

STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

Wildfire Guidance

June 13, 2012 - In response to the major High Park Wildfire, the Colorado Department of Public Health and Environment (“Department”) has been asked to provide guidance for dealing with homes damaged or destroyed by the fire.

Wildfire can create an unexpected emergency situation that warrants a rapid response. A prompt cleanup will enable residents to move forward with their lives while minimizing potential public health and environmental issues that may be exacerbated the longer the material is left in place, such as water contamination from runoff. In light of this situation, the Department is temporarily waiving certain regulatory requirements that might otherwise apply.

Debris and Ash - Handling and Disposal Issues

The ash deposited by forest fires is relatively nontoxic and similar to ash that might be found in your fireplace. However, any ash may contain unknown substances, including chemicals. In particular, ash and debris from burned structures may contain more toxic substances than forest fire ash, because of the many synthetic and other materials present in homes and buildings. For example, car batteries or mercury light bulbs may have been present in the buildings. In addition, older buildings have a greater potential to contain asbestos and lead.

Care should thus be taken when handling any materials from buildings that are either partially damaged by the fire (i.e., salvageable building materials remaining) or completely destroyed by the fire (i.e., only ash and debris remain). Protective clothing and equipment should be worn to avoid skin contact and inhalation of ash and other disturbed material.

All debris and ash should be handled in a manner that will minimize potential exposure to any unknown hazardous materials that could potentially be present in the debris. Soil under the area where the ash/debris was deposited should be scraped to ensure that all ash and building debris has been removed from the site.

- Materials must be thoroughly wetted to minimize dust, then packaged inside a 6-mil plastic sheeting liner and placed in an end-dump roll-off with the top of the roll-off sealed with the plastic sheeting to secure the contents during transport once the roll-off is loaded.
- The roll-off can be taken to one of the landfills listed below. Please call the landfill contact listed below before loads are transported to alert the landfill that the material is coming, confirm waste acceptance, and initiate a waste profile.
- If you wish to bring the materials to a different landfill, please contact the landfill to ensure that they can accept the material.

The landfill should be informed that the material has come from the fire area. Contractors should consult with the Occupational Safety and Health Administration (OSHA) at (303) 844-5285 to determine required training and personal protective equipment that will be required for those handling this material.

A state-issued demolition permit is not required to remove the ash and debris from buildings that have been partially or completely destroyed. However, the ash and debris must be thoroughly wetted prior to handling to minimize dust.

Asbestos

If asbestos-containing material is known to be present in ash or debris in amounts greater than the trigger levels, they must be removed in accordance with Colorado Regulation No. 8, Part B. Trigger levels for single family residential dwellings are 50 linear feet on pipes, 32 square feet on other surfaces or the volume equivalent of a 55 gallon drum. If this is not known, the material may handled and disposed of using the procedures outlined above.

The following landfills are accepting High Park Wildfire ash, soils, and debris **and** waste materials known to contain friable asbestos. Additional landfills may be added to this list or may be contacted directly.

1. LARIMER COUNTY LANDFILL

5887 South Taft Hill Rd.
Fort Collins, CO 80526
Steve Harem: 970-498-5770

2. Republic Services Landfill, Inc.

ALLIED WASTE SYSTEMS
8480 Tower Road
Commerce City, CO 80022
Amy Hobbs: 720-490-0230
303-459-8752

3. Denver Arapaho Disposal Site (DADS)
WASTE MANAGEMENT OF COLORADO

3500 S. Gun Club Road
Aurora, CO 80018
Jeff Sprowls: 720-947-2114
Jason Chan: 720-876-2633
303-598-1790
Gary Baldwin: 720-977-2104
303-618-0230

4. Buffalo Ridge Landfill
WASTE MANAGEMENT OF COLORADO

11655 WCR 59
Keenesburg, CO 80643
Jeff Sprowls: 720-947-2114
303-886-9693
Bill Hedberg: 1-970-686-2800, X23
1-970-418-8268
Gary Baldwin: 720-977-2104
303-618-0230

5. Republic Services Landfill, Inc.

ALLIED WASTE SYSTEMS
8900 Hwy 93
Golden, CO 80033
Amy Hobbs: 720-490-0230
303-459-8752

The landfills list above and following landfills are accepting High Park Wildfire ash, soils, and debris that **do not** contain friable asbestos. Additional landfills may be added to this list or may be contacted directly as noted above.

1. Front Range Landfill
WASTE CONNECTIONS INC.
1830 Weld County Rd. 5
Erie, CO 80516

Brian Karp: 303-673-9431
 720-839-6311

Jeff Burrier 303-673-9431
 303-968-9508

2. North Weld Landfill
WASTE MANAGEMENT OF COLORADO
40000 Weld county Rd. 25
Ault, CO 80610

Bill Hedberg: 1-970-686-2800, X23
 1-970-418-8268

Metal debris must be washed clean of ash/debris prior to recycling. Concrete debris (foundations) must be disposed of at an approved landfill. If you wish to recycle this material, it must be inspected by a certified asbestos building inspector and found to be free of asbestos-containing materials prior to recycling.

Please contact Doug Ryan at the Larimer County Health Department at 970-498-6777 or -- Dryan@larimer.org or questions on additional county requirements.

Please contact Amy White at Larimer County Building and Code Enforcement (970) 498-7708 or awhite@larimer.org to determine local permit requirements.

