

## Recommendation in case of inoperable Safety Showers

Bitumen and bituminous binders are generally stored, loaded and delivered at elevated temperatures. The maximum handling and storage temperatures vary according to bitumen grade, but the current recommended maximums for bitumen and air-rectified bitumen are 200°C and for severely oxidised bitumen 230°C. Contact of hot bitumen with exposed skin and eyes has the potential to cause serious burns, consequently Eurobitume has developed procedural and engineering guidance documents on safe deliveries.

However, it is likely that occasionally there will be unforeseen events leading to uncontrolled loss of product. That is where layers of protection to mitigate the impacts are so important. These include things such as flange shrouds, Personal Protective Equipment (PPE) and safety showers. If any individual does come into contact with hot bitumen, effective cooling is essential in reducing the severity of the burn (ref. Eurobitume Card on Bitumen Burns, September 2022).

Therefore safety showers and eye-wash stations must be operational whenever delivery of bitumen takes place.

The Energy Institute's Model Code of Safe Practice Part 11: Bitumen safety code, March 2023 states: *"An emergency shower should always be provided, together with signs indicating its location (...)"*

Eurobitume's guide to safe delivery (ref. Guide to the Safe Delivery of Bitumen, July 2018) also states: *"At least one emergency shower must be provided in the area of the delivery point."* as well as

*"The customer must make sure the emergency safety shower is working."*

Data collected by Eurobitume's members indicate that there is an increasing trend of reports of safety showers not working. This is likely to increase further in the winter during prolonged periods of low/sub-zero temperatures.

The lack of an operational safety shower places both drivers and other personnel involved in the handling and delivery at increased risk of burns and is therefore not acceptable.

Eurobitume's guidance on safety showers (ref. Eurobitume Safety Shower Guidance, November 2016) clearly states:

*"It is critical to ensure that the emergency shower operates reliably in all weather conditions, in particular during freezing conditions."*

In the light of the above Eurobitume members strongly recommend no activities involving the handling of hot bitumen, e.g. loading or discharge, should take place unless an operable safety shower is available.

Note that the provision of alternative measures such as hosepipes, buckets etc. are not acceptable as alternative measures to Eurobitume members.