



# GROUND-BASED OPERATION OF DELIVERY VEHICLES

MARCH 2021

ISBN: 978-2-930160-35-1

D/2021/7512/067

2nd edition 2021

By consulting and/or using this publication, the user acknowledges and agrees to be bound by the following stipulations. Eurobitume has made considerable efforts to compile this publication on the basis of reliable sources. However, Eurobitume cannot and does not guarantee the completeness, accuracy, reliability and effectiveness of the information contained in this publication for whatever purpose. Furthermore, the content of this publication may be changed, suspended, revised and/or removed by Eurobitume, at its sole discretion, at any time for whatever reason and without notice. Finally, except for cases of fraud, neither Eurobitume nor its members are liable for any loss, damages or injury whatsoever relating to the consultation or use of this publication, or the inability to do so.

Eurobitume, March 2021, [info@eurobitume.eu](mailto:info@eurobitume.eu)

# BACKGROUND

In some countries, principally those where bitumen is unloaded using ground-based pumps, delivery personnel are required to access the man-lid (also known as the 'dome') of the tanker. This operation involves the driver climbing to the top of the vehicle, creating a risk of falling from height and bitumen fumes exposure. To avoid such risks it is desirable that all operations required for safe delivery of bitumen should be carried out from ground level.

The purpose of this document is to highlight key elements of delivery vehicles that will enable ground-based operation during bitumen delivery.

It is recognised that vehicle operators still need to access the man-lid during loading. This document is not intended to address this operation, as it is assumed that in refineries, or terminals adequate fall protection is provided through the use of gantries.

# IMPORTANT CONSIDERATIONS

In bitumen delivery operations it is important to avoid significant over or under-pressure conditions on the tank barrel. It is therefore essential that any system to enable ground-based operation is capable of allowing air to enter the tanker at the same rate that product is being discharged. In practice, an opening on the tank roof must be correctly dimensioned in relation to the pump flow rate. The aperture must have a minimum diameter of 75mm to allow sufficient air flow in relation to the flow rate of the ground-based pump used for discharge, to prevent damage to the tank truck.

Any system installed on a delivery vehicle to permit ground-based operation must indicate when the vent valve is open or closed. The system must ensure that, when the bottom valve is open, discharge cannot commence until the vent valve is open. Similarly, the vent valve must be closed at the loading site. A full truck must not be moved with the vent valve opened.

The system control equipment must be operable in safety by the driver at any time and in the event of any safety concern, the driver can immediately terminate the delivery using an Emergency Stop. This also applies where bitumen deliveries are not made using ground-based pumps but are made under pressure from the delivery vehicle.

**Eurobitume**  
Boulevard du Souverain 165  
B-1160 Brussels  
Belgium  
T: +32 2 566 91 40  
E: [info@eurobitume.eu](mailto:info@eurobitume.eu)



[www.eurobitume.eu](http://www.eurobitume.eu)

 [www.linkedin.com/company/eurobitume](http://www.linkedin.com/company/eurobitume)

 [www.twitter.com/eurobitume](http://www.twitter.com/eurobitume)