County of (Insert Here) (Health/ Fire) Agency	
(Address)	
(Phone #)	
(Email Address)	

## Health Effects from Home and Building Ash

All persons accessing burned structures should be aware of the hazards associated with those sites. Cleanup efforts may expose you to ash, soot, and fire decomposition products that may cause irritation and other health effects. **AVOID** direct contact with ash. If you get ash on your skin, in your eyes, or in your mouth, wash it off as soon as you can. Ash from burned structures is generally more hazardous than forest ash. Fire ash contains tiny particles (dust, dirt, soot) that can be deposited on indoor and outdoor surfaces and can be inhaled if the ash becomes airborne. Ash may contain traces of hazardous chemicals such as metals like lead, cadmium, nickel and arsenic; asbestos from older homes or other buildings; perfluorochemicals (from degradation of non-stick cookware, for example); flame retardants; and caustic materials. For these reasons, it is advisable to be cautious and avoid exposure to the ash.

<u>Health Effects of Ash:</u> Fire ash may be irritating to the skin, nose, and throat, and may cause coughing and/or nose bleeds. Fine particles can be inhaled deeply into lungs and may aggravate asthma and make it difficult to breathe. If the ash contains asbestos, nickel, arsenic, or cadmium, then exposure is a particular concern because these substances can cause cancer. Because the substances in the ash vary, it is best to be cautious.

<u>Sensitive People</u>: People with asthma or other lungs diseases, pregnant women, and the elderly should exercise special caution because they may be more susceptible to health effects from the ash.

<u>Children:</u> Do not allow children to play in ash. Wash and clean all children's toys before using. Children should not be in the vicinity while cleanup is on progress. Even if you are careful, it is easy to stir up ash that may contain hazardous substances. In addition, the exploratory behavior of children may result in direct contact with contaminated materials.

**Pets:** Clean ash off house pets and other domesticated animals if they have been in contaminated areas. However, it is best to not allow pets in these areas due to the potential risk to their health and their ability to spread outside of contaminated areas.

<u>Clothing:</u> Wear gloves, long-sleeved shirts, and long pants to avoid skin contact. Goggles are also recommended. Contact with wet ash may cause chemical burns or irritation on skin. Change your shoes and clothing prior to leaving the site to avoid tracking ash offsite, into your car, or other places.

**Masks:** When exposure to dust or ash cannot be avoided, use a well-fitted NIOSH- certified air-purifying respirator mask. This type of mask can be purchased from most hardware stores. A mask rated N-95 is much more effective than simpler dust or surgical masks in blocking particles from ash. Although smaller sized masks may appear to fit a child's face, manufacturers do not recommend their use for children. If your child is in an area that warrants wearing a mask, you should remove them from that area to an environment with cleaner air. Persons with heart or lung disease should consult their physician before using a mask during post-fire cleanup.

**<u>Cleanup</u>**: Avoid disturbing or sifting through the ash as much as possible. Do not engage in activities that kick up ash particles and associated chemicals into the air. Gently sweep indoor and outdoor hard surfaces followed by wet mopping. A damp cloth or wet mop may be used on lightly dusted areas. When wetting down ash, use as little water possible.

**Vacuum:** Use a high-efficiency particulate air (HEPA) type vacuum to clean dust-contaminated surfaces. Avoid using a typical household vacuum which will re-suspend the collected dust 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. Do not use leaf blowers or take other actions that will put ash into the air.

**Food and Water:** Wash any home-grown fruits or vegetables from trees or gardens before eating. Avoid bringing other food to the site, eating at the affected site, and keep the food in a sealed container to prevent contamination. Always wash your hands well, before eating. Consult with your drinking water provider to ensure the water is safe to drink.

**Disposal:** Ash from burned structures may be more hazardous than that of burned vegetation, due to the presence of synthetic or toxic materials stored in or used in the building of the structure. Lead, lead paint, and/or asbestos may have been used in the construction of older buildings. To ensure safety of people and to protect the environment, care must be taken to control dust and containment of debris during cleanup, storage, and transportation to a landfill.

Avoid washing ash into storm drains. Ash may be stored in plastic bags or other containers that will prevent it from being disturbed. If you suspect hazardous waste including asbestos is present, contact the \_\_\_\_\_ County Waste Management Authority at \_\_\_\_\_.