Incident Investigation Evidence Management
Learning From Incidents

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Abstract

This paper presents practical lessons learned from incident investigation physical evidence gathering, management, documentation, and analysis experiences. Evidence provides the foundation for successful identification of underlying root causes of incidents. Process safety events are sometimes accompanied by severe consequences, and much of the evidence that might otherwise be available has been destroyed by the event. Evidence management is also critical in litigation and forensic concerns. This presentation provides an overview of physical evidence issues associated with major process safety incidents, such as fires, explosions and releases of hazardous materials. Potential sources of useful evidence are addressed as well as the initial reconnoiter, chain-of-custody, photography, evidence storage, and the significance of gathering information on position evidence. There are a few simple measures that investigators can take to prevent or minimize evidence spoilage to help ensure successful identification of the underlying causes of the incident. This presentation includes a summary of evidence analysis methods and resources. Although the primary focus is on major catastrophic process related events, the majority of information is also applicable to events with less severe consequences.