



Coffee Break Training - Fire Investigation Series

Fire/Arson and Explosion Investigation Curriculum: The Importance of NFPA 1033 in Fire Investigation

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Learning Objective: The student shall be able to explain the importance of National Fire Protection Association (NFPA) 1033 in fire investigation.

NFPA 1033, *Standard for Professional Qualifications for Fire Investigator* is an extremely important document that identifies the professional level of job performance requirements for fire investigators. NFPA 1033 is a standard developed through the NFPA consensus process and guided by a technical committee comprised of representatives from various organizations in the field of fire investigation. It is revised every five years. NFPA 1033 serves as one of the primary references used by the National Fire Academy to support its fire/arson-related training and education programs.

A new edition of NFPA 1033 is scheduled to be released in 2014. The 2014 edition contains some important changes. The list of 13 topics that investigators are expected to have knowledge of beyond the high-school level has been expanded to 16 topics. The three new topics are **fire protection systems, evidence documentation, collection and preservation, and electricity and electrical systems**. Additional changes include:

- New definitions have been added for the terms **fire dynamics, fire investigation technology** and **fire science**, which were not previously defined.
- The explanation of the scientific method in Annex A has been revised to be consistent with the steps outlined in NFPA 921, *Guide for Fire and Explosion Investigations* — Basic Methodology.
- Section 4.2 has been revised, expanding an investigator's duties in terms of document review when the incident scene is no longer available.
- In Chapter 4, a section on fire pattern interpretation expands an investigator's duties concerning fire pattern interpretation, now requiring that each individual pattern be evaluated with respect to the burning characteristics of the material involved. Each pattern is then evaluated in context and in relation to all of the patterns observed and the mechanisms of heat transfer that led to the formation of the pattern.
- In Chapter 4, the section on evidence collection has been revised to expand the investigator's duties with respect to evidence collection, now placing an emphasis on not only retaining relevant evidence, but also on documenting, collecting and preserving evidence.

NFPA 1033 is a document that fire investigators can expect defense attorneys to use to challenge their professional qualifications to render an opinion as an expert in fire origin and cause determination. It is critical that investigators and their organizations are thoroughly familiar with all sections of the standard and not only focus on the information contained in NFPA 921. NFPA 1033 is just as, if not more, important than NFPA 921, and all fire investigators should be familiar with its requirements and potential uses in legal proceedings.

Additional information and copies of NFPA 1033 may be obtained at www.nfpa.org.



NFPA 1033 is the professional qualifications standard that applies to fire investigators that is often used to establish their professional qualifications to serve as expert witnesses.