



## **Asbestos Assessment Update**

City of Spartanburg  
177 West Wood Street  
Spartanburg, South Carolina 29303

### ***Prepared for:***

The City of Spartanburg  
440 South Church St., Suite B  
Spartanburg, South Carolina 29306

### ***Prepared by:***

Apex Environmental Management, Inc.  
7 Winchester Court  
Mauldin, South Carolina 29662

Project Number: 0123-01  
May 15, 2023





**Apex Project Number 0123-01**

May 15, 2023

Mr. Martin Livingston  
City of Spartanburg  
440 South Church Street, Suite B  
Spartanburg, SC 29306

Reference: Asbestos Assessment Update  
177 West Wood Street  
Spartanburg, South Carolina 29303

Dear Mr. Livingston:

Apex Environmental Management, Inc. (Apex) is pleased to provide the results of our assessment services for the referenced property.

This report and the associated attachments summarize our evaluation of the conditions observed at the project site. The findings presented by Apex are based upon sampling performed in the subject building. There is a chance that undetected ACM may exist in the building between walls or in other areas that would only be exposed during demolition or structural renovations. Should material be discovered that could potentially contain asbestos during the demolition process, additional samples of the material should be collected by a licensed asbestos inspector and submitted to an accredited laboratory for analytical interpretation. Our recommendations are based on the guidelines presented in EPA and/or OSHA regulations.

Please note that this document is not a specification for asbestos removal. It does not contain means and methods for abatement. Quantities are estimates and contractors must verify amounts prior to bidding or removal. If you are planning an abatement project, please contact Apex to discuss the requirements. Use of this document without the express written consent of Apex is at the sole risk of the user and or/abatement contractor.

The conclusions and/or recommendations contained in this report are based on our understanding of the applicable standards at the time this report was prepared. No warranty, expressed or implied, is made. If you have any questions, please feel free to contact us at (864) 404-3210.

Respectfully submitted,  
**APEX ENVIRONMENTAL MANAGEMENT, INC.**

Stephanie Hamby  
Project Manager

Rebecca W. Shultz, CIH, CSP  
President

Appendices

7 Winchester Court  
Mauldin, SC 29662  
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**ASBESTOS ASSESSMENT UPDATE**

**CITY OF SPARTANBURG  
177 WEST WOOD STREET  
SPARTANBURG, SOUTH CAROLINA 29303**

**APEX PROJECT NO. 0123-01**

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**SECTION I**

**Asbestos Evaluation Report**

<b>ASBESTOS EVALUATION REPORT</b> <b>APEX PROJECT NUMBER: 0123-01</b>
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Date:	5/15/2023	Page Number:	1 of 4
Client:	City of Spartanburg	Client Contact:	Mr. Martin Livingston
Client Address:	440 South Church Street Suite B Spartanburg, SC 29306	Client Phone Number:	(864) 580-5323
Project:	Asbestos Assessment Update	Parcel ID No	7-08-13-038.00
Property Address:	177 West Wood Street Spartanburg, SC 29303		
Assessor:	Stephanie Hamby	Date of Assessment:	4/25/2023
Company:	Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone Number:	(864) 404-3210
Purpose of Assessment:	Demolition	Age of Structure:	Approximately 110 years
Building Type:	Residential	Number of Stories:	1
Foundation:	Basement, partial crawlspace under porch	Approximate Square Footage	2,600 SF

**EXTERIOR BUILDING MATERIALS**

- Gable roof with one layer of shingle and felt.
- Texture over brick exterior walls.
- Wooden windows with glazing.
- Vinyl windows in basement with no caulk.
- Side concrete steps leading to basement are unstable.
- Tar on 1 chimney – assumed positive to be ACM.

**INTERIOR BUILDING MATERIALS**

- Multiple types of vinyl flooring located in crawlspace under porch.
- Construction debris throughout residence.
- Stacks of unfinished drywall sporadic.
- Plaster debris piles located within the base.
- Drywall with joint compound scattered throughout on walls.
- Finished drywall walls added since initial September 2021 assessment.

## **SCOPE OF THE SURVEY**

The objectives of the asbestos assessment update included the following:

- Identification of new suspect asbestos-containing material (ACM) in readily observable locations that were not present during the initial ACM assessment conducted on September 15, 2021. Limited demolition of building finishes was conducted.
- Asbestos survey with sample collection by a South Carolina accredited inspector.
- Suspect ACM analysis by polarized light microscopy (PLM) utilizing EMSL Analytical, Inc. (EMSL) as an NVLAP certified laboratory, their accreditation number is 200841-0.
- Transmission electron microscopy (TEM) analysis of non-friable organically bound materials suspected to contain asbestos and testing negatively by PLM analysis.
- Presenting the results in a report identifying confirmed ACMs.

