Introduction

This document was developed to provide guidance on scope, structure, and content of an “Asbestos Survey”. It is intended for use by local area providers of asbestos surveys, abatement contractors, other regulatory agencies, and building owners. This document is not intended to be a substitute for applicable regulations. Refer to Spokane Clean Air (SRCAA) Regulation I, Article IX.

Background

When an AHERA Building Inspector is Required

1. Prior to renovation or demolition, an asbestos survey must be performed by a certified AHERA Building Inspector. An “asbestos survey” means a written report resulting from a thorough inspection performed pursuant to SRCAA Regulation I, Section 9.03.

2. An exception exists for the renovation of an owner-occupied, single-family residence performed by the resident homeowner. In such cases, the asbestos survey need not be an asbestos survey as defined in Section 9.02.G. A resident homeowner’s assessment for the presence of asbestos prior to renovation of his/her primary residence will suffice. A written asbestos survey is not required.

It is very important to note that a structure that is improperly categorized as an owner-occupied, single-family residence will likely result in violations of SRCAA’s asbestos control standards. To determine if a structure meets the definition, carefully review SRCAA’s Renovation and Demolition information sheet and the definition of “owner-occupied, single-family residence” in Section 9.02.T.

Purpose of an Asbestos Survey

Asbestos surveys are very much project specific. It is important that an asbestos survey be used only for its intended purpose. For example, a limited survey conducted as part of a pre-purchase inspection is not likely to meet the requirements of an asbestos survey and thus would not suffice as an asbestos inspection for renovation or demolition. In addition, prior to moving a structure, the scope of the project should be discussed in detail with an AHERA Building Inspector so that he/she can ascertain what areas of the structure need to be surveyed. The purpose and limitations of any asbestos survey must be clearly identified. Confirm with the owner or owner’s representative the exact area under investigation, exact nature of renovation and demolition, and identify all materials that may be disturbed and those that will be disturbed.
Survey Procedures

Field Procedures

1. Determine what materials were required for use under the Uniform Building Code in effect at the time of construction and past renovations of the structure, if available

2. Review any existing information about the structure, including design drawings, as-built drawings, project specifications, and any existing survey and/or laboratory information

3. Use equipment that will allow visual examination of all accessible spaces (e.g., ladders, flashlights)

4. Determine the extent to which the building will be renovated and/or demolished

5. Determine and investigate each building’s structural, mechanical, electrical and roofing systems

6. Perform a comprehensive investigation of areas to identify materials to be sampled and/or assumed to contain asbestos

7. Always describe uninspected areas and explain why they were not surveyed (e.g., “confined space,” buried materials, restrictions specified by the property owner, etc.)

8. Create a sampling plan based on the suspect asbestos-containing materials present and the asbestos survey procedures specified in SRCAA Regulation I, Section 9.03

9. Collect bulk samples of all suspect materials that may be disturbed or will be disturbed and submit those not assumed to be asbestos to an accredited laboratory for analysis

10. Identify and describe all homogeneous areas of suspect asbestos-containing materials, except where limitations of the asbestos survey prevented such identification and include whether each homogeneous material is surfacing material, thermal system insulation, or miscellaneous material (See Figure 1 for one example of how homogeneous areas may be identified and described in a table within an asbestos survey report.)

11. Document the exact location where each bulk asbestos sample was taken (e.g., schematic and/or other detailed description sufficient for any person to match the material(s) sampled and tested to the material(s) on site)

12. Document the color, location, approximate quantity, and condition (e.g., good, damaged) of each asbestos-containing material. If damaged, describe the general extent and type of damage (e.g., flaking, blistering, crumbling, water damage, fire damage)

13. Document materials presumed to be asbestos-containing material
Destructive Investigation

Many asbestos containing materials are located in concealed areas such as wall cavities, below ground level, and other hidden spaces. The agency expects destructive investigation, as necessary, to gain access to hidden spaces and to inspect them for suspect asbestos-containing materials. The following guidelines constitute reasonable criteria for locating concealed materials:

1. Identify the different building systems which may involve concealed asbestos materials such as the heating/cooling system, domestic water lines, roof drainage lines, miscellaneous piping lines, underlay roofing, etc.

2. Open hidden areas and inspect each system noted above in at least three (3) locations for each area of construction

3. Focus the inspection on likely areas where suspect asbestos-containing materials will be found (e.g., where pipes enter walls or ceilings, under carpeting, etc.)

4. Examine additional areas if inspection results are inconsistent

5. Clearly list all hidden areas which have not been inspected, and explain why they were not inspected, such as:
   a. Records showing recent access to such spaces and sample results,
   b. Safety hazards (e.g. confined space), and
   c. Restrictions imposed by the property owner

6. For those asbestos surveys that include inaccessible concealed spaces, a qualified person should be available during the project to address the potential of unidentified suspect asbestos-containing materials becoming disturbed once work begins

7. AHERA Building Inspectors may discuss with the property owner the possible need to disconnect electrical power or other utilities during the destructive phase of the investigation. It may also be desirable for the property to be unoccupied
Survey Report

Asbestos Survey Content

The survey report should list the results in a manner that promotes ease of comprehension. The survey report should also contain an introductory summary that briefly explains what will be found in the report. Documentation such as field data sheets and photographs should appear in the appendices of the report. Minimum asbestos survey report contents are specified in Section 9.03.C.

Background Information and Scope of Work

1. Date(s) of field inspection and report submittal
2. Building address(es)
3. Building owner name and full address and contact person
4. Description of area surveyed including any exclusions or limitations (be specific)
5. Description of planned renovation and demolition for which the survey was performed

Building Description:

1. Building name(s), if any
2. Type of building(s) (e.g., owner-occupied, single-family residence; residential, but not owner-occupied, single-family residence; commercial; warehouse; retail; etc.)
3. Special features of building(s)
4. Type of business(es)
5. Approximate age of structure(s) and dates of past renovations
6. Building systems such as structural system, mechanical system, roofing system, non-structural systems, miscellaneous information, etc.

