

Use of bitumen boiler for sealing longitudinal timbers

Issued to: All Network Rail line managers, safety professionals and RISQS registered contractors

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Location: Hopetown Viaduct, LNE

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Overview

In October 2017 during longitudinal timber replacement work on Hopetown Bridge in Darlington, hot bitumen was being used to seal the longitudinal track support beams. The overnight weather was stormy with strong winds and heavy rain.

Hot bitumen was being decanted from a tar boiler into a bucket when the liquid caught alight.

In attempting to move the bucket the operative found one of his gauntlets had got stuck to the bucket handle. He was not wearing a face visor and some bitumen splashed on his neck and face. He was admitted to hospital for treatment.

A thermostatically controlled boiler, as required by the existing task risk control sheet, was not being used.

Immediate action required

The Supervisor/Person In Charge must ensure that the following guidance is complied with:

Health and Safety Guidance Note 33 (Health and Safety in Roof Work) Appendix 6 (Safe operation of bitumen boilers). Copies are available on the [HSE website](#).

Three types of risk need to be controlled when using these boilers:

- fire and explosion risk from storage and use of liquefied petroleum gas (LPG);
- risk of burning from contact with hot bitumen; and
- risk of respiratory irritation from excessive inhalation of bitumen fumes.

The guidance note has specific requirements for the following areas:

- General risks
- Condition of equipment
- Setting up the boiler
- Heating the bitumen
- Precautions during use
- Precautions after use
- Precautions at all times

Workers and supervisors should be trained in specific first-aid procedures for bitumen burns.

This should be supported by written instructions clearly available on site. A concise burns handling card can be downloaded from the [Eurobitume](#) website.

Always consider whether the task is safe in the prevailing weather conditions.

Copies of Safety Advice are available on [Safety Central](#).