NetworkRail

# CLIC

London Kings Cross Station

Issue 115

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# Management of polychlorinated biphenyls (PCBs)

## What are PCBs?

Polychlorinated biphenyls (PCBs) are a group of man-made organic chemicals consisting of carbon, hydrogen, and chlorine atoms. They were widely used in various industrial and commercial applications due to their non-flammability, chemical stability, and insulating properties. Here are some key points about PCBs:

- **Uses:** PCBs were commonly used in electrical equipment like transformers and capacitors, as well as in hydraulic systems, plasticisers, and even in carbonless copy paper.
- **Health and Environmental Impact:** PCBs are highly toxic and can cause a range of adverse health effects, including cancer, immune system suppression, and neurological damage. They persist in the environment and accumulate in living organisms, leading to long-term ecological and health issues.
- **Regulation and Ban:** Due to their harmful effects, the production of PCBs was banned in many countries starting in the late 1970s. The Stockholm Convention on Persistent Organic Pollutants, which came into force in 2004, aims to eliminate the use of PCBs globally.

## How are PCBs Managed?

In the UK, the management of PCBs is strictly regulated due to their harmful environmental and health effects. Here are the key points:

- **Ban and Exceptions:** PCBs are generally banned, but there are exceptions for research, analysis, and disposal processes.
- **Registration and Labelling:** Owners of equipment containing PCBs must register with the Environment Agency and label both the equipment and premises where they are used.
- **Disposal:** PCBs must be disposed of as hazardous waste, either by destruction or permanent underground storage. Specialised waste contractors licensed by the Waste Regulation Authority handle this.
- **Regulations and Compliance:** The UK follows the Stockholm Convention and the EU POPs Regulation, which mandate the identification and removal of PCB-containing equipment by the end of 2025.

## Disposing of PCBs:

In the UK, disposing of PCBs involves several regulated steps to ensure safety and environmental protection:

- **Identify and Register:** If you own equipment containing PCBs, you must register it with the Environment Agency.
- **Labelling:** Clearly label the equipment and premises where PCBs are stored.
- **Specialist Disposal:** PCBs must be disposed of as hazardous waste. This involves either:
- **Destruction:** Using high-temperature incineration to destroy the PCB content.
- **Permanent Storage:** If destruction isn't possible, PCBs can be stored permanently underground.
- **Licensed Contractors:** Only licensed waste contractors can handle the disposal of PCBs. They ensure the waste is managed according to legal requirements.
- **Record Keeping:** Maintain records of how and when the PCBs were disposed of.

UK Government's Official Guidelines

NR Safety Central Guidance Note

# A Prescription for Nature

## What is a Prescription for Nature??

World Wildlife Fund (WWF) have released a campaign (Prescription for Nature) to encourage more people to get outside and enjoy nature to improve their mental health.. A Prescription for Nature is a way to encourage individuals to spend time in natural environments to improve their mental well-being. Engaging with nature has been shown to reduce stress, enhance mood, and promote overall mental health.

## How Nature Helps Restore us

Spending time connecting with nature is brilliant for our mental wellbeing. It can reduce stress and anxiety, lift our mood and help our minds rest. Based on evidence, we recommend 20 minutes a day to gain the benefits.

Because nature is so good at helping us feel well, we're encouraging everyone get their daily dose of it. From nature soundscapes and insect-spotting to house plant-potting, we've got a prescription to suit everybody. And, while we find new ways to thrive in nature, we might discover ways to help nature out a bit, too.

## Ways to get your daily dose of nature at work

- Got an afternoon of meetings? Grab your headphones and take one of your calls outside.
- If you're working from home, step outside your front door and feel the sun's rays on your face for a few moments or take a walk in the fresh air to boost your spirits.
- Take a break and spend your lunchtime outdoors. Make use of office balconies, local gardens or any outside area near you.
- Use your volunteer days or volunteer as a project in nature.


Download your free daily dose of nature pack here

# 3D Avoidance

## Working Together in Collaboration

Flannery Plant Hire is collaborating with BAM Nuttall on the development at Eaglescliffe railway station, which is part-funded by the Department for Transport (DfT) Access for All projects. The scheme includes:

- Construction of a new accessible footbridge with lifts, connecting the east and west sides of the railway for the first time. This bridge will link the existing east car park, the island platform, and a new access point from the west via a proposed car park.
- Building a new station waiting room and ticket office, including passenger toilets (with accessible facilities), staff welfare amenities, and a passenger waiting area.
- Demolition of the existing taxi office in the eastern car park to facilitate the construction of the footbridge, followed by the construction of a new taxi office.
- Life extension works on the existing station footbridge and ramps to retain them as a secondary access/egress route in emergencies.
- One challenge was the requirement to work on the island platform, behind timber hoarding, during the day whilst trains were in service. Measures were implemented to ensure the 8te excavator presented no risk to the operational railway during these activities.

**3D Avoidance in Plant Machinery:** 3D avoidance technology enhances construction site safety by providing real-time data on potential hazards in the vicinity of plant machinery. This system employs advanced sensors and software to create a virtual three-dimensional model of the work environment, identifying and mapping underground and overhead utilities, as well as other obstacles. Operators receive immediate alerts when they approach these hazards, allowing them to adjust their operations accordingly. This not only increases safety by reducing the risk of accidents but also improves efficiency by minimising disruptions to workflows.

