

## **Asbestos, Renovation, Deconstruction, and Demolition Information For Fourmile Canyon Residents Affected by the Fire**

Asbestos is a naturally occurring mineral that has been added into thousands of various types of building materials to add fire resistance, strength, and durability. The addition of asbestos to building materials has never been banned; therefore, asbestos-containing materials may be part of your building, even if it was recently constructed. When these building materials were burned in the Fourmile Canyon wildfire, asbestos fibers likely remained in the ash. Therefore, the ash and remaining building debris will need to be treated as asbestos-containing waste material (“ACWM”) unless a certified Colorado asbestos building inspector samples the debris and ash and can determine that the debris is asbestos-free.

A number of local, state, and federal regulations cover the handling and disposal of debris potentially contaminated with asbestos. The following information attempts to answer questions from the local and state level. The Occupational Safety and Health Administration (“OSHA”) should be contacted for worker protection issues. The ash and debris from the burned buildings can also contain other harmful materials, including lead, mercury, and cadmium. Appropriate protective clothing and respiratory protection should always be used whenever handling debris.

### **Abatement / Demolition Permits**

#### **1. Do I have to get a permit?**

##### **1. Buildings were completely destroyed by the fire (i.e. only ash and debris remain):**

The requirement for obtaining abatement/demolition permits from the Colorado Department of Public Health and Environment (“CDPHE”) and Boulder County have been waived under the following scenarios:

- When removing ash/debris from buildings that have been completely destroyed. However, the **ash/debris must be thoroughly dampened with water prior to handling**. The damp material should be placed into the lined dumpsters located in the community or lined dumpsters you have arranged for your own property.
- For load-bearing structural members associated with buildings completely destroyed by the fire (i.e., only ash and debris remain). This would include concrete foundations and metal girders left standing after the fire with no building structures/debris attached to them.

##### **2. Buildings were partially damaged by the fire and will be renovated, deconstructed, or demolished:**

The requirement for obtaining abatement/demolition permits from CDPHE remains in effect; however, the fees have been waived.

- The building must be inspected by a certified Colorado asbestos building inspector to determine if asbestos-containing materials are present, and if so, in what quantities. Contact a certified Colorado asbestos building inspector, who will guide you through the asbestos inspection and, if necessary, the abatement process.
- If the building is to be demolished or deconstructed, submit a Demolition Notification Application to the CDPHE, even if no asbestos is present.

### **Resources**

- Colorado Department of Public Health and Environment Asbestos Unit:  
303-692-3100 or [www.cdphe.state.co.us/ap/asbestos/index.html](http://www.cdphe.state.co.us/ap/asbestos/index.html)

- List of certified Colorado asbestos building inspectors:  
[www.BoulderCountyAir.org](http://www.BoulderCountyAir.org); click on “Asbestos Demolition Permit” on the left.
- Application form and instructions:  
[www.BoulderCountyAir.org](http://www.BoulderCountyAir.org); click on “Asbestos Demolition Permit” on the left.

**2. My house was built in the 90’s or later. So it doesn’t contain asbestos, right?**

Asbestos has never been totally banned from being added to building materials, and materials imported from other countries can also contain asbestos fibers. Therefore, testing is required to determine if ash and debris from any building contains asbestos. The alternative is to treat the ash/debris as asbestos-containing waste material (“ACWM”). Prior to any renovation or demolition (deconstruction) activities, buildings that are damaged but not destroyed by the fire must be inspected.

