Fire Origin & Cause

Incendiary Fire Investigation of an Adult Diaper Supplier

The Problem

An adult diaper supplier, insured by our client, suffered a fire at their facility, causing severe property damage due to a prolonged burn time and extensive fire suppression to control the still burning diapers. This, combined with the owner's multiple hypotheses on potential ignition scenarios, added to the complexity of the investigation.

Our Investigation

Advanced Analysis (now a division of Pete Fowler Construction) was hired by an independent claims representative to investigate the fire's origin and cause. During the initial scene examination, our investigator noticed signs that the business may have been inactive at the time of the fire, with possible missing contents. The easternmost production line had significant damage and burn patterns on the east wall, suggesting the fire may have started in that area. Although hardwired electrical components were present along the east wall, there were no signs of malfunctioning or electrical arcing.

Our investigator revisited the property with a canine trained in accelerant detection, which identified the northeast roll-up door as the area of origin. An open one-gallon container of flammable liquid, intended for cleaning sticky substances, was discovered in the building. Moreover, we confirmed several computers were missing from various desks within the offices, with connection cords left in place but the CPUs unaccounted for.

Investigators returned months later to remove debris and observed concrete spalling in front of the northeast warehouse overhead door, indicating high temperatures possibly linked to flammable liquid displacement. Our investigator noticed that the alarm system had been removed, which was later determined to be as a result of nonpayment. The investigation revealed the insured's financial struggles, providing a potential motive for fraud.

Conclusions

The fire was deemed incendiary, and evidence pointed to the insured as the likely culprit. The determination was based on scene examination, forensic engineering analysis, and eyewitness reports of a vehicle similar to the insured's car and an individual entering the property just seconds before the explosion. All other sources of ignition were ruled out by forensic examination. Although the insured suggested that arc welding slag was to blame, interviews with witnesses and lack of evidence led to its rejection. Our findings resulted in the denial of the claim, and no appeal was made.

