



B129 An Atypical Cause of Fire: CCTV Evidence to the Rescue

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After attending this presentation, attendees will recognize the importance of CCTV evidence when investigating a large fire scene; understand how civil litigation can direct and/or curtail an investigation; implement a multidisciplinary and multi-agency investigation; learn of an unusual substrate for spontaneous combustion; and learn how to confirm the occurrence of spontaneous combustion using laboratory facilities.

This case study will highlight the differences between the UK and the USA in the way that civil litigation can influence the extent of a fire investigation. In addition, it will demonstrate the large differences in the way in which fire investigation is undertaken in the UK and the USA.

The presentation will reinforce the basic methodology of fire investigation, refresh investigator's memories concerning aspects that should not be overlooked and how best to exploit a multi-agency approach. Furthermore, the case will reveal an unusual substrate that is capable of self-heating, thus making investigators aware of the potential of this material to spontaneously combust. The presentation will also explain how best to use the available laboratory facilities to confirm or refute initial suspicions of self-heating.

On a dry October Sunday afternoon a small fire was discovered in the external storage area of a large expanded foam factory. Due to a number of factors, including a strong south easterly wind, the fire escalated into one of London's largest fires for a decade and resulted in a £26 million loss. The ensuing investigation lasted several months and is an excellent example of a multi-disciplinary and multi-agency approach. The potential civil litigation meant that the investigation incorporated many facets of fire investigation, from sprinkler systems to fire fighting procedures, and highlights the (sometimes frustrating) role that civil litigation plays in directing an investigation.

CCTV evidence proved invaluable in identifying the point of origin of the fire. Without the video evidence, the cause of the fire may well have been recorded as deliberate ignition. As it turns out the fire was initiated in a much more unusual manner. Subsequent laboratory tests confirmed the initial conclusions and demonstrated that the fire was caused by self-heating (spontaneous combustion).

Spontaneous, Combustion, CCTV