Ash Cleanup Resources for Museums

This reference is intended for collections and items with a minor amount of ash impact and not for items directly in the burn zone. Please be aware of the toxic nature of ash and burn debris. When in doubt, review FEMA guidelines for safe handling.

From Boulder County Public Health

There is potentially dangerous information circulating from community organizations and businesses in Boulder County regarding the safety of upsetting ash and debris to recover cherished belongings, and some organizations are offering equipment designed for sifting through ash.

Toxic, cancer-causing substances make recovering belongings dangerous.

BCPH strongly recommends that residents do not attempt to remove debris or clean-up properties that have been damaged or destroyed and under no circumstance should residents disturb ash regardless of what personal protective equipment (PPE) they may have.

For more information on how to safely clean up after a fire, visit:

https://www.bouldercounty.org/.../safe-cleanup-after-a-fire/

When returning to your home to look for belongings that may have survived the fire, FEMA provides basic guidelines from professional conservators on how to keep yourself and your loved-ones safe and healthy.

Wear personal protective equipment when handling fire and water damaged objects: long sleeves, long pants, sturdy shoes or boots, gloves; N95 mask; safety glasses or goggles, hard hat as necessary.

Photograph areas and objects before you move them. Exposure to heat may have caused objects and paper to become brittle. Review handling procedures before moving items. You will want to move items to a prepared area for cleaning.

Websites:

FEMA Resource for General Cleanup-

https://www.fema.gov/sites/default/files/documents/fema after-the-fire fact-sheet.pdf

American Institute for Conservation -

https://www.culturalheritage.org/resources/emergencies

https://www.culturalheritage.org/resources/emergencies/disaster-response-recovery

https://www.culturalheritage.org/resources/emergencies/disaster-response-recovery/fieldguide

https://www.culturalheritage.org/about-conservation/find-a-conservator

Northeast Document Conservation Center

https://www.nedcc.org/free-resources/disaster-assistance/

Remove soot and debris using dry methods from DRY objects only:

 $\frac{\text{https://www.youtube.com/watch?v=M6ApEyvQO-Q\&list=PLH0WXCtl2noiqtbY6nN11P-qKbf04lp7t\&index}{\text{x=8}}$

Prepare an area for cleaning – The area needs to have good air circulation, but not subject to strong breezes, and enough space to spread items out and keep notes with them. If you must disassemble items to clean them, plan for space to organize all the parts of the item. Clean the area thoroughly – dusting, sweeping, and vacuuming any ash or debris before beginning. Cover table surfaces with paper or plastic. (Suggestion – if you can, use a contrasting color so small or broken pieces are easy to see. For example, cutting open a black plastic garbage bag would make pieces of paper easier to see.) The covering should be cleaned or shaken outside between object cleanings.

Vacuuming – preferably using a vacuum with a HEPA filter and if there is enough structural integrity to the object. Hold the hose or nozzle at a distance and avoid direct contact with the object.

Avoid brushing the surface as soot and ash can be abrasive and ground into place. Let the suction do the work. If there are loose pieces or there is concern about small pieces breaking, place a piece of mesh over the nozzle of the vacuum cleaner (cotton fabric or a piece of nylons can be held over the nozzle) before vacuuming.

Soot sponges – these can be purchased online and locally and used once the loose debris has been removed by vacuuming. Avoid rubbing – simply press gently in place and move to another area.

Microchamber products are good for absorbing odors. The products contain zeolites (molecular sieves) that have been manufactured into boxes, cardboard, and interleaving paper and tissue. They can be purchased from Conservation Resources International: https://www.conservationresources.com/

Ozone:

A lot of commercial recovery services use ozone for recovering smoke damaged materials. Ozone is a powerful oxidizer and can actually damage organic-based materials such as rugs, furniture, paintings, books, maps, photographs, etc. Consider carefully the use of ozone in your recovery efforts.

Additional Info:

Consider cleaning the sidewalks and areas outside of the museum to prevent ash from being tracked indoors. A stick mat, like those used in construction, can capture debris off shoes as they enter the building. Changing air filters on HVAC equipment as soon as they become dirty will also aid in preventing the spread of ash.

Paper records and archival collections – Papers contained in closed boxes and filing cabinets should be minimally impacted by ash that is deposited on their containers. Clean the containers as described for objects above – vacuum to lift ash so it is not pushed into the containers – before opening them to check the contents.

Papers that were left on open shelves or stacked will need to be cleaned individually. Depending on the condition of the paper (how fragile or brittle), determine the best method of handling each piece individually. You may wish to support more fragile papers with a mylar sleeve. If vacuuming, be sure the paper is flat on a surface and the vacuum is not so close that it sucks in the paper and damages it.

It is unlikely that materials exposed to ash can be brought back to their original condition without work by a trained conservator. The fire is now part of our history. Do consider photographing or scanning materials that may be compromised by ash after they are cleaned to create a preservation copy.