

QD SOP-15 Procedure for Preservation of Liquid Soaked Documents

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Status: Retired

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Approved by Director: Dr. Guy Vallaro

Purpose: Standard for Preservation of Liquid Soaked Documents

This procedure provided guidance that should be used by forensic document for the preservation of liquid soaked documents. These procedures include evaluation of the sufficiency of the material requiring preservation. The particular methods employed in a given case will depend upon the nature of the material requiring preservation. This procedure does not cover all the steps that might be necessary to preserve unusual or uncommon liquid soaked documents. Consultation with a document conservationist, archivist, or related material expert, as well as reference materials, may be necessary.

Due to the extensive time required for some of these procedures and the type of procedures chosen can conflict with investigative needs and other forensic examinations. The examiner should communicate with the stakeholder of the time that will be needed for the completion of the preservation methods. Additionally, if other testing is needed, the examiner will discuss the preservation techniques with the Deputy Director and technical responsibility of the other disciplines involved to determine the best course of examination.

Responsibility:

Forensic Science Examiners assigned to the Questioned Documents Unit or performing casework in the Unit.

Safety:

The examiner should take necessary precautions and wear protective equipment when handling liquid soaked documents in case the liquid may be a hazardous material.

Equipment:

1. Lighting (natural, fluorescent) and alternate light sources
LED or fluorescent sources, or fiber optic lighting systems may be utilized. Transmitted lighting, side lighting, and vertical incident lighting have been found useful in a variety of situations.
2. Stereomicroscopes with fiber-optic lighting
3. Trays, tanks, and pliable screening.
4. Bone folder or similar device.
5. Polyester film or other encapsulation material, as required.
6. Imaging or other equipment for recording observations, as required.
7. Other apparatus, such as humidity chamber, laboratory oven, and chemicals, as appropriate.
8. Measuring devices

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9. Scanners
10. Cameras

Procedure:

1. Examine the evidence and detail all relevant observations with notes and photography. Images should be made to document the initial condition of the evidence and subsequently as needed.
2. Evaluate the documents for the following:
 - 1) The nature and condition of the documents.
 - 2) The nature of the liquid(s).
 - 3) The extent of the effect from the liquid(s).
3. Determine the appropriate procedures to optimize preservation of the document(s).
 - 1) For wet, single-page document(s):
 - a. Select a suitable method, such as submersion or drying, to unfold the document(s), if necessary.
 - b. Select a suitable method, such as air drying, freeze drying, or pressing, and dry the document(s).
 - 2) For wet, multi-page document(s):

Determine if the wet pages can be separated or unfolded without additional damage. This can be accomplished by submerging the document(s) in an appropriate liquid, such as water or mineral spirits. If the pages cannot be separated or unfolded, select a suitable drying process, such as air drying, freeze drying, or pressing.
 - 3) For dried document(s):

Attempt to separate, if necessary, and flatten the pages using appropriate equipment, such as bone folders, picks, probes, and tweezers. Prior to or during the attempt to separate and flatten the document(s), it may be necessary to re-humidify or re-submerge the document(s). Re-humidification with appropriate fluids may be accomplished with an atomizer, humidity chamber, or both. When re-submerging the document(s), an appropriate container and screen should be utilized.
 - 4) For documents received frozen:

Freeze dry the document(s) and treat as if it was a dry document. If time does not permit, thaw the document(s) and treat as wet document(s).
4. Encapsulate the document(s) upon completion, with materials such as polyester film or glass.

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Sources of Error: Not applicable

References:

SWGDOC Standard for Preservation of Liquid Soaked Documents ver. 2013-1

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