

Disaster - First Actions

First Actions for Film, Tape and Discs

Immediate response

Some actions under immediate response and initial actions may be done simultaneously or may be on-going as information or circumstances change.

- 1) Determine source of disaster.
- 2) Contact authorities, experts and/or disaster response personnel.
- 3) Determine if location is safe to enter.

Note: At any step in the following work flow, experts can be called in to perform the work. The sooner experts are called upon and the more-inclusive the amount of work that is performed by experienced, trained personnel; the greater the probability and degree of recovery that can be expected. As such, the farther down the work-flow that procedures are attempted by in-house personnel, the greater the likelihood that salvageable materials may be lost due to inexperienced handling or lack of specialized knowledge and tools.

Initial actions

Once area is safe to enter

- 1) Determine nature of disaster effect.
 - A) Is contamination wet or dry?
 - B) Is disaster local or regional?
- 2) Minimize damage from ongoing disaster.
 - A) Block points of disaster ingress to vaults.
 - i) If safe, close connecting doors to minimize spread of contaminants.
 - ii) Cover openings to outside or heavily affected areas with tarps/sheets.
 - B) If building systems are involved (HVAC/ water mains, etc.), turn off systems.
 - C) If contaminants are still entering vaults, cover materials with sheets and/or divert contaminants with temporary walls, dikes or plastic sheets.
 - D) Move uncontaminated materials from areas of most likely ongoing contamination (floors, lower shelves, rooms with breaches, etc.).
- 3) Minimize effects of existing conditions.
 - A) Evacuate large amounts of contaminants (smoke, water, etc.). This is usually done by professional contractors.
 - B) Shore up or re-support any shelving that may be compromised.
 - C) Map out and record areas of contamination.

- i) Record degrees of contamination within each area.
 - ii) Code materials by area for later triage and review.
- D) If safe, remove undamaged materials from structurally compromised shelving.

Secondary actions

Once disaster is no longer active or ongoing

- 1) Update authorities and experts on conditions.
 - A) Confirm available resources.
 - B) Confirm existence/location of non-contaminated work and storage space (if available).
 - C) Confirm available personnel and material transport (if required).
 - D) Consult with experts on additional actions.
- 2) Determine safety level of handling contaminated materials.
 - A) Are biological contaminants present?
 - B) If flood/water, did water originate from or pass through sewage or treatment areas/pipes?
 - C) Most fire debris is not contact toxic. Was fire from unusual source (military or chemical storage/material processing)?
 - D) If toxic chemicals are stored on location, are chemical containers intact/unbreached?
 - E) IF TOXIC OR BIOLOGICAL CONTAMINATION IS SUSPECTED, DO NOT HANDLE MATERIALS. CALL EXPERTS.
- 3) If debris is judged non-harmful to humans, Remove high levels of contamination from immediate area of materials.
 - A) Note general levels of debris removed from around specific groups of materials to assist with later triage and review.
 - B) Vacuum up large amounts of dry debris around materials.
 - C) Mop up any standing water.
 - D) Begin on-going efforts to return vault areas to proper environmental conditions.
 - i) If flooding has occurred, extra dehumidification may be required.
 - ii) If fire, large-scale decontamination of the facility may be required
 - iii) If concussive or collapse, renovation or construction may be required.
 - iv) Some of this activity, such as building repair, may not be done while materials are in or exposed to the work site.

Initial Triage

- 1) Separate wet and dry materials.
 - A) Separate materials by degree of exposure.
 - B) Do not move or store wet and dry materials together to avoid spread of water contamination.

