

Solvent company fined for fire which led to a huge blaze

A solvent company has been fined after using unsafe methods “fraught with risk” to handle highly flammable chemicals.

Workers fled for their lives when a fire, which broke out when a flammable vapour ignited, quickly spread to other containers of dangerous solvent mixtures, causing some of them to explode. Seven of Doncaster firm Solvents With Safety’s workforce were present at the time, but all managed to escape unharmed after a quick-thinking supervisor ordered them to evacuate the site and called the fire service. The initial blaze was described as escalating to a raging inferno within minutes.

Doncaster magistrates heard that employees were transferring highly-flammable toluene from a bulk container into a smaller drum ahead of the incident, at the company’s Plumtree Farm Industrial Estate premises on 16 June 2010. They were attempting to fill the drum using a pipe from a container; however, the pipe they used was too short. Consequently, the liquid was dropped from the pipe into the drum, as part of a process called ‘splash filling’.

The flash point of toluene is just 4 °C, and the court heard that on a “hot” June evening the chemical would have had a flammable vapour over its surface. The build up of static electricity in the drum is then thought to have caused the ignition, which quickly spread.



An HSE investigation found the ‘splash filling’ method to be wholly inappropriate and it posed a clear safety risk that wasn’t properly assessed.

HSE inspector, Jayne Towey, described the method as “fraught with risk. The Solvents With Safety workforce was extremely lucky to escape unharmed from this incident. The size and scale of the fire was immense; it took hold in minutes and caused total devastation to the company’s premises. Lives were needlessly put at risk because there would have been no blaze at all had the company taken more care with the decanting operation.”

The safety of workers was further compromised by the fact that the pipe used to fill the containers wasn’t earthed, and because the protective clothing worn by workers was not anti-static.

Solvents With Safety had been twice previously warned by HSE about the dangers of splash filling in letters in May 2006 and December 2007. Solvents With Safety pleaded guilty to breaching reg.6(1) of the Dangerous Substances and Explosive Atmospheres Regulations 2002, and was fined £20,000 plus £6,860 in costs.

Ms Towey added: “Companies working with dangerous substances must take extreme care at all times and in all aspects of their operations. That clearly didn’t happen on this occasion and it could have had far-reaching consequences.”

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