Fire and Explosion Control Measures for Biomass Storage and Handling at Lynemouth Power Station.

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Abstract

A background in the mining industry gives an individual a wide experience in the techniques and processes utilised in detecting and mitigating fire and explosion hazards below ground. These techniques and processes have been developed over centuries and are relevant and transferable to the biomass handling industry.

This paper explains how the author, armed with mining experience, set out on a journey throughout the UK, Europe and Canada to explore the equipment, processes and techniques that have been employed for the safe and efficient handling of wood pellets. The paper also explores what can and has gone wrong, lessons that have been learned and further mitigation methods that can be employed.

The presentation details this journey and presents the final design that was implemented at Lynemouth Power Station.

Keywords: Biomass conversion, fire and explosion, Control and mitigation. Mining experience.