
Economic Commission for Europe

Inland Transport Committee

13 January 2022

Working Party on the Transport of Dangerous Goods**Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)**

English

Thirty-ninth session

Geneva, 24–28 January 2022

Item 4 (c) of the provisional agenda

Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN): Interpretation of the Regulations annexed to ADN

Flame arresters for degassing**Transmitted by the Government of the Netherlands****Introduction**

1. The requirements of 7.2.3.7.1.3 specify that during degassing to the atmosphere the gas/air mixture should be led out of the tank through flame arresters capable of withstanding steady burning. However, the Dutch delegation has been informed that most vessels have been constructed in such a way that the venting equipment for degassing is incorporated in the venting piping. This to limit the number of openings in the cargo tank and to maximize the strength of the cargo tank. This opening to the venting piping is equipped with a flame arrester capable of withstanding a detonation, conform 9.3.x.22.4. During degassing, the gas/air mixtures are lead through the flame-arrester capable of withstanding a detonation. These flame-arresters are not certified for withstanding steady burning.
 2. In the Netherlands, no incidents involving any kind of steady burning are known during degassing operations. Furthermore, steady burning is defined in the ADN, referencing ISO standard ISO 16852:2016. This standard differentiates between short time burning and endurance burning, whereas endurance burning is defined as burning of longer than 30 minutes.
 3. Since degassing on tank vessels is an active operation which can be stopped well within 30 minutes, the Dutch delegation questions whether any degassing operation could result in a flow of product, which feeds the steady burning for 30 minutes or longer.
 4. The Dutch delegation invites the Safety Committee to take note of the above-mentioned points and would like to perform further research regarding the question whether the current flame arresters, which can withstand detonations and deflagrations, are suitable to ensure the safety during degassing operations. The members of the Safety Committee are invited to share any knowledge they have on incidents during degassing with the Dutch delegation.
-