**Highway Restrictions:** We can establish pre-determined geospatial avoidance zones or virtual barriers when working on live carriageways and public roads. This system prevents the excavator from breaching these areas and protects the excavator's tracks without interrupting the slew system when moving forward, minimising the risk of human error.

**Our solution** integrates Leica Geosystems MC1 machine control software and XWatch Safety solutions, both of which have been rigorously tested in the UK. At Flannery Plant Hire, we recognise that fostering a safe working environment is paramount. Our commitment to safety is bolstered through collaborative partnerships, which are instrumental in developing innovative solutions that enhance operational safety and efficiency.

The construction industry has faced challenges in avoiding hazards when using plant equipment on-site. We understand accidents can have severe consequences, both financially and in terms of worker well-being. To combat this, we employ dynamic avoidance strategies that allow our engineers to thoroughly assess underground and above-ground hazards before and during construction.

By integrating advanced technology, we significantly reduce risks and ensure that workers return home safely each day. Our systems provide real-time data and alerts, alleviating operator stress and allowing them to focus on their tasks. This approach not only enhances safety but also boosts operational efficiency, enabling site management to concentrate on optimising workflows.

# Shared Learning

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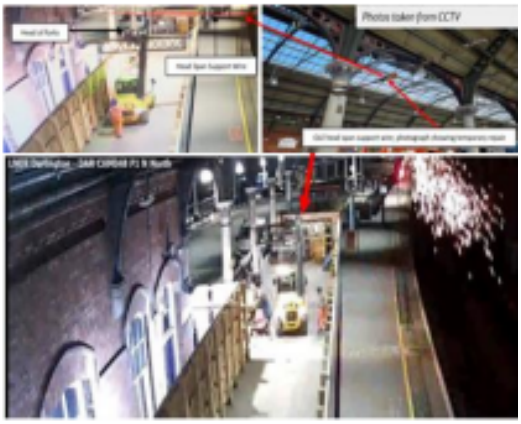
## OLE Head Span Cable Strike



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

Ref: NRL24-07

Date of issue: 25/11/2024

Location: Darlington Station, Eastern region

Contact: Simon Burns Senior Portfolio Manager, Capital Delivery Eastern, Major Projects and Programmes

## Overview

Following dismantling works at Darlington Station, the site area was being cleared of steel arising during the nightshift. Works were being carried out behind pre-erected 2.4m high timber hoarding on platform 1 that surrounded the whole work site to segregate the work site from the operational platform.

Whilst travelling within the hoarding, the load (3m length of steel) was lifted (boomed) over the hoarding using the telehandler (see photos). The Telehandler's head of the forks contacted the OLE head span support wire and brought the vehicle to a stop. The Plant Marshall checked the tires and then informed the operator that the tires are inflated and therefore couldn't identify any problem. The telehandler driver then continued forward pushing against the OLE head span support wire (see photo) which caused it to snap under the tension and likely came into contact with the live contact wire.

The event caused the adjacent circuit breakers to trip and resulted in 570 delay minutes whilst a temporary repair of the OLE head span was undertaken.

## Underlying causes

- Steel arisings were not planned to be raised above the hoarding.
- Steel arising were not cut into manageable sections to remain within the hoarding when transported.
- Change in methodology to transport materials was not risk assessed in accordance with NR/L3/ELP/29987 module 2.
- Site Supervision never corrected or ensured that zoning arrangements and safe working practices were being adhered to throughout the shift.

## Key message

- When working in proximity of NR OLE infrastructure (whether deemed live or not), a risk assessment is required to be in place in accordance with NR/L3/ELP/29987 module 2.
- Site walk through with the designers, contractor and site staff must be carried out.
- When changes arise during planned activities, the collaborative consultation process must be revisited to re-view risks and control measures.
- Supervisors and operatives must check and challenge permits that are ambiguous without any control measures being identified or implemented.
- When putting people to work, briefings must be clear and concise with confirmation of understanding asked.
- Capability assessments to be carried out on all operations and personnel involved prior to commencing the task.
- Plant Marshall required to be in a position of safety out 3 meters away from moving plant(s).

# Recent Accidents and Incidents

| Date of Incident | Portfolio | Project | Location | Type of Incident / Accident | Event Description |
|---|---|---|---|---|---|
| 28/11/2024 | MPP-North | 180426 – LAIP Package 2 | Project Site Offices Foster Square Retail Park | Non KPI Reportable Event | Cleaner reported to Site Management that she had found a small bag of white powder on the floor in the dry room. It was locked away before police collection. Urine sample testing, on all persons on site, including management and operatives performed. |
| 27/11/2024 | MPP-South | 150796- Beaulieu Station | Beaulieu Park Station | Environmental Category 4 (Negligible) | Vehicle hit uneven terrain on its underside, rupturing the oil tank causing approximately 15-20 litres of oil to be spilled onto the ground |
| 26/11/2024 | Signalling & Telecoms | 159568 - South Kirkby Re-signalling | Sandal and Abrigg station | Route Crime | Vehicle windows smashed and tools stolen. Their vehicles were parked at Sandal and Agbrigg station. Two youths seen running off towards a white transit van. |
| 23/11/2024 (late reported) | Buildings and Minor Enhancements | 167486 - Selby Access for All | Selby Station | Non-Operational Infrastructure - Construction Event | Platform information sign had become unsecure and was removed by Mitie for safety reasons and placed in storage. |

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- **Do you have something to share?**
- **Can others learn from your work?**

SCAN ME

Whether it be linked Health, Safety, Environment or Social Value
Please get in touch and email: **clic@networkrail.co.uk**

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