**An exemption does exist for buildings constructed after October 12, 1988:**

- As per Colorado Air Quality Control Commission Regulation No. 8, Part B-Asbestos, Section III.A.1.d., a letter must come from an architect or project engineer responsible for the construction of the building, and it must state that no asbestos-containing material (ACM) was specified as a building material in any construction document for the building or that no asbestos-containing material was used as a building material in the building.
- The letter writer should include a complete list of any documents, drawings, blueprints, specifications, plans, etc. used to make that determination and be able to produce or make those documents, drawings, blueprints, specifications, plans, etc. available to CDPHE for review, upon request.
- The letter should close with a statement to the effect that, “After a careful and thorough review of the above-mentioned documents, drawings, blueprints, specifications, plans, etc., I have determined, to the best of my ability and knowledge, that no asbestos-containing materials (“ACM”) was specified as a building material in any construction document for the building and that no asbestos-containing material was used as a building material in the building.”
- The letter should be signed and dated, and a copy of the person’s credentials and/or license included, along with his/her contact information.
- The letter and a supporting document list shall be submitted to the CDPHE Asbestos Unit.

**3. My home was only partially burned, so what do I need to do?**

The requirement for obtaining abatement/demolition permits from CDPHE remains in effect; however, the fees have been waived.

- The building must be inspected by a certified Colorado asbestos building inspector to determine if asbestos-containing materials are present, and if so, in what quantities.
- Contact a certified Colorado asbestos building inspector, who will guide you through the asbestos inspection, and if necessary, the abatement process.
  - If the building is to be demolished or deconstructed, submit a Demolition Notification Application to CDPHE, even if no asbestos is present.

**4. How do I get a demolition permit?**

The certified Colorado asbestos building inspector should provide you with a signed copy of the Demolition Notification Application once all asbestos required to be removed from the building has been removed, or if there is no asbestos found during the inspection. This form is to be submitted to the CDPHE Asbestos Unit.

**5. I am already cleaning; do I still have to get a permit?**

- If you are cleaning up a building completely destroyed by the fire (i.e. only ash and debris remain), the requirement to obtain a permit has been waived.
- If you are planning to renovate, deconstruct, or demolish a structure damaged by the fire, you will need to obtain an inspection and any required permits; however, the fees for required permits have been waived.

**6. What will happen if I don't get a demolition permit?**

If a demolition permit is not obtained prior to any applicable renovation, deconstruction, or demolition activity, those responsible for the renovation, deconstruction, or demolition could be subject to enforcement action.

**7. Are demolition applications required to be signed by a building inspector?**

If the structure is completely burned, the requirement for a demolition permit to remove ash and debris has been waived. If the structure is damaged and demolition of the remaining structure will be done, a demolition permit is required, and a certified Colorado asbestos building inspector must sign it; however, the fee for this demolition permit has been waived.

**8. Are demo permits required for foundations? The first information sheet released specifically said "yes," but the second information sheet, dated 9/29/10, did not mention this requirement.**

For **completely destroyed buildings**, the requirement for a demolition permit from the State of Colorado has been waived. Concrete debris must be rinsed to ensure it is free of all ash and debris, then inspected by a certified Colorado asbestos building inspector or air monitoring specialist and found to be free of suspect materials in order to dispose of it as construction and demolition ("C&D") waste or to recycle it.

If suspect materials are present, they must be sampled by a certified Colorado asbestos building inspector. If the materials are non-asbestos-containing material ("ACM"), the concrete debris may be disposed of as C&D waste or recycled. If the materials found are ACM, the concrete debris must be disposed of as (friable or non-friable) asbestos-containing waste material ("ACWM") unless the ACM is removed by an abatement contractor.

**OR**, the foundation may be disposed of with the rest of the building ash and debris as ACWM without an inspection.

**9. Will an abatement permit be required to abate a site or transfer waste from an unlined container to a lined container?**

For dealing with ash and debris from **completely destroyed buildings**, the requirement for permits from the State of Colorado has been waived. For partially damaged buildings, abatement and demolition permits are required, but associated fees have been waived. Please see the answer to question 1. under Hauling regarding container requirements.

- 10. A certified Colorado asbestos building inspector sampled suspect material on the exterior of foundation walls and determined it to be non-friable “ACM”. Is a demolition permit required?**  
For **completely destroyed buildings (i.e. only ash, debris, and foundation remains)**, the requirement for a demolition permit from the state has been waived, but the foundation must be disposed of as non-friable “ACWM” unless the asbestos is first removed. In that case, the concrete can be recycled or disposed of as “C & D” waste.

