This is the first of three information papers used to alert employees to requirements and dangers to consider before conducting renovation, repair, maintenance and demolition of building materials. Other information sheets cover lead rules; and other hazards (mold, radiation, chemicals, and universal waste).

The Spokane Regional Clean Air Agency (SRCAA) administers the asbestos program in Spokane County. This Agency performs on-site compliance inspections during renovation and/or demolition. If the SRCAA find violations to the asbestos standards they will notify Washington State Department of Labor and Industries (L&I) who will then send their inspectors to the site.

The following is in part paraphrased from SRCAA regulations:

**Is My Project Regulated by SRCAA?**
Regardless of the age of the building, if you plan to alter a structure or component (e.g., equipment, pipe, structural member, etc.) in any way, or wreck, raze, level, dismantle a structure, use a structure for fire training, or move a facility, your project is subject to asbestos regulations. Even small scale remodeling projects are affected, like carpet removal, window replacement, conduit placement, light installation, and new furnace installation.

**Is My Project Regulated by Others?**
Yes. Check with your local city/town planning departments, since most require permits for these activities (separate and in addition to Spokane Clean Air’s notification requirements). In addition, L&I has requirements regarding asbestos survey, notification, removal and worker standards.

**Examples of Renovation**
- Remodeling a residence or other building, inside or outside
- Replacing, repairing, or disturbing flooring, wall, ceiling, siding or roofing materials
- Replacing, repairing, or disturbing heating, plumbing or electrical systems
- Altering a structure or component (e.g., wall, pipe, equipment, etc.) in any way, other than demolition

**Examples of Demolition**
- Wrecking, leveling or dismantling a structure thereby making it permanently uninhabitable or unusable in part or whole
- Wrecking or taking out any load-supporting structural member of a facility
- Using a structure for fire training
- Moving a structure to a different location

There are more than 3,500 building materials that are known to contain asbestos. Asbestos was banned in some materials, but is still used in other materials. It is more common in older buildings but can still be found in newer construction depending on where the building materials country of origin is, or if a contractor has some materials left over they wanted to use. All building materials except for the following must be considered to be asbestos containing until testing (survey) proves otherwise:

- Unpainted structural steel,
- Glass
Asbestos concentrations vary from material to material with some thermal system insulation having more than 70 percent asbestos, while other materials may be less than one percent asbestos. Materials that contain greater than one percent asbestos are subject to SRCAA and L&I regulations for handling, removal and disposal. Materials with less than one percent asbestos are regulated by L&I and the local landfills.

The following table lists the inspection, notification and removal requirements for renovation and demolition:

<table>
<thead>
<tr>
<th>Project</th>
<th>Survey</th>
<th>Notification</th>
<th>Asbestos Removal</th>
<th>Asbestos Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovation</td>
<td>Prior to beginning any renovation or demolition work, an asbestos survey <strong>must</strong> be performed by an accredited AHERA Building Inspector.</td>
<td>A completed Notice of Intent must be submitted to Spokane Clean Air with a filing fee, before any asbestos removal.</td>
<td>All Asbestos identified in the asbestos survey must be removed prior to renovation by certified asbestos workers if it is likely to be disturbed during the renovation.</td>
<td>All asbestos waste materials must be properly disposed of within 10 days of removal.</td>
</tr>
<tr>
<td>Demolition</td>
<td>A copy of the survey must be kept on-site during renovation and/or demolition.</td>
<td>Most projects require a 10-day waiting period</td>
<td>All asbestos-containing material must be removed by certified asbestos workers prior to demolition.</td>
<td></td>
</tr>
</tbody>
</table>

Note: Some Landfills have their own regulation on less than one percent asbestos materials. These materials, while not considered asbestos waste, are required to be handled similarly to asbestos waste.

Notification and costs for asbestos projects is covered in the table below:

<table>
<thead>
<tr>
<th><strong>NOT Owner-occupied, Single-Family Residence Projects</strong></th>
<th><strong>Notification Waiting Period</strong></th>
<th><strong>Fee</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 10 linear ft. and/or ≤48 square ft. of asbestos</td>
<td>Notification not required</td>
<td>N/A</td>
</tr>
<tr>
<td>10-259 linear ft. and/or 48-159 square ft. of asbestos</td>
<td>3 day notice required</td>
<td>$250A</td>
</tr>
<tr>
<td>260-999 linear ft. and/or 160-4,999 square ft. of asbestos</td>
<td>10 day notice required</td>
<td>$500A</td>
</tr>
<tr>
<td>≥ 1,000 linear ft. and/or ≥ 5,000 square ft. of asbestos</td>
<td>10 day notice required</td>
<td>$1,250AB</td>
</tr>
<tr>
<td>Any Demolition Work</td>
<td>10 day notice required</td>
<td>$250</td>
</tr>
</tbody>
</table>

A) Includes demolition fee, if applicable, provided the asbestos project and demolition project are submitted to the Agency on one notification.
B) An added fee of $250 shall be paid for each increment of up to 1,000 linear feet when removing 2,000 or more linear feet.
An added fee of $250 shall be paid for each increment of up to 10,000 square ft when removing 10,000 or more square feet.
Clarification example to asbestos removal and project notification. If five feet of cove base is to be removed from a room in a building and seven feet is to be removed from the same building in another location as part of the same work project, then there is over 10 linear feet of material that would be removed for the project. Notification and a three day waiting period would be required.