## **METHODS**

In order to determine if the suspect materials observed during the visual survey contained asbestos, representative bulk samples were collected and placed in sealed packages. Three (3) bulk samples were collected during the survey and submitted to EMSL in Pineville, North Carolina for analysis using the EPA recommended method of Polarized Light Microscopy (PLM) coupled with dispersion staining (Method No. EPA 600/M4-82-020, Dec. 1982). EMSL participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Their NVLAP accreditation number is 200841-0. EPA regulations require that multiple samples of each homogeneous material be collected for laboratory analysis. Twelve (12) samples were analyzed due to layering by PLM and positive stop methods. In accordance with South Carolina Regulation 61-86.1, non-friable organically bound materials that are reported to be non-asbestos containing by PLM analysis must also be analyzed by Transmission Electron Microscopy (TEM). No samples were analyzed using TEM.

## **RESULTS**

The EPA defines an asbestos-containing material (ACM) as a material containing more than 1% asbestos. It should be noted that materials were identified to contain less than 1% asbestos and OSHA Construction Industry Asbestos Standards (29 CFR 1926.1101) will apply if those materials are disturbed during renovation or demolition activities. Provided below is a general discussion of the asbestos containing materials identified in the residence. A specific *PLM and TEM Data Table* is located in Appendix II of this report and identifies positive materials and designates approximate quantities.

Wood subflooring has been added to the main level of the residence. New building finishes have been stored within the main level as well. The initial assessment in 2021 listed plaster walls throughout the residence. The plaster has been removed from several areas and currently stored within the basement level. Finished drywall walls have been added to the basement since the assessment in 2021. Drywall, joint compound and tape were sampled within the basement on April 25<sup>th</sup>, 2023. The basement drywall installation is evidence that renovations are in process. The building was fully assessed; however, if additional ACM is discovered during demolition activities, Apex recommends that work activities stop until the suspect building materials may be sampled and analyzed.

Suspect asbestos containing materials that were identified to be asbestos containing in the initial assessment performed in September 2021 include:

- Approximately 200 SF of square wood pattern and tan marble under wood pattern vinyl flooring in the crawlspace under the front porch.
- Approximately 50 SF of 9"x9" floor tile in the back left corner of the basement.
- Approximately 6 LF of tar on one chimney – assumed positive.

The drywall, joint compound, and tape added to the basement after the initial assessment was sampled on April 25<sup>th</sup>, 2023. The analysis of the material did not detect asbestos from the material sampled.

## **RECOMMENDATIONS AND DISCUSSION**

If the above referenced asbestos materials are to be disturbed by renovations or demolition, the asbestos must be removed in accordance with EPA, State of South Carolina and OSHA asbestos regulations. South Carolina, Department of Health and Environmental Control (DHEC) has specific regulations that must be adhered to during asbestos removal/abatement projects.

Apex recommends the following:

1. Abate the asbestos containing materials in the structure prior to renovation or demolition.
2. Follow applicable asbestos regulations during renovation or demolition of the structure. You should be aware that stringent requirements are imposed upon anyone renovating or demolishing a structure in which ACM will be disturbed. This work must be performed in accordance with OSHA asbestos regulations, 29 CFR 1910 & 1926, and NESHAP asbestos regulations 40 CFR 61, subpart M. South Carolina regulations require the accreditation of personnel who work in the asbestos field and notification and permitting fees for asbestos removal projects. There is a 10 working day notification period required prior to abatement of asbestos in a facility. Failure to take proper precautions and actions to protect human health and the environment can result in penalties, danger to personnel, and construction delays.

**A copy of this report must be submitted to SCDHEC at least ten (10) working days prior to demolition when applying for a demolition permit.**

**SECTION II**

**Asbestos Data Tables**



**ASBESTOS SURVEY FIELD DATA SHEET  
PLM & TEM ANALYSIS**

Project Name: COS 177 West Wood Street ACM-LBP

Sampled By: Stephanie Hamby

Project Location: 177 West Wood Street, Spartanburg, South Carolina 29303

Project Manager: Stephanie Hamby

Project Number: 0123-01

Date: 4/25/2023

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1	Basement Walls	Drywall, Joint Compound & Tape	PLM - NAD	Friable	Good	-
2						
3						

NAD = No Asbestos Detected

LF = Linear Feet

EA = Each

**Bold = Positive For Asbestos**

SF = Square Feet

Chry = Chrysotile

**SECTION III**

**Laboratory Analytical Results & Chain of Custody**



# EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

EMSL Order: 412304559

Customer ID: AXEM25

Customer PO: 0123-01

Project ID:

