous			100%	Binder	None Detected
		Brown Non-fibrous Bound					
A1328398B	Mastic	Heterogeneous			100%	Mastic	None Detected
		Tan Non-fibrous Bound					
6 A1328399A	Covebase	Heterogeneous			100%	Binder	None Detected
		Brown Non-fibrous Bound					



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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			
A1328399B	Mastic	Heterogeneous Tan Non-fibrous Bound		100%	Mastic	None Detected	
7 A1328400	Ceiling Tile	Heterogeneous White, Silver Fibrous Loosely Bound	5% 80%	Cellulose Fiberglass	10% 5%	Binder Metal Foil	None Detected
8 A1328401	Ceiling Tile	Heterogeneous White, Silver Fibrous Loosely Bound	5% 80%	Cellulose Fiberglass	10% 5%	Binder Metal Foil	None Detected
9 A1328402	Ceiling Tile	Heterogeneous White, Silver Fibrous Loosely Bound	5% 80%	Cellulose Fiberglass	10% 5%	Binder Metal Foil	None Detected
10 Layer 1 A1328403	Sheetrock	Heterogeneous White, Tan Fibrous Bound	20%	Cellulose	80%	Gypsum	None Detected
Layer 2 A1328403	Joint Compound	Heterogeneous White Non-fibrous Bound			60% 40%	Binder Calc Carb	None Detected
11 Layer 1 A1328404	Sheetrock	Heterogeneous White, Tan Fibrous Bound	20%	Cellulose	80%	Gypsum	None Detected
Layer 2 A1328404	Joint Compound	Heterogeneous White Non-fibrous Bound			60% 40%	Binder Calc Carb	None Detected



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Project: Greenville County - County Square

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
12 A1328405	Mastic	Heterogeneous Black, Yellow Non-fibrous Bound	98%	Mastic		2% Chrysotile	
13 A1328406	Ceiling Tile	Heterogeneous White, Tan Fibrous Loosely Bound	60% 20%	Cellulose Fiberglass	5% 5% 10%	Binder Paint Perlite	None Detected
14 A1328407	Ceiling Tile	Heterogeneous White, Tan Fibrous Loosely Bound	60% 20%	Cellulose Fiberglass	5% 5% 10%	Binder Paint Perlite	None Detected
15 A1328408	Ceiling Tile	Heterogeneous White, Tan Fibrous Loosely Bound	60% 20%	Cellulose Fiberglass	5% 5% 10%	Binder Paint Perlite	None Detected
16 A1328409	Sheetrock	Heterogeneous White, Tan Fibrous Bound	20%	Cellulose	80%	Gypsum	None Detected
17 A1328410	Sheetrock	Heterogeneous White, Tan Fibrous Bound	20%	Cellulose	80%	Gypsum	None Detected
18 A1328411A	Covebase	Heterogeneous Grey Non-fibrous Bound			100%	Binder	None Detected
A1328411B	Mastic	Heterogeneous Grey Non-fibrous Bound			100%	Mastic	None Detected



ASBESTOS BULK ANALYSIS

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Project: Greenville County - County Square

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous	Non-Fibrous			
19 A1328412A	Covebase	Heterogeneous Grey Non-fibrous Bound	100%	Binder			None Detected
	A1328412B	Mastic	Heterogeneous Grey Non-fibrous Bound	100%	Mastic		None Detected
20 A1328413A	Covebase	Heterogeneous Grey Non-fibrous Bound	100%	Binder			None Detected
	A1328413B	Mastic	Heterogeneous Grey Non-fibrous Bound	100%	Mastic		None Detected
21 A1328414	Ceiling Tile	Heterogeneous White, Tan Fibrous Loosely Bound	60%	Cellulose	5%	Binder	None Detected
			20%	Fiberglass	5%	Paint	
22 A1328415	Ceiling Tile	Heterogeneous White, Tan Fibrous Loosely Bound	60%	Cellulose	5%	Binder	None Detected
			20%	Fiberglass	5%	Paint	
23 A1328416	Ceiling Tile	Heterogeneous White, Tan Fibrous Loosely Bound	60%	Cellulose	5%	Binder	None Detected
			20%	Fiberglass	5%	Paint	
24 A1328417	Ceiling Tile	Heterogeneous White, Tan Fibrous Loosely Bound	60%	Cellulose	5%	Binder	None Detected
			20%	Fiberglass	5%	Paint	
			10%	Perlite			