The disturbance or dislocation of asbestos-containing materials may cause asbestos fibers to be released into the building's atmosphere, thereby creating a potential health hazard to workers and building occupants. It is imperative that all shops that conduct building material removal and modification be trained in asbestos awareness, be fit tested for respiratory use and have a written asbestos report in hand before work is conducted. This does not authorize employees to disturb asbestos containing material; the survey only alerts you to its presence. Asbestos containing materials may only be removed by those who are certified asbestos abatement workers/supervisors or employees trained in specific asbestos material handling (floor tile, roofing).

There are four categories of “Asbestos Work”:

Class I work – activities involving the removal of thermal system insulation and surfacing materials. Thermal system insulation includes pipe and boiler insulation, insulation on ducts, insulated pipe fittings, and hot water tank insulation. Surfacing material includes decorative popcorn ceiling coatings, spray applied fireproofing, and textured wall coatings.

Class II work – activities involving the removal of miscellaneous materials. Miscellaneous materials include floor tiles and other resilient floor coverings, roofing materials, cove base, ceiling tiles, construction mastics, gaskets, and cement asbestos board.

Class III work – repair and maintenance operations where asbestos-containing materials may be disturbed. This includes thermal system insulation, surfacing materials, and miscellaneous materials.

Class IV work – maintenance and custodial activities during which employees contact but do not disturb asbestos-containing materials.

Facility Employees (facility maintenance and facilities services) and Housing Maintenance Mechanics receive Asbestos Awareness Training annually. This allows them to perform only Class III and Class IV work. WAC 296-62-07722 states that only certified asbestos workers may conduct Class III and Class IV asbestos work that is considered an asbestos project.

The following asbestos work IS considered an asbestos project:

(A) All Class III asbestos work where there is one square foot or more of asbestos containing materials that do not stay intact;

(B) All Class IV asbestos work where there is one square foot or more of asbestos containing materials that do not stay intact; or

(C) All Class III and Class IV asbestos work with pipe insulation or surfacing material.
* (Except for a project involving pipe insulation or surfacing material work), any project involving only Class III or Class IV asbestos work with less than one square foot of asbestos containing materials is not considered an asbestos project.

All Class I, II, and III asbestos work must be conducted under the supervision of a certified asbestos supervisor. If the Class III or IV work involves ACM in quantities less than 3 square feet or 3 linear feet, the workers must have eight hours of training specific to the ACM being disturbed (example roofing and floor tiles). For Class II work, where (ACM) in quantities greater than 3 square feet or 3 linear feet are disturbed, a certified asbestos supervisor must be present for eight hour workers to conduct the work. However, if the floor tiles cannot be removed intact i.e. they break apart into small fragments (pulverize), break into more than three pieces, or if asbestos fibers are see on the broken edge of the tile, work must be conducted by 40 hour trained asbestos workers.

**Penalties**

An employer, who violates the requirements of the Washington Industrial Safety and Health Act, Chapter 49.17 RCW, may be issued a citation or order to restrain activity by the Department of Labor & Industries. Willful or repeated violations may be assessed a civil penalty not to exceed fifty thousand dollars for each violation. Serious violations may be assessed a civil penalty not to exceed five thousand dollars for each violation. Violations not of a serious nature may be assessed a civil penalty not to exceed three thousand dollars. Other penalties can be assessed by the Spokane Regional Clean Air Authority under Article IX Asbestos Control Standards.

*Before you begin any work have an asbestos survey in hand.*

**Asbestos Containing Building Products**

Various forms of asbestos were widely used in many products throughout the United States since the early part of the twentieth century. Asbestos was used because of its high tensile strength, flexibility, and resistance to thermal, chemical, and electrical conditions.

Contrary to popular belief, asbestos or asbestos containing material (ACM) has not been banned (except for certain applications) and may still be found in manufactured or imported products and building materials. Although health concerns, legal liability, and regulatory requirements have largely stifled most manufacture or use of ACM in the U.S., many other countries still use asbestos and/or otherwise export asbestos.

