



Asbestos Inspection and Report Requirements

The Division has determined based on the review of hundreds of inspections/reports that there has been a great deal of “interpretation” as to what constitutes an asbestos building inspection and the resulting asbestos inspection report. Colorado Regulation No. 8, Part B, requires that the inspection of a building - including the identification, sampling and assessment of suspect materials - and the components of the final report summarizing the findings must be done in accordance with the appropriate portions of Sections IV.C.1., IV.D, and IV.F. Many inspections and inspection reports reviewed by the Division are deficient and do not constitute a complete and accurate inspection of the building, structure, facility or component(s) and many do not include required information in the final report.

The inspection requirements in the Asbestos Hazard Emergency Response Act (AHERA) were designed to identify suspect materials that students or staff might encounter so as to have those materials sampled by a certified asbestos building inspector (or materials could be assumed to be asbestos-containing). Inspection results are used to develop a meaningful management plan whose ultimate purpose is to prevent unintended disturbance of ACBM in order to protect building occupants from being exposed to asbestos fibers. Section III.A.1.b. of Regulation No. 8, Part B, requires suspect materials that will be impacted by renovation or demolition activities to be sampled by a Colorado certified asbestos building inspector (or assumed to be asbestos containing) and assessed as required by Sections IV.C.1., IV.D. and IV.F. prior to the start of those activities.

While the building type may be different – a school building vs. a public and commercial building or single-family residential dwelling – the basic inspection procedures and components of the inspection report are the same. All asbestos inspections and reports, whether it is an inspection of one component or of the entire building, must comply with the requirements of Section IV.C.1., IV.D and IV.F. of Regulation No. 8, Part B. An inspection prior to renovation or demolition activities may be more inclusive. Unlike AHERA, all suspect materials - inside and out - must be identified and assessed.

As defined in Colorado Regulation No. 8, Part B, renovation means altering in any way one or more facility components. Operations in which load supporting structural members are wrecked or taken out are excluded. Examples of renovation work include replacement or repair of mechanical ventilation systems, pipes, ceilings, walls, flooring (including floor tiles) and insulating materials.

As defined in Colorado Regulation No. 8, Part B, demolition means the wrecking or taking out of any load supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

Inspections conducted prior to renovation or partial demolition activities might be limited to specific to areas or materials that would be disturbed by that activity. If this is the case, the inspection report must clearly identify the limitations of the inspection. Inspections conducted prior to full demolition must comprehensively identify all suspect materials and homogeneous areas in and on the building, structure or facility.

INSPECTION

For each building, structure, facility or component(s) inspected to determine the presence of asbestos – containing materials, the Colorado certified asbestos building inspector shall:

- First and foremost, identify, quantify for the purposes of sampling (surfacing materials) and categorize (into either surfacing, TSI or miscellaneous) all homogeneous areas of suspect ACM. This information is required for all materials, not just those that are confirmed as ACM. **(Section IV.C.1.d.(iii).) Identify all homogeneous areas of friable suspected ACBM and all homogeneous areas of nonfriable suspected ACM.**
- Touch all suspect ACM to determine whether the material is friable or non-friable. **(Section IV.C.1.d.(ii).) Note: Nonfriable ACMs that have become friable due to erosion, damage, weather, etc. will require assessment per Section IV.F.**
- Either assume suspect material to be ACM or collect, in a statistically random manner representative of the homogeneous area, bulk samples of suspect ACM as follows: **(Section IV.C.1.d.(iv).)**
- Surfacing Material – Additional information on sampling surfacing material can be found in the EPA “Pink Book”, Asbestos In Buildings: Simplified Sampling Scheme For Friable Surfacing Materials (1985). (Section IV.D.1.) The Pink Book is incorporated by reference in Section IV.D.1.d. for purposes of sampling friable surfacing materials. The quantity and dates of construction (including any known renovations) of all homogenous areas of surfacing materials must be identified and correctly delineated.
 - At least three bulk samples shall be collected from each homogeneous area that is 1,000 square feet or less. This is based on the quantity of the surfacing material, not footprint of the homogeneous area. Note that homogeneous areas must be determined prior to any sampling/analysis being done, *not* after. **(Section IV.D.1.a.)**
 - At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 square feet but less than or equal to 5,000 square feet. This is based on the quantity of the surfacing material, not footprint of the homogeneous area. **(Section IV.D.1.b.)**
 - At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 square feet. This is based on the quantity of the surfacing material, not footprint of the homogeneous area. **(Section IV.D.1.c.)**
 - It is recommended, though not required, that nine bulk samples be collected from each homogeneous area of friable surfacing material. **(Section IV.D.1.d.)**
- Thermal System Insulation – Although not required, additional information on sampling thermal system insulation can be found in the EPA “Purple Book”, Guidance For Controlling Asbestos-Containing Materials in Buildings (1985). **(Section IV.D.2.)**

- At least three bulk samples shall be collected from each homogeneous area of thermal system insulation. **(Section IV.D.2.a.)**
 - At least one bulk sample shall be collected from each homogeneous area of patched thermal system insulation that is less than six square or linear feet. **(Section IV.D.2.b.)**
 - In a manner sufficient to determine whether the material is ACM, collect bulk samples from mechanical system fittings such as “Ts”, elbows, and valves. **(Section IV.D.2.c.)**
 - Bulk samples are not required where the Colorado certified asbestos building inspector has determined the thermal system insulation is fiberglass, foam glass, rubber, or other non-suspect ACM insulation. The inspector is still responsible to look under the non-suspect ACM insulation to determine that another suspect material is not present. **(Section IV.D.2.d.)**
- Miscellaneous Material
- In a manner sufficient to determine whether the material is asbestos-containing, collect bulk samples from each homogeneous area. **(Section IV.D.3.)**
 - EPA has addressed its use of the term “collect bulk samples” (AHERA). Their interpretation is that this means that the inspector must collect a minimum of two samples of each miscellaneous material.