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Project: Greenville County - County Square

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
25 A1328418	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Tan	20%	Fiberglass	5%	Paint	
		Fibrous			10%	Perlite	
		Loosely Bound					
26 A1328419	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	Binder	None Detected
		White, Tan	20%	Fiberglass	5%	Paint	
		Fibrous			10%	Perlite	
		Loosely Bound					
27 A1328420	Joint Compound	Heterogeneous			60%	Binder	None Detected
		White			5%	Paint	
		Non-fibrous			35%	Calc Carb	
		Bound					
28 A1328421A	Floor Tile	Heterogeneous			100%	Vinyl	None Detected
		Grey					
		Non-fibrous					
A1328421B	Mastic	Heterogeneous			100%	Mastic	None Detected
		Tan					
		Non-fibrous					
A1328422B	Mastic	Heterogeneous			100%	Mastic	None Detected
		Tan					
		Non-fibrous					
29 A1328422A	Floor Tile	Heterogeneous			100%	Vinyl	None Detected
		Grey					
		Non-fibrous					
A1328422B	Mastic	Heterogeneous			100%	Mastic	None Detected
		Tan					
		Non-fibrous					
30 A1328423A	Floor Tile	Heterogeneous			100%	Vinyl	None Detected
		Grey					
		Non-fibrous					
		Bound					



ASBESTOS BULK ANALYSIS

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CEI Lab Code: A12-7209

Date Received: 08-14-12

Date Reported: 08-15-12

Project: Greenville County - County Square

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
A1328423B	Mastic	Heterogeneous Tan Non-fibrous Bound	100%	Mastic	None Detected
31 A1328424A	Floor Tile	Heterogeneous Tan Non-fibrous Bound	95%	Vinyl	5% Chrysotile
A1328424B	Mastic	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile
32 A1328425A	Floor Tile	Heterogeneous Tan Non-fibrous Bound	95%	Vinyl	5% Chrysotile
A1328425B	Mastic	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile
33 A1328426A	Floor Tile	Heterogeneous Tan Non-fibrous Bound	95%	Vinyl	5% Chrysotile
A1328426B	Mastic	Heterogeneous Black Non-fibrous Bound	90%	Tar	10% Chrysotile
34 A1328427	TSI	Heterogeneous White Non-fibrous Bound	5%	Fiberglass	95% Mastic None Detected



ASBESTOS BULK ANALYSIS

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CEI Lab Code: A12-7209

Date Received: 08-14-12

Date Reported: 08-15-12

Project: Greenville County - County Square

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
35 A1328428	TSI	Heterogeneous White Non-fibrous Bound	5%	Fiberglass	95%	Mastic	None Detected
36 A1328429	TSI	Heterogeneous White Non-fibrous Bound	5%	Fiberglass	95%	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:

Megan Fisher

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: T12-0555

Date Received: 08-17-12

Date Reported: 08-20-12

Project: Greenville County - County Square

TEM BULK CHATFIELD

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
4 T02596	Covebase	0.2291	32.9	66	1.1	None Detected
4 T02597	Mastic	0.2425	51.9	20.2	27.9	<1% Chrysotile
19 T02598	Covebase	0.2747	50.3	49.3	.4	None Detected
19 T02599	Mastic	0.2714	34.5	30.4	35.1	None Detected
34 T02600	TSI Mastic	0.47	33	64.7	2.3	None Detected

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ANALYST: Kamila Reichert
Kamila Reichert

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