



Asbestos & Lead Based Paint Assessment

City of Spartanburg
213 Windigo Road
Spartanburg, South Carolina 29306

Prepared for:

The City of Spartanburg
P.O. Box 1749
Spartanburg, SC 29304

Prepared by:

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

Project Number: 0124-01

June 13, 2024





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Mr. Martin Livingston
City of Spartanburg
P.O. Box 1749
Spartanburg, SC 29304

Reference: Asbestos and Lead-Based Paint Assessment Services
213 Windigo Road
Spartanburg, South Carolina 29306

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.

Tom Oliver
Vice President

Appendices

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ASBESTOS AND LEAD BASED PAINT ASSESSMENT

**CITY OF SPARTANBURG
213 WINDIGO ROAD
SPARTANBURG, SOUTH CAROLINA 29306**

APEX PROJECT NO. 0124-01

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SECTION I

Asbestos & Lead Evaluation Report

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|---|
| ASBESTOS/LEAD EVALUATION REPORT APEX PROJECT NUMBER: 0124-01 |
|---|

| | | | |
|------------------------|--|-----------------------------|-----------------------|
| Date: | 6/13/2024 | Page Number: | 1 of 4 |
| Client: | City of Spartanburg | Client Contact: | Mr. Martin Livingston |
| Client Address: | P.O. Box 1749 Spartanburg, SC 29304 | Client Phone Number: | (864) 580-5323 |
| Project: | Asbestos Evaluation and Lead Based Paint Assessment | Parcel ID No.: | 7-21-00-205.00 |
| Property Address: | 213 Windigo Road Spartanburg, SC 29306 | | |
| Assessor: | Ted Shultz | Date of Assessment: | 6/13/2024 |
| Company: | Apex Environmental Management 7 Winchester Court Mauldin, SC 29662 | Phone Number: | (864) 404-3210 |
| Purpose of Assessment: | Demolition | Age of Structure: | Approximately 7 years |
| Building Type: | Residential | Number of Stories: | 2 |
| Foundation: | Slab on Grade | Approximate Square Footage: | 2,100 SF |

EXTERIOR BUILDING MATERIALS

- The residence has burned down and collapsed into a debris pile.
- Roof shingles & felt, vinyl siding over wood, drywall with joint compound were observed in the debris pile.
- Large portion of materials were unidentifiable due to fire damage.

INTERIOR BUILDING MATERIALS

- Interior building materials were not assessed due a fire and the residence being collapsed into a debris pile.
- The residence and associated debris piles are presumed to be positive for ACM (6,000 FT³).

SCOPE OF THE SURVEY

The objectives of the asbestos and lead assessment included the following:

- Identification of suspect asbestos-containing material (ACM) and lead based paints (LBP) in readily observable locations. Limited demolition of building finishes was conducted.
- Asbestos survey with sample collection by a South Carolina accredited inspector.
- No samples were collected during the assessment due to the collapsed nature of the structure.
- Lead inspection by a lead risk assessor certified by the Environmental Protection Agency to conduct LBP surveys in South Carolina.
- In situ analysis of suspected lead based paints by X-ray fluorescence (XRF).
- Presenting the results in a report identifying confirmed ACMs and LBPs.

METHODS

Asbestos Containing Materials

Apex was requested to perform an asbestos assessment to identify asbestos-containing materials (ACM) which could be disturbed prior to or during scheduled demolition activities. The National Emission Standard for Hazardous Air Pollutants (NESHAP) requires the identification of friable ACM and non-friable ACM likely to become friable during demolition and/or renovation activities. NESHAP requires that the identified ACM be removed prior to initiating activities likely to disturb the ACM.

No samples were collected during the survey since the residence is burned down into a debris pile.

Lead-Based Paint

Lead painted surfaces were analyzed in place using X-ray fluorescence. Painted surfaces were selected based on color of topcoat, underlying layers and substrate on which it was painted.

RESULTS

Asbestos Results

The EPA defines an asbestos-containing material (ACM) as a material containing more than 1% asbestos. OSHA defines ACM as a material containing detectable amounts of asbestos. A specific PLM and TEM Data Table is located in Appendix II of this report and identifies positive materials and designates approximate quantities. Provided below is a general discussion of the asbestos containing materials presumed to be positive in the residence.

At the time of the assessment, the roof of the residence was found to be burned down and collapsed into a debris pile. Subsequently, the building materials and finishes not sampled during the survey should be presumed to be ACM. Apex recommends that the residence be demolished in place and materials be treated and disposed of as regulated asbestos containing materials (RACM).

Suspect asbestos containing materials that were presumed to be asbestos containing include:

- Approximately 6,000 FT³ of the residence & associated debris piles.

Lead Based Paint

OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. The current OSHA regulations recognize an airborne action level of thirty micrograms per cubic meter (30 µg/m³) during an eight-hour workday and a permissible exposure level of fifty micrograms per cubic meter (50 µg/m³) for employees.

Currently, HUD and the EPA define LBP as paint containing in excess of, or equal to, 1.0 mg/cm². *XRF LBP Data Sheets* providing XRF results for testing combinations can be found in the Appendices at the conclusion of this report.

No surfaces in the building/debris pile tested positive for lead in excess of the regulatory definition.