### **Debris Handling**

**1. Can I get help at my property to sort and load ash and debris?**

Colorado Baptist Disaster Relief (CBDR) was providing this type of free volunteer assistance to uninsured and underinsured property owners in the Fourmile Canyon fire area; however, this work has now ended for the year. Potentially, CBDR may provide additional assistance in spring 2011.

**2. How wet must I make the ash before handling it?**

Use enough water to dampen the ash so it doesn't create dust when it is handled. Avoid using too much water and creating water runoff while loading or hauling.

**3. How should I rinse metals?**

Rinse metals over the ash and other debris needing to be dampened to conserve water. If you have rinsed metals or plan to rinse them over soil, scrape up at least 2 inches of soil in that area afterwards and dispose of it in a lined dumpster as “ACWM”.

**4. How do I wet the ash if I we don't have access to water?**

Multiple options are available for accessing water, including:

- A list of companies that can provide water trucking services is available at: <http://www.bouldercounty.org/health/pdfs/ContractorsWater.pdf>; or contact Susan Martino, Boulder County Public Health, at 303-441-1176.
- Contracting with a well service provider, such as Boulder Water Well or John's Well Service, to get the well up and running. A portable generator may be needed if you don't currently have electricity. A 5000K generator is capable in most situations of providing power for a 1hp pump.

**5. How can I prevent debris from blowing off the property?**

Dampening the debris can help keep it from blowing off of the property. Cleanup activities involving debris should be kept to a minimum during high winds.

**6. How are we dealing with ash/debris being blown down into Boulder to the non-affected homes? Debris is blowing into ventilation systems and open windows.**

Building owners are being urged to keep building debris damp to prevent the ash from being blown away. People who are concerned should keep their windows closed and wet wipe surfaces, not dry dust. In reality, most of the ash is from burned vegetation.

**7. Who do I call to file a complaint related to debris handling?**

Please contact the Colorado Department of Public Health and Environment (CDPHE) Asbestos Unit at 303-692-3150 or send an e-mail to [Asbestos@state.co.us](mailto:Asbestos@state.co.us).

## Hauling

**1. I have dumpsters on my property that I filled before the State requirements were issued. Is there any way my existing dumpsters can be hauled?**

If your dumpsters contain **building** ash or debris that was loaded prior to the issuance of the guidance from the State, contact the CDPHE Hazardous Materials and Solid Waste Division at 303-692-3300. A landfill has been approved to receive sealed, unlined dumpsters **IF** the dumpsters were delivered to the Fourmile Canyon area on or before September 27, 2010.

**2. The contractor will not deliver a roll-off to my property now because of the State's new requirements. What should I do?**

While some contractors may not be comfortable with these requirements, there are others that have indicated a willingness to follow these procedures. When selecting a contractor, we recommend you first obtain multiple bids.

**3. Why is there only one place to haul, and why is it so far away?**

There are now three landfills permitted to accept asbestos-containing material. These are landfills that have the capacity and expertise to handle the material in a safe way. For more information, please see the CDPHE letter dated September 29, 2010; it can be found at [www.cdphe.state.co.us/ap/asbestos/index.html](http://www.cdphe.state.co.us/ap/asbestos/index.html); or contact Susan Martino, Boulder County Public Health, at 303 441-1176.

**4. Can I haul on my own debris?**

You can haul your own debris to lined dumpsters in the community, as long as materials are first dampened to minimize dust. It may be possible to haul your materials directly to the landfill if you have loaded it into lined containers; however, at least one of the approved landfills (i.e. Tower Road) requires that asbestos-containing material be delivered by approved waste haulers or asbestos abatement contractors (i.e. residents and businesses cannot haul their own material).

