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FIRE SAFETY

Standards Opposing Spoliation in Fire & Explosion Investigations

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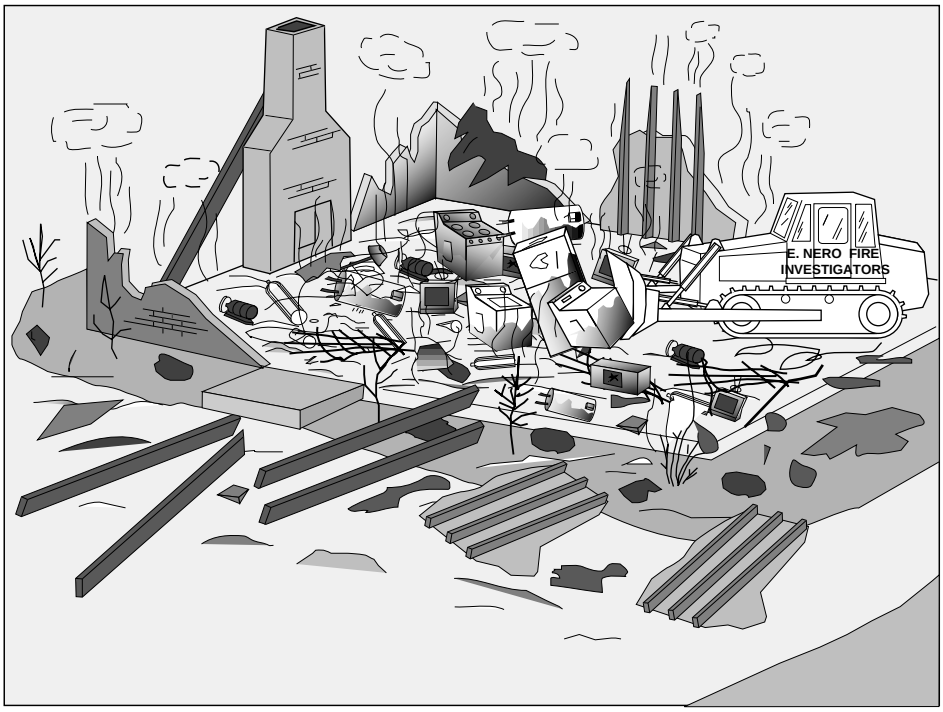

Spoliation in fire and explosion investigation is encountered quite frequently despite nationally accepted professional criteria which clearly prohibit it. Fire scenes can be quite extensive and there can be many potential ignition sources; it is very convenient for an investigator to limit the scope of the investigation and not clutter documentation and evidence preservation with things he or his client are not interested in or which do not support their opinions.

A common spoliation scenario is the discarding of all potential ignition sources except one appliance or piece of equipment an investigator finds at what he deduces is the fire's point of origin. This one item is retained and the scene repaired or torn down before litigation begins. The point of origin typically will have been determined by an analysis of fire patterns using a methodology as scientific as tea leaf reading [1]. For example, only part of the fire scene will have been photographically documented; there may be no dimensions or identification of important factors such as interior finish, construction, etc. The single artifact is turned over to an engineer without the credentials, experience, or equipment to determine why the equipment or appliance started the fire or caused the explosion.

[1] Triodyne Fire and Explosion Engineers, Inc.

Generally, neither the initial investigator nor the engineer will have followed accepted technical criteria for such investigations and analyses, i.e., NFPA 921 and ASTM publications E-1188, E-860 and E-678. These standards do not permit incomplete scene documentation, the discarding of potential evidence, unilateral destructive examinations, or speculation and guesses in identifying the fire origin or cause.

Defense attorneys need to be aware of these NFPA and ASTM documents and what is required by each. This allows them to evaluate whether the plaintiff's experts have followed them and to ensure their own experts comply. The defense has several options available when spoliation occurs. Discovery sanctions may be imposed if the spoliation occurs after discovery has commenced, or a motion for summary judgment may be entered where the destroyed evidence prevents the defense from establishing their theory of defense. Additionally, a rebuttable presumption may arise that the destroyed evidence would have been unfavorable to the spoliator. There is an increasing amount of case law on spoliation; a discussion of this is included in Reference 2.

The National Fire Protection Association's *Guide for Fire and Explosion Investigation*, NFPA 921, is a consensus of what is proper, legitimate and valid in fire and explosion investigation. It covers fire patterns, documentation of the scene, evidence, origin determination, cause determination, competent ignition sources, explosions and other relevant topics. NFPA 921 is generally quite specific in identifying methods for documentation and evidence collection since criminal prosecutions or civil litigation may follow as the result of the investigation. NFPA 921 also states that if the cause of a fire cannot be identified with a probability greater than 50 percent, the cause of the fire shall be classified as undetermined. [3]

Equally important in most investigations are the American Society for Testing and Materials' Standard Practices covering forensic investigations. Scene documentation is covered in ASTM E-1188, *Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator:* "The intent is to obtain sufficient information and physical items to discover the cause(s) of the incident and to preserve them for later investigators." The investigation should be planned to protect physical items significant to the incident. Photographs should document the scene of the incident and the condition of elements involved. "If items involved in the incident are disassembled or subjected to destruction testing, each step should be photographically documented." [4]

ASTM E-860, *Standard Practice for Examining and Testing Items That Are or May Become Involved in Product Liability Litigation,* states that whenever any test or examination or other action will alter the evidence, the person, or firm, conducting the examination should notify his client. The client should be counseled to notify other parties of interest and give them the opportunity to examine the artifact and witness the examination. [5]

ASTM E-678, *Standard Practice for Evaluation of Technical Data,* covers the evaluation of technical data, criteria for the evaluation, and considerations which constitute a proper basis for the formation of technical opinions in product liability matters. The expert needs to identify and explain each technical hypothesis and judgmental criterion used in an evaluation. "The source, technical basis, and relationship to all known incident data of each such hypothesis and criterion should be specified." If the data permits alternative hypotheses, then the relative technical merits of each should be considered. Conclusions should be consistent with all known facts and with accepted engineering and physical principles. Any inconsistencies should be identified and explained. [6]

REFERENCES

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