

ENVIRONMENTAL ALERT

ALERT NUMBER: 001/2023 ISSUE DATE: 05/05/2023

INCIDENT / ALERT DETAILS:

Note to Duty Holders, particularly those who utilise ATEX call point activation switches to control systems with the potential for environmental release.

INITIAL/ALERT FINDINGS:

A significant volume of a fluorinated fire suppressant gas was released to the environment when a faulty ATEX push-button activation switch inadvertently triggered.

Following routine testing of the fire suppressant system, the push-button activation switch was reset and inhibits removed. The system was showing as healthy for 20 minutes when without further inputs, the system activated releasing over 400kgs of fluorinated fire suppressant gas to the environment. No personnel were injured as a result.

The subsequent investigation identified the push-button activation switch as the causal factor. Water ingress to the switch impacted the performance of the microswitch and resulted in the delayed activation following routine testing.

Examination of the switch (and other similar switches) identified the presence of corrosion on the surfaces between the switch lid and base. This corrosion did not allow sufficient water ingress to damage the switch, but degradation of the seal O-ring may result in water ingress of sufficient quantity to impact on the switch functionality.

Duty holders who utilise such switches, particularly in systems with the potential to adversely impact the environment, should consider reviewing inspection and maintenance schedules for such switches to ensure they are sufficiently robust to minimise the likelihood of seal failure and water ingress leading to inadvertent system activation.



Further Information

Any queries relating to this alert should be addressed to:

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