Contact one of the approved landfills **PRIOR** to taking a load to them to find out if they will accept your load, and to arrange for a waste profile and manifest. These documents need to be prepared and signed in advance.

**5. I have my own truck, so where can I get rolls of 6mil plastic sheeting?**

Home Depot: 1600 29<sup>th</sup> St., Boulder, CO

Lowe's: 1171 W. Dillon Rd., Louisville, CO

**6. My hauling contractor has raised the price by 40% because of the State requirements. What can I do?**

When selecting a contractor, we recommend obtaining multiple bids. Individuals who are uninsured or underinsured may contact the Fourmile Fire Assistance Center at 303-441-3560 for assistance with debris removal.

**7. How am I supposed to get waste to the community dumpsters?**

The best way to do this is to put dampened ash and small debris into triple-layer plastic bags, and securely seal the bags before transporting and placing them in the community dumpster. Larger debris can be transported to the community dumpsters as is, provided no ash is attached, and no dust is created by doing so.

If you have hired a contractor, he/she may be able to move larger loads of dampened ash and debris to a community dumpster using a loader or other appropriate vehicle.

**8. How can I find someone to haul the waste?**

A list of licensed haulers operating in Boulder County is available at: [www.bouldercounty.org/fourmilefire/asbestos.htm](http://www.bouldercounty.org/fourmilefire/asbestos.htm); or contact Hillary Collins, Boulder County Resource Conservation Division, at 720-564-2224.

**9. Can lined containers already loaded go to the Denver Arapahoe Disposal Site (DADS) by covering the tops?**

Haulers should contact the landfill that is going to accept the waste to ask about their specific requirements for closing the container prior to transporting. Property owners should then discuss this with their contractor/hauler.

**Inspection and Testing**

**1. Who is going to pay for an asbestos inspector?**

Discuss payment for an asbestos inspector with your insurance agent.

**2. Where can I get a list of inspectors?**

A list of Colorado certified asbestos inspectors can be found at:

- [www.cdphe.state.co.us/ap/asbestos/index.html](http://www.cdphe.state.co.us/ap/asbestos/index.html)
- [www.BoulderCountyAir.org](http://www.BoulderCountyAir.org); click on "Asbestos Demolition Permit" on the left

**3. How much does an asbestos inspection cost?**

- Asbestos inspection costs (includes time and sampling) are determined by the asbestos consulting firms performing the work. When selecting a consulting firm, we recommend that you obtain multiple bids.
- Asbestos removal costs vary greatly – when selecting a general abatement company, we recommend you obtain multiple bids.

**4. Can I have an asbestos test done on my ash and debris, and if there isn't any asbestos, be exempt from the new hauling requirement?**

Yes; please see the Fourmile Sampling Plan Requirements developed by the CDPHE Asbestos Unit. The sampling plan requirements are available at: [www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx](http://www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx) or contact Susan Martino, Boulder County Public Health, at 303 441-1176.

However, even if the debris can be determined to be asbestos-free, some landfills may still not be able to accept construction and demolition (C&D) waste under their current management plans. Many landfills may only accept municipal waste.

**5. Do I have to get my concrete debris tested if I want to reuse it on my property to prevent erosion?**

Yes, concrete debris must first be rinsed to ensure that it's free of all ash and debris, then inspected by a certified Colorado asbestos building inspector or air monitoring specialist and found to be free of suspect materials. If suspect materials are present, they must be sampled by a certified Colorado asbestos building inspector. If the materials are non-"ACM", the concrete debris may then be used for erosion control **IF AND ONLY IF** the CDPHE Hazardous Materials and Solid Waste Division has approved the erosion control plan with all necessary best management practices ("BMP"). Please call Charles Johnson of CDPHE at 303-692-3348 if you would like to pursue this option.

