

NFPA 921 AND PROPER LOSS SITE INVESTIGATION TECHNIQUES

**Mark T. Mullen, Esq.
COZEN AND O'CONNOR
1900 Market Street
Philadelphia, PA 19103
(800) 523-2900
(215) 665-2000
mmullen@cozen.com**

**Atlanta, GA
Charlotte, NC
Dallas, TX
Los Angeles, CA
Mt. Laurel, NJ
New York, NY
Newark, NJ
San Diego, CA
Seattle, WA
W. Conshohocken, PA
Westmont, NJ
Wilmington, DE
London, UK**

These seminar materials are intended to raise questions concerning current issues in the law. They are not intended to provide legal advice. Readers should not act or rely on this material without seeking specific legal advice on matters which concern them.

Copyright © 1999 Cozen and O'Connor
ALL RIGHTS RESERVED

NFPA 921 AND PROPER LOSS SITE INVESTIGATION TECHNIQUES

I. INTRODUCTION

The National Fire Protection Association was organized in 1896 to promote the science and improve the methods of fire protection and prevention. It is a non-profit, educational, voluntary membership organization internationally recognized as an authoritative source for fire prevention, fire-fighting procedures, fire protection, and, now, fire investigation.

In 1992 the NFPA published its first Guide for Fire and Explosion Investigations, NFPA 921. There was a separate publication for electrical fire investigations, NFPA 907M. Effective February 7, 1995, the Standards Council issued a new, improved, more detailed Guide, combining 907M and 921 and adding significant new information. There is a Technical Committee on Fire Investigations with members and alternates from highly respected industry, government, and private organizations. The Committee has primary responsibility for documents relating to techniques to be used in investigating fires and facilities designed to assist or to be used in developing or verifying data needed by fire investigators in their determination of the origin and spread of fires.

NFPA 921 has assumed substantially greater influence since 1992 due to a combination of factors: the exemplary track record of NFPA in standard-setting for fire prevention, protection and fire-fighting naturally carried over to fire investigation; the explosion of spoliation issues; and the United States Supreme Court decision in *Daubert v. Merrell Dow Pharmaceutical sAnc.*, 509 U.S. 579 (1993) (imposing duty on federal trial courts to assess whether an expert's methodology is sound prior to admitting expert testimony.)

II. ORIGIN AND DEVELOPMENT OF NFPA 921

The first edition of NFPA 921 was issued in 1992 and focused primarily on the determination of origin and causes of fires and explosions involving structures. It was developed by the Committee on Fire Investigations to assist in improving the fire investigation process and the quality of information on fires resulting from the investigation process. It was intended for use by both public sector employees with statutory responsibility for fire investigation and private sector investigators working for insurance companies or for litigation. The goal of the Committee is to provide guidance to investigators that is based on accepted scientific principals or scientific research.

The Guide is a work in progress and future editions will be issued addressing new topics and, perhaps, debunking previous assumptions such as some of the information addressed in the 1995 edition.

III. INFORMATION ADDRESSED

NFPA 921 is made up of nineteen chapters with two appendices. The chapters include: Administration; Basic Methodology; Basic Fire Science; Fire Patterns; Legal Considerations; Planning the Investigation; Sources of Information; Recording the Scene; Physical Evidence; Safety; Origin Determination; Cause Determination; Explosions; Electricity and Fire; Investigation of Motor Vehicle Fires; Management of Major Investigation; Incendiary Fires; Appliances; and Referenced Publications.

Chapter One, Administration, contains definitions of technical terms used in the Guide. Chapter Two, Basic Methodology, sets forth the systematic approach for fire investigation that is the goal of the Guide and it should be very helpful to counsel in subrogation cases for resisting Daubert challenges to experts in fire cases, particularly cause and origin experts. Chapter Three, Basic Fire Science, is a primer for basic concepts of the chemistry and physics involved in fires. Chapter Four, Fire Patterns, addresses basic concepts relating to reading fire patterns and the telltale signs a fire leaves after it is extinguished. It also addresses "false" burn patterns and some common misconceptions in reading burn patterns.

Chapter Five, Legal Considerations, moves into a completely different area. It provides basic legal information with respect to issues that typically arise at loss sites. It also deals with legal issues relating to arson. Chapter Six, Planning the Investigation, raises and deals with issues that should be addressed prior to the actual on-scene investigation. Chapter Seven, Sources of Information, relates to the part of the investigation outside of the actual fire scene. It deals with interviews and has a helpful section on governmental and private sources of information.