- 2) Identify the types of materials affected by the disaster. This is critical to any further actions as different materials may require different handling.
- 3) Further separate wet and dry materials by type (film, tape, disc; acetate, nitrate, polyester, ferric oxide, metal particle, etc.).
- 4) By type, separate dry materials by degree of contamination.
 - A) Distinguish between heavy/caked debris and “coated” materials.
 - B) Distinguish between coating and minor “dusting”.
- 5) Vacuum off dry debris on outside of material cases.
 - A) Use a vacuum with a hepa-filter to avoid spreading debris.
 - B) After vacuuming, wipe off caked or difficult to remove debris with a dry cloth.
 - C) Do not introduce moisture onto dry materials.
 - D) After wiping off containers, vacuum off any additional debris loosened during the wiping process.
- 6) By type, separate wet materials by degree of contamination.
 - A) Distinguish between submersion and liquid “spotting”.
 - B) Distinguish between “spotting” and damp.
- 7) Wipe off standing water on outside of material cases.
 - A) Use a cloth dampened with distilled water. Water can be mixed with isopropyl alcohol to increase cleaning efficiency.
 - B) Do not get additional liquid into the material case.
 - C) If multiple materials are packed in boxes, remove the materials and re-classify by the amount of contamination on the individual materials.

Initial handling-Basic stabilizing of materials

- 1) Remove materials from the contaminated environment (Macro-).
 - A) If an area in the vault is relatively clean, initial handling may be done on-site and the triaged material then moved to a clean environment for further handling.
 - B) If the vault area is still contaminated, a clean area must be located in which to handle the materials.
 - C) If materials are moved for initial handling, care must be taken to control the spread of contaminants in the clean environment.
- 2) Remove each AV material from contaminated case (Micro-environment).
 - A) Remove any contaminated paper or cardboard materials and place these in a plastic bag labeled so it can be matched to the flim/tape/disc at a later stage.
 - B) Confirm that the identifying labels on the case and the AV material are the same so it can be matched to the flim/tape/disc at a later stage.
 - C) Do not unwind or play contaminated AV materials.
- 3) If the material is dry, vacuum off any loose debris using a vacuum with a Hepa filter.
 - A) Lightly dust or dry wipe the majority of the remaining contamination from the reel, cassette, disc, film can, tape box or the jewel/amaray case
 - B) Vacuum a second time to remove loose debris.
 - C) Label the film/tape/disc and film can, tape box or the jewel/amaray case with a brief description of the problem and place in a clean, cool and dry environment.

- 4) If the material is wet and has visible physical contaminants, rinse off the majority of the contaminants with cool, distilled water.
 - A) Do not use tap or drinking water that contains chlorine as this may damage AV materials.
 - B) Drip-dry or blot off the majority of the water on the material.
 - C) Do not return the damp/wet materials to cases. Place the exposed reel/cassette, disc in a clean, cool and dry environment that has gentle air movement and, if possible, a positive air flow (air is being evacuated or drawn out of the environment)
 - D) DO NOT use heat to dry materials.
 - E) Film and discs should be positioned lying flat on an absorbent cloth or drying rack; discs should be positioned reflective side up. Magnetic tapes should be positioned upright, on edge (not lying flat).
 - F) When wiping discs, always use radial strokes, across the apparent grooves in the disc.
 - G) When wiping film or tape, always use a circular path, following the wind of the film or tape on the reel.

Stabilizing Materials - Treatment and Recovery

Note that professionals have both special equipment and extensive experience handling AV materials that have been exposed to disaster conditions. Whether you are going to use a specialist to work on your materials or you are going to attempt some in-house treatment, at the very least, consult with a specialist for guidance before attempting any stabilization or treatment procedures. Many in-house handling and treatment techniques are compromises between what is optimal and what can be done with limited resources and personnel. Experts will direct you on which procedures will assist in recovery and which may actually interfere with recovery or damage your materials.

When planning the recovery stage, it is necessary to prioritize your efforts to best use available, and frequently limited, resources. It is helpful, at this stage to note that, if the AV material is a commercially distributed copy, it is often more practical and economical to purchase another copy than to attempt treatment and recovery. In addition, if treatment and recovery of AV material is attempted, once treatment of the material is complete, it is often more practical or economical to replace the film can/tape box or the disc jewel/amaray case with new rather than treat or clean the easily replaced container.