**6. Do I have to get my concrete debris tested if I want to bury it on my property?**

Landowners could bury the material as "one's own waste on one's own property," but they would need to comply with CDPHE Hazardous Materials and Solid Waste Division landfill regulations, including submitting design, construction, closure, and post-closure care plans for review and approval prior to burying any waste. Unless the waste has been tested and found not to contain asbestos, homeowners would also need to comply with CDPHE Air Pollution Control Division ("APCD"), Occupational Safety and Health Administration ("OSHA"), and National Emission Standards Hazardous Air Pollutants ("NESHAP") landfill requirements. Any landfill containing asbestos waste poses a concern and would require an environmental covenant be attached to the property, along with requiring post-closure care financial assurance.

In addition, local or county ordinances would need to be checked to see if the creation of a landfill would be permitted. Please call Charles Johnson of CDPHE at 303-692-3348 if you would like to pursue this option.

**7. Can concrete debris that is not going to be recycled or disposed of as asbestos-containing material ("ACM") go straight to the landfill in an unlined dumpster as construction and demolition ("C&D") waste without being sampled?**

No. Concrete debris must first be rinsed to ensure that it's free of all ash and debris, and then inspected by a certified Colorado asbestos building inspector or air monitoring specialist and found to be free of suspect materials in order to dispose of it as C&D waste. If suspect asbestos-containing materials ("ACM") are present, they must be sampled by a certified Colorado asbestos building inspector. If the materials are non-"ACM", the concrete debris may be disposed of as "C&D" waste. If the materials found are "ACM", the concrete debris must be disposed of in an approved landfill, as (friable or non-friable) asbestos-containing waste material ("ACWM"), and transported in a lined dumpster.

If you do not want to have your concrete inspected or sampled, you can landfill it as "ACM" in a lined dumpster, as required by State requirements.

**8. What is the procedure if I want to recycle my concrete foundation?**

Concrete debris that has been inspected and found to be non-ACM can be recycled, usually at less cost than landfill disposal.

**9. If I have a completely burned building, do I have the option to test the ash and debris to determine asbestos content? If yes, how?**

Yes; please see the Fourmile Canyon Sampling Requirements developed by the CDPHE.

The sampling plan requirements are available at:

[www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx](http://www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx) or contact Susan Martino, Boulder County Public Health, at 303 441-1176.

**10. Will contaminated soil removal require confirmatory soil sampling?**

No sampling of the soil is required where contaminated soil has been removed.

**11. How far out from the building do we have to clean the building ash?**

Only ash and debris associated with the building must be removed as "ACWM". Please use your best judgment to determine where the building collapsed.

**12. The County has mandated that all concrete be recycled. Do we have to wet wipe the concrete before demolition?**

There is no County mandate to recycle concrete from fire-destroyed homes, as the concrete removal is not subject to a demolition permit. There is a requirement to recycle concrete under Boulder County's Build Smart program, but this only applies to partially damaged homes for which a demolition permit is required.

The concrete debris must be rinsed to ensure that it's free of all ash and debris, not wet wiped, and then inspected by a certified Colorado asbestos building inspector or air monitoring specialist and found to be free of suspect materials in order to recycle it. If suspect materials are present, they must be sampled by a certified Colorado asbestos building inspector. If the materials are non-"ACM", the concrete debris may be recycled or disposed of as "C&D" waste in a regular landfill. If the materials found are "ACM", the concrete debris may not be recycled or disposed of as "C&D" waste, and must be disposed of as (friable or non-friable) "ACWM" unless the asbestos-containing materials contaminating the concrete can be removed by an asbestos contractor.

**13. How do we address the recycling of potentially contaminated steel?**

The steel must be rinsed with water to ensure that it's free of all ash and debris, not wet wiped. If suspect building materials are present or attached to the steel, they must be sampled by a certified Colorado asbestos building inspector. If the materials are non-"ACM", the steel may be recycled. If the materials found are "ACM", the steel may not be recycled and must be disposed of as (friable or non-friable) asbestos-containing waste material ("ACWM") unless the "ACM" is removed by an abatement contractor.