Chapter Eight, Recording the Scene, involves methodical documentation of the fire scene for future review or potential litigation. It involves photographs, video tapes, diagrams, maps, overlays, tape recordings, and notes. A new section provides that utilities (gas, electric, entrances and controls) should be photographed along with gas appliances and the electrical panel. Chapter Nine, Physical Evidence, is a new and very important addition to NFPA 921. As detailed as this chapter is, some courts, especially those in Pennsylvania, are requiring plaintiffs in product liability cases to preserve evidence at all costs or suffer dismissal of the action. We now strongly recommend that any early identified potential defendants be placed on notice of the loss and invited to the fire scene as soon as possible. Obviously, the access to the scene will be controlled but it may alleviate potential spoliation problems if an invitation is extended and either accepted or declined. Chapter Ten, Safety, is also a new section and relates to protecting investigators and others at the fire scene. Chapter Eleven, Origin Determination, and Chapter Twelve, Cause Determination, are unchanged except for one critical addition in Chapter Twelve. Chapter Eleven recommends procedures to follow in determining the origin of the fire and its spread. The determination of the cause of a fire "requires the identification of those circumstances and factors that were necessary for the fire to have occurred." A critical new addition to Chapter Twelve is section 12.6 relating to opinions. It provides four levels of confidence for investigators when forming opinions from hypotheses about fires or explosions. The four levels are conclusive, probable, possible, and suspected. A definition is provided for each but as far as plaintiffs are concerned in civil litigation, the "possible" and "suspected" levels of confidence will likely not do us much good. If an expert does not hold his opinion with either "probable" or "conclusive" levels of confidence, the opinion will probably not be accepted by a court because it does not meet the standard of reasonable degree of certainty generally required of experts in most jurisdictions. If your cause and origin investigator insists on putting a level of confidence in his report you should know what the level of confidence is before he puts it in writing.

Chapter Thirteen, Explosions, is new and provides the specific guidelines in those cases that involve the ignition of flammable vapors. Chapter Fourteen, Electricity and Fire, is also new and is essentially adapted from the former 907M. It provides excellent basic information concerning a very difficult concept for many to grasp, electricity.

Chapter Fifteen, Investigation of Motor Vehicle fires, is new and very helpful for an expert or adjuster handling this particular type of claim.

Chapter Sixteen, Management of Major Investigations, is also new and is principally concerned with the investigation of major fire and explosion incidents as a management function, with an organizational and managerial perspective. Chapter Seventeen, Incendiary Fires, deals with fires that are deliberately ignited under circumstances in which the person knows the fire should not be ignited. It provides guidance to assist the investigator in identifying incendiary fires and documenting evidence regarding origin and cause. It is also a new section. Chapter Eighteen, Appliances, is a new addition and focuses on the analysis of appliances as it relates to the investigation of the cause of fires. Chapter Nineteen, Referenced Publications, provides a very useful list of documents or portions of documents referenced within NFPA 921.

IV. IMPORTANCE OF NFPA 921 TO THE CLAIMS ADJUSTER, SUBROGATION PERSONNEL, EXPERT, AND COUNSEL

Although NFPA 921 itself states that it is only a "guide," it is rapidly becoming a standard to which experts will have to measure their investigations under cross examination in depositions and at trial. As a result, it is essential that all involved in subrogation and arson investigations familiarize themselves with it. If you have a cause and origin expert who is not familiar with it yet, you probably should get yourself a new expert. Even though Chapter 1.2 itself states that "this document is not designed to encompass all of the necessary components of a complete investigation or analysis of any one case," an expert had better be prepared to defend why his investigation deviated from NFPA 921 or did not encompass things from it. There is an excellent article authored by Terry-Dawn Hewitt that appeared in the March/April 1996 NFPA Journal and the March 1996 edition of Fire an Arson Investigator dealing with the role of NFPA 921 in fire litigation.

With respect to spoliation, clever defense lawyers will no doubt soon refer to NFPA 921 if it has not been followed and potential critical evidence has not been preserved. If a universally recognized authority such as the National Fire Protection Association recommends something in its guide on fire investigation that is not followed, a court will have ready authority to justify an adverse inference, evidence preclusion, or, the ultimate sanction, dismissal of a claim.

In addition, under Daubert, federal trial judges are required to perform a gatekeeping role to ensure that expert testimony is reliable. The cases interpreting Daubert uniformly suggest that the court, in deciding the preliminary question of admissibility, must focus on the methodology used rather than the conclusions reached. Chapter Two of NFPA 921 states that fire investigation is a complex endeavor involving both art and science. NFPA 921 should be the blueprint for convincing the court that the expert testimony is reliable because the methodology followed, NFPA 921, is a universally recognized approach based upon accepted scientific principles.

V. CONCLUSION

Copies of all NFPA publications can be obtained through the National Fire Protection Association at One Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101. In addition, The American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103 publishes standards for testing, several of which can be obtained from ASTM. ASTM

1188-87, Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator, and designation E860-82, Standard Practice for Examining and Testing Items that Are or May Become Involved in Products Liability Litigation, are also standards that adjusters, experts and counsel should be aware of for potential spoliation claims.