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SAFETY ALERT

Overfill of Helifuel Tank and Subsequent Ignition

Description of Process:

Transfer of aviation fuel between storage tanks

Description of Incident:

During the non-routine transfer of aviation fuel from one tank to another, an overfill of the tank occurred resulting in the release of approximately 0.57kg of aviation fuel through an open vent line on the recipient fuel tank. The released aviation fluid was projected onto nearby turbine exhaust pipework and subsequently ignited for a short period of time before self-extinguishing. Transfer operations were immediately suspended and the power turbine was shutdown.

The direct cause of the incident was determined to be an inaccurate level gauge which lead to the tank being filled beyond capacity.

The transfer of fuel between tanks was a non-routine operation - normally the platform crane would be used to replace helifuel pods. However, the crane was unavailable.

No detailed risk assessment or procedure had been completed for the task.

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Position of helifuel tanks and exhaust ducting

Good Practice Guidance:

- Ensure the level indication is functional and subject to routine maintenance.
- Ensure non-routine transfer operations are subjected to sufficient risk assessment and develop a detailed temporary transfer procedure.
- When transferring between tanks, do not use two tanks of the same volumetric capacity, use a smaller supply tank.

Other Useful Resources

- Joined-up Thinking pack (2013): Control of Work
  https://www.stepchangeinsafety.net/safety-resources/joined-up-thinking/joined-up-thinking-resources/2013-control-work-video
- Joined-up Thinking pack (7 Cs): Control of Work
  https://www.stepchangeinsafety.net/safety-resources/joined-up-thinking/joined-up-thinking-resources/control-work-high-res-video