

Preventing water ingress to 25kV Track Sectioning Cabin

Issued to: **Network Rail line managers, safety professionals and accredited contractors**

Ref: NRA21-05

Date of issue: 23/03/2021

Location: Carstairs TSC, Scotland Region

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Overview

In a recent incident in Scotland Region, significant flooding was discovered in and around a 25kV Track Sectioning Cabin (TSC) at Carstairs. Pools of water inside and outside the cabin are also believed to extend underneath the building's false floor creating damp conditions and potential corrosion of the traction power equipment within. The site dehumidifier was out of service and several defective heaters were found.

Investigation found the site was particularly vulnerable to flooding from an adjacent haulier's yard on higher ground. A previous flashover of traction power equipment is now thought to be due to unusually high levels of moisture in and around the building.

Heating and dehumidification equipment have been rectified to bring moisture levels within the building under control. Work is in progress to improve drainage at the site.

High moisture levels in a traction power supply location at [Godinton](#) in Southern Region in 2018 led to a colleague being seriously burned by a flashover.

Immediate action required

The following measures must be taken across all Regions:

- Apply extra vigilance when accessing or inspecting lineside buildings, particularly those that contain electrical equipment.
- Assess the area around the site to identify factors that may increase the risk of flooding. For example, sites situated on low ground, vulnerable to run-off from adjacent premises or with poor drainage.
- Report any fabric damage, flooding or water ingress at a lineside building to the Operational Property Helpdesk OPHD@networkrail.co.uk
- Report any concerns with the building environmental controls.

Discussion Points:

- What assets could be similarly affected in your region?
- How effectively are defects and vulnerabilities at lineside buildings being escalated via OPHD when defects are found?
- What would you do if you found significant fabric damage, flooding or water ingress at a lineside building?
- How does your assurance check the effectiveness of asset inspection and resolving defects?