PSF
Process Safety Forum
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Learning Brief 018

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Lessons from the Grenfell Tower Accident

This learning brief is shared in order to promote learning and improve safety. You should seek appropriate guidance regarding the relevance, accuracy, and completeness of this alert to your circumstances prior to implementation.

Theme

Assets - Plant & Equipment (Design), Configuration Control, Management of Change, Accountabilities, Management of Contractors, Management Systems, Culture

Summary of Learning

Photograph: Loz Pycock from London, UK

When such a significant accident as the Grenfell Tower fire occurs, responsible organisations make it their business to learn from the tragedy – Grenfell touches on many process safety themes. Following a review of the *Building a Safer Future Independent Review of Building Regulations and Fire Safety: Final Report* published in May 2018, the Process Safety Forum (PSF) identified the need for a Learning Brief to encourage high hazard organisations to carry out a deeper review of incidents and learnings from within their business (and more widely) to identify weaker signals and potential causal factors.

Description

The loss of life arising from the fire at Grenfell Tower arose due to a complex succession of failures, which have emerged through a number of investigations and will continue to emerge during the Inquiry These failures highlight the importance of reviewing incidents and learnings within a business and importantly determining if failures have been shown as causal factors in other incidents or near misses. Some of the key failures are described in this Learning Brief.

Assets – Plant & Equipment (Design) and Configuration Control

Failure to understand that the basis of the Grenfell Tower design was that it was constructed from materials of minimal combustibility, with concrete walls and effective fire doors. This underpinned the stay-put policy. In addition, there was a failure to look at the system as a whole, and the interactions between sub-systems.

Within high hazard organisations, do the decision makers adequately understand the original design intent of the system / plant and the interactions between sub-systems. Is this knowledge available to all who need it?

Management of Change

When the refurbishment was undertaken in 2015/16 which involved the addition of Reynobond PE (Polyethylene cored) ACM (Aluminium Composite Material) cladding, stakeholders failed to understand that this 'change' was a departure from design intent.

Do Management of Change processes adequately consider departure from design intent, and possible unintended consequences during the change processes?

Accountabilities and Management of Contractors

The Kensington and Chelsea Tenants Management Organisation hired the construction firm Rydon as the lead contractor on the refurbishment project, and numerous other contractors and sub-contractors were involved in separate elements of the refurbishment and supply of materials. Dame Judith Hackitt discussed the need for clearer accountability over who is responsible for building safety during the construction, refurbishment and on-going management [of high-rise buildings].

Is the supply chain similarly complex within a high hazard organisation, and are accountabilities for building and system safety well-defined?

Management of Contractors, Management Systems

Cladding and fire doors used in Grenfell Tower were subject to testing and certification. However, the independent public inquiry has established that the cladding failed to meet Building Regulations, and some fire doors failed to meet the required performance standard of 30 minutes for fire resistance.

Where high hazard organisations rely on 3rd parties to test and certify safety structures, systems and components, how is the parent organisation assuring itself that these tests and certifications are being carried out correctly?

Culture

Dame Judith Hackitt noted that one of the key issues that underpinned the system failures of Grenfell Tower was a culture of indifference.

Is there sufficient focus on safety, or is the primary motivation to do things quickly and cheaply? Are there signs that the balance of priorities could drive poor decision making within your own organisations? Do Leaders give clear messages on safety priorities?

Consider these themes within your organisation. Have failures relating to any of these themes been shown as causal factors to recent incidents or near misses?

Further reading

Grenfell Tower Inquiry: Phase 1 report Overview Report of the Public Inquiry into the Fire at Grenfell Tower on 14 June 2019. Chairman: The Rt Hon Sir Martin Moore-Bick

Building A Safety Future. Independent Review of Building Regulations & Fire Safety. Final Report May 2018. Dame Judith Hackitt DBE FREng