



Standard Practice for Examining And Preparing Items That Are Or May Become Involved In Criminal or Civil Litigation¹

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1. Scope

1.1 This practice sets forth guidelines for the examination and testing of actual items or systems (hereinafter termed evidence) that may have been involved in a specific incident that are or may be reasonably expected to be the subject of civil or criminal litigation. This practice is intended to become applicable when it is determined that examination or testing of evidence is required, and such examination is likely to change the nature, state or condition of the evidence.

1.2 This practice recommends generally acceptable professional practice, although the facts and issues of each situation may require specific considerations not expressly addressed herein. Deviations from this practice are not necessarily wrong or inferior, but such deviations should be justified and documented.

1.3 *This practice offers a set of instructions for performing one or more specific operations. This document cannot replace education, training, or experience and should be used in conjunction with professional judgment. Not all aspects of this practice may be applicable in all circumstances.*

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.*

2. Referenced Documents

2.1 ASTM Standards:²

E 1188 Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator

E 1459 Guide for Physical Evidence Labeling and Related Documentation

E 1492 Practice for Receiving, Documenting, Storing, and Retrieving Evidence in a Forensic Science Laboratory

E 1843 Guide for Sexual Assault Investigation, Examination, and Evidence Collection

2.2 Other Documents:

NFPA 921 Guide for Fire and Explosion Investigations³

3. Terminology

3.1 Definitions:

3.2 *destructive testing*— testing, examination, re-examination, disassembly, or other actions likely to alter the original, as-found nature, state or condition of items of evidence so as to preclude or adversely affect additional examination and testing.

3.3 *Spoliation of evidence*—the loss, destruction, or material alteration of an object or document that is evidence or potential evidence in a legal proceeding by one who has the responsibility for its preservation. Spoliation of evidence may occur when the movement, change or destruction of evidence, or alteration of the scene significantly impairs the opportunity of other interested parties to obtain the same evidentiary value from the evidence as did any prior investigator.

4. Significance and Use

4.1 This practice establishes procedures to be followed to document the nature, state, or condition of items of evidence. It also describes specific actions that are required if planned testing, examination, disassembly, or other actions are likely to alter the nature, state, or condition of the evidence so as to preclude or adversely limit additional examination or testing.

5. Procedure

5.1 The person, firm, or agency conducting examinations or tests of the evidence should document the nature, state, and condition of the evidence by descriptive, photographic, or other suitable methods prior to any test, examination, re-examination, disassembly, or alteration.

5.1.1 Attempt to determine any change(s), alteration(s) or contamination of the evidence subsequent to the incident, and document those findings.

5.2 It is recognized that certain characteristics cannot be determined without destructive testing. Non-destructive tests

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For Annual Book of ASTM Standards volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02169-7471, <http://www.nfpa.org>.

and examinations should be carried out prior to any destructive testing, and destructive testing should be kept to a minimum, and thoroughly documented. If exemplars can be used instead of the subject items, then exemplars should be used to minimize consumption of the subject item. If proposed tests, examinations, or other actions are likely to alter the nature, state, or condition of the evidence so as to preclude or limit additional examination or testing, the person, firm, or agency planning to perform the proposed action should take the following steps:

5.2.1 Notify its client that the proposed action is likely to alter the nature, state, or condition of the evidence so as to preclude or limit additional examination or testing of the evidence.

5.2.2 Recommend that its client notify other interested parties of the proposed action described in 5.2 and,

5.2.3 Recommend to its client that other interested parties be given the opportunity to participate in the procedures described in 5.2 or to witness and record any such actions.

5.3 If compelling reasons exist for performing the actions without notifying other parties, then the person, firm or agency planning the actions should draft and preserve documentation supporting the compelling reasons for such action.

5.3.1 In some criminal cases, notification is superfluous, or would unnecessarily impede an investigation. Suspects or criminal defendants in drug possession cases, for example, can be presumed to be on notice that seized substances will be tested. If possible, the examiner should, however, leave a sufficient quantity of the substance intact to allow independent testing.

5.3.2 Investigators or analysts working on evidence collected for criminal or civil cases should understand that there may be parties to a related potential civil or criminal case whose interests could be prejudiced if evidence is not handled properly.

5.4 Upon completion of testing or examination, preserve and label each item in a manner that protects and maintains its identity and integrity.

5.4.1 For handling evidence related to sexual assault, follow Guide E 1843.

5.4.2 For handling evidence related to fires, and to avoid spoilage in such cases, follow NFPA 921.

5.4.3 For documenting the chain of custody, follow Practice E 1492 .

6. Documentation

6.1 Document methods used and results obtained in tests, examinations, disassembly, or other actions conducted in compliance with this practice.

6.2 Document the procedures used according to Practice E 1188.

6.3 Label any new items of evidence resulting from the testing according to the procedures set forth in Guide E 1459.

7. Keywords

7.1 evidence collection and preservation; forensic engineers; forensic sciences

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