

Designation: E1188 - 11 (Reapproved 2017)

Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator¹

This standard is issued under the fixed designation E1188; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

- 1.1 This practice covers guidelines for the collection and preservation of information and physical items by any technical investigator pertaining to an incident that can be reasonably expected to be the subject of litigation.
- 1.2 This practice recommends generally accepted professional principles and operations, although the facts and issues of each situation require consideration, and frequently involve matters not expressly dealt with herein. Deviations from this practice should be based on specific articulable circumstances.
- 1.3 This practice offers a set of instructions for performing one or more specific operations. This standard cannot replace knowledge, skill or ability acquired through appropriate education, training, and experience and should be used in conjunction with sound professional judgment.
- 1.4 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.
- 1.5 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Significance and Use

2.1 This practice is intended for use by any technical investigator when investigating an incident that can be reasonably expected to be the subject of litigation. The intent is to obtain sufficient information and physical items to discover evidence associated with the incident and to preserve it for analysis.

- 2.2 The quality of evidence may change with time, therefore, special effort should be taken to capture and preserve evidence in an expeditious manner. This practice sets forth guidelines for the collection and preservation of evidence for further analysis.
- 2.3 Evidence that has been collected and preserved shall be identified with, and be traceable to, the incident. This practice sets forth guidelines for such procedures.

3. Procedure

3.1 Documentary Information—Collect information related to events and conditions occurring before, during, or after the incident. Documentary information may be held by any entity associated with the incident. Make a broad search to identify documents and, where possible, collect them. Obtain statements as early as feasible from all individuals associated with the incident and the recovery activity.

3.2 Physical Evidence:

- 3.2.1 Plan the investigation to protect physical evidence significant to the incident. The plan should consider the possibility of identity loss, physical loss, or the deterioration or destruction of information due to environmental effects or the recovery and collection activities. For each item considered to be significant to the incident, document, collect and preserve physical items and their information content as soon as possible.
- 3.2.2 Document conditions that prevent or interfere with the preservation of any potential evidence in the state in which it was found. This might include hazardous or accessibility conditions, weather conditions, or other existing complications.
- 3.2.3 Assign a unique identifier to each item collected and include this information in a label securely attached to the item or as documentation on the item's container and enter the identifying information on a log sheet together with a brief description of the item. The evidence documentation should also clearly include any specific details necessary for preservation of the item, such as temperature control or special handling instructions.

¹ This practice is under the jurisdiction of ASTM Committee E30 on Forensic Sciences and is the direct responsibility of Subcommittee E30.11 on Interdisciplinary Forensic Science Standards.

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- 3.3 Photographic Documentation:
- 3.3.1 Commence photographic documentation as soon as possible after the incident. Document the scene of the incident and the condition of items involved.
- 3.3.2 Potential evidence should be photographed in the position where it is first observed by the investigator. If items involved in the incident are disassembled or subjected to destructive testing, each step of the disassembly or testing shall be documented by contemporaneous photographs or videotaping.
- 3.3.3 The photographic technique utilized should be of sufficient resolution to preserve the essential aspects of the appearance of the evidence being photographed, and should also be capable of producing images that can be reproduced and enlarged. The date, time, and location of the photography or videotaping, and the identity of the photographer or videotaper shall be documented.
- 3.4 Validation and Authentication—To support the admissibility of evidence and information, the validity and authenticity must be established and the chain of custody traceable. Validity and authenticity of evidence is established by documentation that defines the relationship of the evidence to the incident. Parts of this documentation may be located within the records of different agencies; however, it is the intention of this practice that the history of custody should be capable of being reconstructed to reflect the entire lifetime of the evidence. Such documentation includes, but is not limited to, the following:
- 3.4.1 *Initial Collection Information*—Document the following:
 - 3.4.1.1 Identity of the evidence and any unique labeling,

- 3.4.1.2 Location where the evidence was found,
- 3.4.1.3 Date and time the evidence was found or obtained, and
- 3.4.1.4 Name and affiliation of the individual who initially removed the evidence from the incident scene.
- 3.4.2 Subsequent Custody Transfer Information—Contemporaneous documentation of the following (information/documentation may not be available all in the same location):
- 3.4.2.1 Name and affiliation of each subsequent custodian along with the date of transfer.
- 3.4.2.2 Modification or repackaging of items by each custodian, and
- 3.4.2.3 Configuration and condition when transferred to the new custodian.
- 3.5 It is preferred that evidence and documentation should remain unchanged to the fullest extent possible.
- 3.5.1 If transfer of information or items to a more appropriate storage medium is necessary, this is permitted provided that information loss is minimized.
- 3.5.2 If an agency or company has a written document or evidence retention policy, that policy should be followed. These types of policies are routinely found when dealing with evidence that is potentially hazardous or present in large volumes.

4. Keywords

4.1 evidence collection; evidence documentation; forensic engineers; forensic sciences; photographic documentation; technical investigator

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