**Attention:** Stephanie Hamby  
Apex Environmental Management  
7 Winchester Court  
Mauldin, SC 29662

**Phone:** (864) 918-1433

**Fax:**

**Received Date:** 04/26/2023 10:00 AM

**Analysis Date:** 04/27/2023 - 05/01/2023

**Collected Date:**

**Project:** 0123-01 COS 177 W. Wood Street- Update

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1-Tape <small>412304559-0001</small>	Basement Walls - DW, J.C. d	Tan Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
1-Pink Joint Compound <small>412304559-0001A</small>	Basement Walls - DW, J.C. d	Pink Non-Fibrous Homogeneous	2% Wollastonite	35% Ca Carbonate 63% Non-fibrous (Other)	None Detected
1-White Joint Compound <small>412304559-0001B</small>	Basement Walls - DW, J.C. d	White Non-Fibrous Homogeneous	5% Cellulose 2% Wollastonite	40% Ca Carbonate 53% Non-fibrous (Other)	None Detected
1-Drywall <small>412304559-0001C</small>	Basement Walls - DW, J.C. d	Tan/White Non-Fibrous Homogeneous	2% Cellulose <1% Glass	10% Ca Carbonate 88% Non-fibrous (Other)	None Detected
2-Tape <small>412304559-0002</small>	Basement Walls - tape	Tan Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
2-Pink Joint Compound <small>412304559-0002A</small>	Basement Walls - tape	Pink Non-Fibrous Homogeneous	2% Wollastonite	35% Ca Carbonate 63% Non-fibrous (Other)	None Detected
2-White Joint Compound <small>412304559-0002B</small>	Basement Walls - tape	White Non-Fibrous Homogeneous	5% Cellulose 2% Wollastonite	40% Ca Carbonate 53% Non-fibrous (Other)	None Detected
2-Drywall <small>412304559-0002C</small>	Basement Walls - tape	Tan Non-Fibrous Homogeneous	5% Cellulose 2% Glass	3% Ca Carbonate 90% Non-fibrous (Other)	None Detected
3-Tape <small>412304559-0003</small>	Basement Walls - tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
3-Pink Joint Compound <small>412304559-0003A</small>	Basement Walls - tape	Pink Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
3-White Joint Compound <small>412304559-0003B</small>	Basement Walls - tape	White Non-Fibrous Homogeneous	<1% Cellulose	25% Ca Carbonate 75% Non-fibrous (Other)	None Detected
3-Drywall <small>412304559-0003C</small>	Basement Walls - tape	White Non-Fibrous Homogeneous	10% Cellulose <1% Glass	90% Non-fibrous (Other)	None Detected

Initial report from: 05/02/2023 07:56:57



# EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

**EMSL Order:** 412304559

**Customer ID:** AXEM25

**Customer PO:** 0123-01

**Project ID:**

Analyst(s)

Ashley Hill (4)

Matthew Schaefer (8)

Lee Plumley, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from: 05/02/2023 07:56:57

412304559



EMSL ANALYTICAL INC. LABORATORY-PRODUCTS-TRAINING

Asbestos Bulk Building Materials - Chain of Custody

EMSL Analytical, Inc. 10801 Southern Loop Blvd

EMSL Order Number / Lab Use Only

Empty box for EMSL Order Number / Lab Use Only

Pineville, NC 28134 PHONE: (704) 525-2205 EMAIL: charlottelab@EMSL.com

Customer and Billing Information section with fields for Company Name, Contact Name, Street Address, City, State, Zip, and Phone.

Project Information section including Project Name/No., EMSL LIMS Project ID, US State where samples collected, and Date Sampled.

Turn-Around-Time (TAT) section with checkboxes for 3 Hour, 6 Hour, 24 Hour, 32 Hour, 48 Hour, 72 Hour, 96 Hour, 1 Week, and 2 Week.

Test Selection section with checkboxes for PLM - Bulk (reporting limit) and TEM - Bulk tests, including EPA 600/R-93/116, EPA NOB, and NYS NOB.

Table with 4 columns: Sample Number, HA Number, Sample Location, and Material Description. Contains handwritten entries for samples 1, 2, and 3.

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment, Refinquired by, and Sample Condition Upon Receipt section with handwritten signatures and dates.

Controlled Document - Asbestos Bulk R7 9/14/2021

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety.

**SECTION IV**  
**Photographic Log**



Photo 1 – 177 West Wood Street in Spartanburg, South Carolina 29303



Photo 2 – Building material located at the rear of the residence.



Photo 3 – View of basement from the 2021 assessment.



Photo 4 – Original wall material from walls is in piles on basement floor.



Photo 5 – New drywall added to basement since initial assessment. View of sampling area.



Photo 6 – Typical view of wood flooring stored throughout main level. New subflooring has been added.





Photo 7 – Newly added wood flooring. Building material stored on main level of residence.



Photo 8 – Stacks of unfinished drywall located sporadically throughout.



**SECTION V**

**SC DHEC Asbestos Inspector License**

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# SCDHEC ISSUED

Asbestos ID Card

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**Stephanie Hamby**



**AIR SAMPLER  
CONSULT BI**

**AS-000632  
BI-01894**

**Expiration Date:  
08/04/23  
01/10/24**