**Partial List of Asbestos Containing Building Materials**

- Acoustical panels
- Acoustical plaster
- Acoustical tile
- Adhesive
- Aircell insulation
- Aprons
- Asbestos board
- Asbestos canvas
- Asbestos cloth
- Asbestos cord
- Asbestos corrugated sheets
- Asbestos curtains
- Asbestos felt
- Asbestos fiber
- Asbestos fiber felt
- Asbestos finishing cement
- Asbestos flatboard
- Asbestos forms
- Asbestos furnace tape
- Asbestos gaskets
- Asbestos gloves
Asbestos insulating blankets
Asbestos insulating cement
Asbestos insulation
Asbestos lap
Asbestos micarta
Asbestos millboard
Asbestos mineral wool
Asbestos mittens
Asbestos packing
Asbestos pads
Asbestos panels
Asbestos paper
Asbestos rollboard
Asbestos rope
Asbestos seals
Asbestos sheets
Asbestos sponge block
Asbestos sponge cover
Asbestos spray
Asbestos tank jacket
Asbestos tape
Asbestos textile
Asbestos tiles
Asbestos wick
Asbestos yarn
Asbestos-faced mineral wool
Asphalt
Attic insulation
Automobile hood liners
Blaze shield
Block
Board
Boiler wall coat
Boilers
Bonding cement
Cables
Calcium silicate insulation
Carded asbestos cloth
Castables
Ceiling tiles
Cement
Ceramic tile
Cigarette filters
Clapboards
Clay
Cloth
Clutches
Cork board
Cork covering
Cork-filled mastic
Cork mastic
Corrugated asbestos sheets
Corrugated paper
Dry mix joint compound
Duct adhesive
Eighty-five percent magnesia insulation
Electric Wiring paper
Emulsion adhesive
Emulsions
Expansion
Expansion joint
Fake snow
Fibrous adhesive
Finishing cement
Fire resistant insulation shield
Firebrick
Fireclad asbestos paper
Firefoil board
Firefoil panel
Fireguard asbestos paper
Fireproofing cement
Flex board
flexible duct connectors
Furnace cement
Fyrbestos sheets
Gasket material
Gaskets
Generators
Goldbestos
Gunning mix
Hair dryers
Heat shield
Heatguard
High pressure packing
Industrial A-C board
Insulation coating
Insulation duct
Insulation jacketing
Insulating mix
Insulation seal
Insulmastic
Ironing board covers
Joint compounds
Kent cigarettes
Lagging
Lagging adhesive
Lagging cloth
Lagging tape
Leggings
Limpet
Marine panels
Mastic
Masonry fill
Mastic
Mastic adhesives
Metal mesh blanket
Millboard
 Mineral wool block
Mineral wool insulating cement
Mineral wool mineral wool blankets
Mittens
Mitts
Navy sealer
Nuclear reactors
One-shot cement
Packing
Packing material
Paint
Paper
Paper tape
Panels
Patching fiber
Patching plaster
Permaboard
Pipe covering
THINGS TO CONSIDER BEFORE WORK BEGINS: ASBESTOS CONTAINING MATERIALS

- Plaster
- Powershield
- Pumps
- Putty
- Quick-setting joint compound
- Railroad electrical arc chutes
- Raw asbestos fiber
- Refractory cements
- Roofing felt
- Roofing paper
- Rollboard
- Rope
- Rope packing
- Sealer
- Sheet packing
- Sheet rope
- Sheetrock
- Sheets
- Shingles
- Sound shield
- Sleeves
- Spackle
- Spackle plaster
- Sponge felt
- Spray
- Spray fireproofing
- Stone corrugated sheets
- Stone sheathing
- Talc powder
- Tape
- Tar paper
- Thermal protective lab equipment
- Transite
- Troweled coating
- Turbines
- Valve rings
- Valve stem packing
- Valves
- Vermiculite compounds
- Vinyl asbestos floor tile
- Vinyl wallpaper
- Waterproofing
- Welding rods
- Wick
- Wires
- Wood fiber plaster
- Yarn

Note this is not a complete list

Materials still manufactured that can contain asbestos minerals:

- Roofing Felt
- Roofing Shingles
- Roofing Tiles
- Siding Shingles
- Tar sealers
- Asbestos Cement Sheet
- Cement pipe and fittings
- Brake and Clutch Components
- Gaskets
- Spackle
- Duct tape
- Glazing
- Ceramic tiles
- Vinyl floor tiles
- OSB and Plywood (in the glues)
- Construction glue
- Some plastics
- There may be other products beside these.

Some of these materials have asbestos by specification (for fire proofing, strength etc.). Other materials have asbestos minerals due to contamination of the raw process minerals. Not all building materials will identify asbestos in their products. They may name the asbestos “mineral fiber” (which may or may not be asbestos); or if there is less than one percent asbestos in the material they may not label the material as having asbestos at all.