RECOMMENDATIONS AND DISCUSSION

Asbestos Containing Materials

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 SC (DHEC) has specific regulations that must be adhered to during asbestos removal/abatement projects. APEX recommends the following:

1. Demolish the residence/debris pile with presumed ACM in place and dispose of the waste stream as friable Regulated Asbestos Containing Materials (RACM) and delivered to an asbestos approved hazardous waste landfill for disposal.
2. An asbestos abatement project design and perimeter asbestos air monitoring during abatement by demolition activities will be required by SC DHEC.
3. 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.

Lead-Based Paint

Changes to state and federal regulations have changed the disposal options for LBP “waste” and LBP “residue.” LBP “waste” is defined as material such as wood, brick, metal, etc. that is coated with LBP. LBP “residue” is defined as residue that is generated from the removal (scraped, chipped, sandblasted, chemical means, etc.) of LBP from a structure. The regulations allow LBP

“waste” from residential and commercial structures to be disposed of in Class 2 (construction and demolition debris) and Class 3 (municipal solid waste or industrial) landfills in South Carolina. The management of LBP “residue” is based on the source and lead concentration characterized by Toxic Characteristic Leaching Procedures (TCLP) to determine if the waste is classified as hazardous or non-hazardous. LBP “residues” that have TCLP sample results less than 5 milligrams per liter (mg/L) lead may be disposed of in a Class 3 landfill and is considered to be non-hazardous. LBP residues that have TCLP sample results equal to or greater than 5 mg/L lead should be disposed of in a Subtitle C landfill and is considered to be hazardous. However, the landfills should be contacted to determine their specific disposal requirements.

Occupational Safety and Health Administration (OSHA) Lead Regulations apply to actions initiated on LBP and lead containing materials performed by workers as a course of their job duties. This regulation applies to LBP and detectable lead concentrations since OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. This regulation sets exposure levels on airborne lead and does not reference the percent lead in paint. Therefore, initial personal air monitoring should be conducted on workers performing work on surfaces which have a detectable lead concentration to satisfy the OSHA requirements. The current OSHA regulations recognize an airborne action level of thirty micrograms per cubic meter ($30 \mu\text{g}/\text{m}^3$) during an eight-hour workday and a permissible exposure level of fifty micrograms per cubic meter ($50 \mu\text{g}/\text{m}^3$) for employees. If a baseline exposure lower than the OSHA Action Level of $30 \mu\text{g}/\text{m}^3$ is established, personal air monitoring may be terminated. The full OSHA lead standard (29 CFR 1926.62) should be referenced for compliance.

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 & LBP Data Tables

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

Project Name: COS 213 Windigo Road ACM/LBP

Sampled By: Ted Shultz

Project Location: 213 Windigo Road, Spartanburg, South Carolina 29306

Project Manager: Ted Shultz

Project Number: 0124-01

Date: 6/13/2024

| Sample No. | Location | Sample Description | Analytical Results | Friable/Non Friable | Condition | Quantity |
|----------------|---------------------------|---------------------------|--------------------|---------------------|------------------------------|------------------|
| Assumed | House/debris piles | House/debris piles | Assumed | Friable | Significantly Damaged | 6,000 FT3 |

NAD = No Asbestos Detected

LF = Linear Feet

FT3 = Cubic Feet

Chry = Chrysotile

Bold = Positive For Asbestos

SF = Square Feet

EA = Each

**FIELD DATA SHEET
XRF LBP ANALYSIS**

Project Name: COS 213 Windigo Road ACM/LBP

Sampled By: Tom Oliver

Project Location: 213 Windigo Road, Spartanburg, South Carolina 29306

Project Manager: Ted Shutlz

Project Number: 0124-01

Date: 6/13/2024

| Sample No. | Sample Location | Component | Color | Substrate | Analytical Result (mg/cm ²) |
|------------|-----------------|------------------|-------|-----------|---|
| 1 | | Standardization | | | 184.00/PASS |
| 2 | | Pre-Calibration | | | 1.12 |
| 3 | | Pre-Calibration | | | 1.12 |
| 4 | | Pre-Calibration | | | 1.14 |
| 5 | Debris pile | Siding/wall | White | Vinyl | 0.00 |
| 6 | Debris pile | Fence | Green | Wood | 0.00 |
| 7 | Debris pile | Roof | White | Wood | 0.00 |
| 8 | | Post-Calibration | | | 1.11 |
| 9 | | Post-Calibration | | | 1.16 |
| 10 | | Post-Calibration | | | 1.13 |

Bold = LBP

SECTION III
Photographic Log



Photo 1 – Typical view of 213 Windigo Road in Spartanburg, South Carolina 29306



Photo 2 – Typical view of the burned remains of the house collapsed into a debris pile



Photo 3 – Typical view of the burned remains of the house collapsed into a debris pile



Photo 4 – Typical view of the burned remains of the house collapsed into a debris pile



Photo 5 – Typical view of the burned remains of the house collapsed into a debris pile

SECTION IV

SC DHEC Asbestos Inspector License

SCDHEC ISSUED

Asbestos ID Card

Tedman K Shultz



**AIRAMPLER
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**AS-00355
BI-00971**

**Expiration Date:
02/15/25
01/21/25**