If you need additional information, please contact Charles Johnson at the Department's Solid Waste Unit at 303-692-3348 or Charles.Johnson@state.co.us , or the Asbestos Unit at 303-692-3100 or <http://www.cdphe.state.co.us/ap/asbestos/index.html>.

Food safety tips to follow whenever the power goes out:

- Keep the refrigerator and freezer doors closed as much as possible to maintain the cold temperature. The refrigerator will keep food cold for about four hours if it is unopened. A full freezer will hold the temperature for approximately 48 hours (24 hours if it is half full) if the door remains closed.
- If the food stored in the refrigerator has been held above 41 F for more than four hours, throw it away.
- If food stored in the freezer has thawed but is still below 41 F, it can be refrozen. Although the quality of the food may be compromised, it still should be safe to eat.
- Always keep a thermometer in the upper one-third of a refrigerator or freezer to help monitor the air temperature and to aid in the determination of whether the unit may have held the food at unsafe temperatures for

more than four hours. If there isn't a thermometer in the unit, each package of food should be checked with a probe thermometer to determine its safety.

- Perishable foods such as meat, poultry, seafood, milk and eggs should be held below 41 F at all times to avoid illness when consumed.

If a refrigerator or freezer has been cleared of all spoiled and questionable foods but a spoiled food odor persists:

- Clean the shelves and interior with hot soapy water, then rinse with clean water.
- Sanitize the surfaces with a bleach solution of one tablespoon of bleach per gallon of water. If odors are still present after cleaning, try placing a container of baking soda, activated charcoal or dry coffee grounds inside the unit. Close the door and wait 24 hours or until the odor is no longer present.

Once the power is restored, all unsafe or questionable perishable food should be discarded. When in doubt, throw it out!

If you need additional information, please contact the Division of Environment Health and Sustainability at 303-692-3645.

Respiratory Health

- Avoid getting ash into the air as much as possible. Do not use leaf blowers or take other actions that will put ash into the air.
- Shop vacuums and other common vacuum cleaners do not filter out small particles, but rather blow such particles out the exhaust into the air where they can be breathed.
- The use of shop vacuums and other non-HEPA filter vacuums is not recommended. HEPA filter vacuums could be used, if available.
- Well fitting dust masks may provide some protection during cleanup. A mask rated N-95 or P-100 will be more effective than simpler dust or surgical masks in blocking particles from ash. In general, many ash particles are larger than those found in smoke; thus, wearing a dust mask can significantly reduce (but not completely eliminate) the amount of particles inhaled.
- Persons with heart or lung disease should consult their physician before using a mask during post-fire cleanup.
- Gentle sweeping of indoor and outdoor hard surfaces followed by wet mopping is the best procedure in most cases. A damp cloth or wet mop may be all that is needed on lightly dusted areas.
- Children are more likely to be affected by health threats from smoke because their airways are still developing and because they breathe more air per pound of body weight than adults. Children also are more likely to be active outdoors.
- Pay attention to local air quality reports. Listen and watch for news or health warnings about smoke. Also pay attention to public health messages about taking additional safety measures. Refer to visibility guides if they are available.
- If you are advised to stay indoors, keep indoor air as clean as possible. Keep windows and doors closed unless it is extremely hot outside. Run an air conditioner if you have one, but keep the fresh-air intake closed and the filter clean to prevent outdoor smoke from getting inside. If you do not have an air conditioner and it is too warm to stay inside with the windows closed, seek shelter elsewhere.
- Do not add to indoor pollution. When smoke levels are high, do not use anything that burns, such as candles, fireplaces, or gas stoves. Do not vacuum, because vacuuming stirs up particles already inside your home. Do not smoke, because smoking puts even more pollution into the air.

Disease Control and Environmental Epidemiology Division

- Know the location and status of your nearest medical treatment facility and verify the route to reach it is passable.

- Be sure a clean water supply, electricity, and communication system (including 911 access) is restored, reliable, and readily accessible.
- Be certain areas not yet cleaned or not safe are not accessible to children.
- Carbon monoxide: NEVER use generators, space heaters, or any gas or kerosene appliances in enclosed spaces as this may result in carbon monoxide poisoning.
- Wash any home-grown fruits or vegetables before eating.
- Clean all children's toys before using.
- Debris: Broken glass, exposed electrical wires (whether or not they are "live"), nails, wood, metal, plastics, and other solid objects commonly found in areas of fire damage can cause puncture wounds, cuts, electrical injuries, and burns from smoldering materials.
- Watch for ash pits and mark them for safety. Ash pits are holes full of hot ashes, created by burned trees and stumps. Falling into ash pits or landing in them with your hands or feet can cause serious burns.
- Unstable building structures including flooring, stairways, railings, balconies, roofing, and fire escapes. Children should not be permitted in the residence or permitted to play on nearby fire-damaged buildings or structures until these have been cleared by their local authorities.
- Materials in storage areas may have moved into unstable positions and could fall. Doors and entryways to storage areas should be opened carefully.
- Floors may be slippery.
- Trees: Avoid burned or damaged trees as they may be unstable and fall.
- Roadways, sidewalks, bridges and other outdoor structures may be damaged or unstable.

If you need additional information, please contact the Disease Control and Environmental Epidemiology Division at 303-692-2700.