REPORT

The exact report format may be determined by each inspector or firm.

Provide a written report of the asbestos inspection findings and assessment. Reporting requirements are limited to IV.C.1.d.(vi). for documenting an inspection and IV.F.1. and IV.F.2. for documenting an assessment. All elements of IV.F.3 are optional.

- The name (if applicable) and address of the building, structure or facility that was inspected. If there is no street address, the county legal description should be used or another method such as GPS coordinates may be used. If less than the entire building, structure or facility is inspected, the exact location of the area or component(s) inspected shall be listed.
- The Colorado certified asbestos building inspector’s name, signature, and individual certification number. **(Section IV.C.1.d.(vi.)(A).)** Note: all inspectors must work for a currently registered Asbestos Consulting Firm.
- The date(s) the inspection was performed. **(Section IV.C.1.d.(vi.)(A).)**
- An inventory of the location(s) of each homogeneous area of all suspect ACM that was sampled or assumed. All spaces represented by each homogeneous area shall be listed. **(Section IV.C.1.d.(vi.)(B).)** Any limitations of the inspection, if applicable, must be clearly

identified. For example: identification of the specific component(s), room(s), area(s), floor(s), etc. inspected, or the component(s) or area(s) where partial demolition will occur.

- The exact location where each bulk sample was collected and the date the sample was collected. **(Section IV.C.1.d.(vi).(B).)**
- Although not required, a blueprint, diagram or drawing of the building, structure, facility or component(s) with each homogeneous area delineated, exact sample locations identified, and each homogeneous area determined or assumed to be ACM clearly illustrated is recommended. It is also recommended that photographs and detailed descriptions of each suspect and/or known ACM and assumed material are included in the report.
- A description of the manner used to determine sampling locations. (See the requirements for surfacing materials in the “Pink Book” and although not required, additional information on sampling thermal system insulation can be found in the EPA “Purple Book.”)
- A copy of the analytical report, which must contain the name and address of the laboratory performing the analysis, the laboratory’s CDPHE registration number, if applicable, and NVLAP accreditation number, the date of analysis, the name and signature of the microscopist performing the analysis, the method of analysis and the results of the analysis. Point count or composite analysis analytical data must also be included if performed. **(Sections III.A.1.c and IV.E.4.)**
- An assessment of all known or assumed ACM as to whether, in its current condition, it is friable or non-friable. **(Section IV.C.1.d.(vi).(E).)**
- The Inspector shall classify and give reasons for classifying the ACM into one of the following categories **(Section IV.F.2.):**
 1. Damaged or significantly damaged thermal system insulation ACM.
 2. Damaged friable surfacing ACM.
 3. Significantly damaged friable surfacing ACM.
 4. Damaged or significantly damaged friable miscellaneous ACM.
 5. ACM with potential for damage.
 6. ACM with potential for significant damage.
 7. Any remaining friable ACM or friable suspected ACM.
- The Colorado certified asbestos building inspector’s conclusions. This shall include a list of all known or assumed ACM.

ADDITIONAL INFORMATION

Demolition Notice Application Forms will not be approved if the asbestos inspection report is labeled “for renovation”, “limited” or states that it was “limited in scope” unless the demolition is specific to an area or component(s). Examples of limited inspections for demolition might include a “pop top” or taking out a load bearing wall to add an addition.

Demolition inspections may necessitate destructive sampling to locate and sample all suspect materials that may be under or behind other building components, or otherwise hidden from view or at least to rule out their existence. Although not required, it is advised that the building be empty or at least unoccupied (with repairs to sampling locations made prior to re-occupancy) during the inspection.

The inspector is required to and is responsible for inspecting **all** areas where suspect material may be present. Inspection reports for demolition containing sentences such as *“The attic/basement/boiler, etc. was not accessible during this inspection”* or *“There may be materials under the ones tested”* will result in the denial of the Demolition Notification Application Form.

Note: The Division does not expect that an inspector will perform demolition (which is defined as the wrecking or removal of load-bearing members) in order to locate and sample materials. However, if there is concern that there may be suspect materials in areas that actually require demolition in order to access them such as the removal of the slab or foundation, the inspector should clearly state this in their report so that the building owner knows that an inspector may be required to inspect previously unidentified suspect materials.

Failure to make all reasonable effort to identify homogeneous areas and to sample or assume suspect materials may lead to enforcement.

For questions or clarification, please contact the CDPHE Indoor Environment Program at 303-692-3100 or cdphe.asbestos@state.co.us.