Building Inspector/Firm Affiliation/ Laboratory Information:

1. Name of AHERA building inspector including AHERA certification number and expiration date
2. Inspector firm information including name, address, and phone number
3. Laboratory name and NVLAP certification
4. Special instructions regarding type of analysis requested such as PLM, point counting, or TEM
Survey Methodology:

1. Describe the inspection procedure, including scope of the survey. The inspection must be in accordance with the sampling protocol in 40 CFR 763.86 and as required per Spokane Clean Air Regulation I, Article IX, Section 9.03.

2. Identify the locations of homogeneous areas where samples are to be collected. (See Figure 1 for one example of how homogeneous areas may be identified and described in a table within an asbestos survey report.)

3. Describe the sampling methods employed.

4. If hidden or inaccessible areas are to be disturbed or are likely to be disturbed, provide a detailed description of the procedure used to find hidden suspect materials. For example, if asbestos pipe insulation is suspected in a wall cavity, describe by location where the wall was opened for examination. It is recommended that each building and non-structural system suspected of having asbestos materials be sampled at a minimum of three locations.

Asbestos Identification Process:

1. List all materials sampled and tested, including test results and date(s) collected

2. List all materials assumed to contain asbestos, being specific in terms of quantity and location

3. List whether suspect asbestos-containing materials identified are surfacing material, thermal system insulation, or miscellaneous material and indicate the approximate quantity present

4. Describe the exact location where each bulk sample was collected (e.g. schematic)

Limitations

1. In the inspection report, describe any concealed areas that were not surveyed that may contain undiscovered asbestos-containing materials

Procedure for Communicating Survey Findings to Affected Parties

1. The AHERA Building Inspector should assist the property owner in communicating findings (copy of survey report) to persons who may come in contact with any identified or suspect asbestos-containing materials. Such persons may include contractors, subcontractors, building occupants/guests, custodial and maintenance staffs, occupants of neighboring buildings, etc.

2. A complete copy of an asbestos survey shall be posted by the property owner or the owner's agent in a readily accessible and visible area at the work site for all persons at the work site. If an AHERA Building Inspector determines there are no suspect asbestos-containing materials in the work area, this determination shall be posted by the property owner or the owner's agent in a readily accessible and visible area at the work site for all persons at the work site.
Examples of Suspect Asbestos-Containing Material

- Acoustical ceiling texture ("popcorn")
- Blown-in insulation
- Boiler / tank insulation
- Breaching insulation
- Brick mortar
- Built-up roofing
- Caulking / putties
- Ceiling tiles/panels/mastic
- Cement board/transite
- Cement pipes
- Cement roofing shingles
- Chalkboards
- Construction mastics / adhesives
- Cove base / adhesive
- Duct tape / paper
- Ductwork flexible connections
- Electrical cloth
- Electrical panel partitions
- Electrical wiring insulation
- Elevator brake shoes
- Fire blankets
- Fire curtains / hose
- Fire doors
- Fireproofing
- Furnace insulation
- Gray or silver roofing paint
- High temperature gaskets
- HVAC duct insulation
- Incandescent light fixture backing
- Joint compound / wallboard
- Laboratory hoods / table tops
- Laboratory fume hood
- Mudded pipe elbow insulation
- Packing materials
- Paper fire box in walls
- Paper on backside of fiberglass insulation
- Pipe insulation
- Plaster walls
- Poured flooring / leveling compound
- Rolled / hot mopped roofing
- Roofing paper
- Roofing shingles*
- Sink insulation
- Spray-applied insulation
- Stucco
- Sub flooring slip sheet
- Textured paints / coatings
- Vapor barrier
- Vinyl floor tile / mastic
- Vinyl sheet flooring / mastic
- Vinyl wall coverings
- Window glazing

*As of 9/2/14, SRCAA doesn’t consider asphalt shingles as defined in Section 9.02.H to be a suspect asbestos-containing material.

**Note:** This list does not include every product that may contain asbestos. It is intended as a general guide to show which types of materials may contain asbestos.
Figure 1. One example of how homogeneous areas may be identified and described in a table within an asbestos survey report

<table>
<thead>
<tr>
<th>Homogeneous Material Description</th>
<th>Color</th>
<th>Condition</th>
<th>Type</th>
<th>Homogeneous Area</th>
<th>Approx. Quantity</th>
<th>Sample Location</th>
<th>Sample #</th>
<th>Asbestos Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popcorn Ceiling Texture (surfacing)</td>
<td>White</td>
<td>Good, no damage</td>
<td>Surfacings</td>
<td>Throughout Main Floor</td>
<td>4,900 ft$^2$</td>
<td>Kitchen Ceiling</td>
<td>20141007-01</td>
<td>2-4% Chrysotile</td>
</tr>
<tr>
<td>Green 9x9 Floor Tile (misc. material)</td>
<td>Green</td>
<td>Good no</td>
<td>Frangible</td>
<td>Basement Bathroom and Basement Utility Room</td>
<td>1,160 ft$^2$</td>
<td>Living Room Ceiling</td>
<td>20141007-02</td>
<td>Not analyzed</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>Hallway Ceiling</td>
<td>20141007-03</td>
<td>Not analyzed</td>
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<td></td>
<td>Basement Bathroom</td>
<td>20141007-04</td>
<td>5-7% Chrysotile</td>
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<td>Basement Bathroom</td>
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