**14. For unlined dumpsters that contain suspect debris, can the dumpster contents be sampled for the presence of "ACM", or does the material need to be transferred into a lined dumpster?**

Please contact the CDPHE Hazardous Materials and Solid Waste Division (303-692-3300). They have arranged for a landfill to take sealed, unlined dumpsters **IF** the dumpsters were delivered to the Fourmile Canyon area on or before September 27, 2010.

**15. Can you have someone test the site and test out of asbestos mitigation/etc.?**

Yes; please see the Fourmile Canyon Sampling Requirements developed by the CDPHE.

The sampling plan requirements are available at:

[www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx](http://www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx) or contact Susan Martino, Boulder County Public Health, at 303 441-1176.

**Is every single site considered contaminated (e.g. garage, shed)?**

Because most buildings are constructed of materials frequently found to contain asbestos, it must be assumed that “ACM” is present, unless testing can show otherwise.

**16. If some samples have been taken of post-1988 homes (e.g. 1994), will that be sufficient to deem those houses, or ash/debris, non-asbestos-containing?**

Any site may be sampled. Please see the Fourmile Canyon Sampling Requirements developed by the CDPHE. The sampling plan requirements are available at:

[www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx](http://www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx) or contact Susan Martino, Boulder County Public Health, at 303 441-1176.

**17. For structures that only have standing foundations, does a demo permit need to be obtained?**

No. For **completely destroyed buildings (i.e. only ash, debris, and foundation remains)**, the requirement for a demolition permit from the State of Colorado has been waived.

**18. Can I bury my debris on my property?**

A landowner can bury the material as “one’s own waste on one’s own property,” but he/she would need to comply with CDPHE Hazardous Materials and Solid Waste Division landfill regulations, including submitting design, construction, closure, and post-closure care plans for review and approval prior to burying any waste. Unless the waste has been tested and found not to contain asbestos, the homeowner would also need to comply with APCD, OSHA, and NESHAPS landfill requirements. Any landfill containing asbestos waste poses a concern and would require an environmental covenant to be attached to the property, along with requiring post-closure care financial assurance.

In addition, local or county ordinances would need to be checked to see if creation of a landfill would be permitted. Please call Charles Johnson at CDPHE at 303-692-3348 if you would like to pursue this option.

**19. Will the County certify that ash/debris removal from each site is done properly and in compliance with State requirements? What is the enforcement mechanism for adhering to the State “mandate”?**

Property owners must hire a certified Colorado air monitoring specialist to inspect the site to ensure that the building area is visually free of all building-related ash and debris. Please see the attached Fourmile Closure Report document and cover letter. The closure report document and cover letter are available at: [www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx](http://www.bouldercounty.org/live/environment/air/Pages/4mileasbestos.aspx) or contact Susan Martino, Boulder County Public Health, at 303 441-1176.

Properties that are not cleared may be subject to Section 5.5 of the Regulations Pertaining to Solid Waste Disposal Sites and Facilities (6 CCR 1007-2), and property owners may be subject to enforcement action.

### **OSHA Health and Safety**

**1. Is OSHA going to treat the ash/debris as a Class I removal?**

This will vary greatly between sites. OSHA recommends that the contractor do bulk sampling and air sampling to make this determination in conjunction with considering the structure's age and any known asbestos-containing materials in the structure.

**OR**, in lieu of sampling, an acceptable default is to treat the ash/debris as a Class 1 removal.

Please contact Megan Meagher at OSHA at 303-844-5285, Ext. 105, for more information.

**2. Is OSHA requiring personal monitoring and/or respirators?**

Please contact Megan Meagher at OSHA at 303-844-5285, Ext. 105, for information.

**3. If materials being handled are considered hazardous material, will disposal company workers be required to take the 40 HAZMAT training?**

Please contact Megan Meagher at OSHA at 303-844-5285, Ext. 105, for more information.