

**Economic Commission for Europe****Inland Transport Committee****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)**

**Twenty-first session**

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Item 5 (a) of the provisional agenda

**Proposals for amendments to the Regulations annexed to ADN:****Amendments for entry into force on 1 January 2013**

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**Heavy Fuel Oils - Proposal for changes to ADN 2013****Transmitted by the European Petroleum Industry Association Europa****SUMMARY*****Explanatory summary:***

The purpose of this information paper is to achieve consensus on a temporary derogation of regulations, limited in time until 31/12/2016, for the loading and carriage of heavy fuel oils as dangerous goods on tank vessels. The temporary derogation is justified by the need to perform a study to identify whether or not there are potential emissions during loading and, if so, allow the development of appropriate measures to reduce or minimise airborne emissions.

***Decision to be made:***

Agreement on time-limited exemption for the loading and carriage of heavy fuel oils in tank vessels from the dangerous goods regulations in column (7) Table C ADN 3.2.3 and ADN 7.2.4.25.5.

**Introduction**

1. Publication of CONCAWE Report No. 11/10 titled "Hazard classification and labelling of petroleum substances in the European Economic Area – 2010" resulted in changes in the dangerous goods classification specifications for heavy fuel oils. The relevant change for transportation is the amended aquatic environmental hazard classification of heavy fuel oils, changing from Dangerous for the Environment - R52/53 (H412) - to Dangerous for the Environment - N, R50/53 (H410). Substances and blends with the symbol N and R50/53 are to be transported as Class 9 dangerous goods as per 2.2.9.1.10.5 RID/ADR/ADN.
2. It was decided at the last meeting of the ADN Safety Committee that, as a consequence of the change in environmental classification of heavy fuel oils, ADN 2013 is to be amended such that

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carriage of these products requires tank vessels of type C or type N double-hull, closed tank vessels.

3. For loading of products requiring a closed tank, it is required under ADN 7.2.4.25.5 that the gas/air mixtures shall be returned ashore through a gas recovery or compensation pipe during loading operations when a closed type vessel is required in column (7) of Table C of Chapter 3.2.
4. To the best of our knowledge most terminals and refineries in the ADN signatory states are currently not equipped with the requisite vapour recovery systems and these facilities are not required by national legislations for the storage and handling of heavy fuel oils.

### **Application**

5. Assessment of an agreement for a time-limited exemption for the loading and carriage of heavy fuel oils in tank vessels from the dangerous goods regulations of column (7) Table C ADN 3.2.3 and ADN 7.2.4.25.5 by an interim regulation effective from 01.01.2013 until 31.12.2016 and, if need be, a foregoing special agreement.

### **Justification**

#### 6. Emissions Assessment

To better understand the potential for airborne emissions, CONCAWE is developing a project to assess the likelihood of airborne emissions during tank vessel loading operations with heavy fuel oil. The outcome of this evaluation will be used to identify whether or not there are potential emissions during loading and, if so, allow the development of appropriate measures to reduce or minimise airborne emissions. Agreement with CONCAWE supervisory bodies on financing and resourcing, conducting the exposure assessment and producing the report is expected to require approximately one year. Additional time is also proposed for interpretation and implementation of any recommendations.

#### 7. Emission protection

To the best of our knowledge, there is no requirement in European or national regulations in the ADN signatory states for the recovery of vapours from heavy fuel oils during storage or handling.

Other modes of transportation are not subject to regulations corresponding to the changes demanded in ADN 2013 for carriage in closed tank vessels and for vapour recovery.

#### 8. Transport safety

To the best of our knowledge, no safety deficits have become apparent in the loading and transportation operations of heavy fuel oils with tank vessels conducted for many years.

The properties of heavy fuel oils have not changed, but evaluation of new aquatic toxicity data have resulted in a more severe environmental hazard classification.

#### 9. Refinery, storage and transportation management

In Germany alone refineries deliver about 4 million t of heavy fuel oils annually for transportation. About 40% of these quantities are carried by tank vessels, some of which

involves cross border movement. Additional quantities are stored and handled by independent storage companies.

In the event that most of the loading terminals would have to be retrofitted with vapour recovery and treatment systems, a period of several years would be needed for application, approval, constructing and commissioning of such systems.

That would require significant capital expenditure, which might mean that established loading and handling terminals Europe-wide would in future risk to lose economic sustainability and consequently no longer offer handling of heavy fuel oils. That would have negative impacts on secure, safe supplies to consumers (e.g. industry, power stations, oil bunkering facilities) in quantities to meet demand and on an economically viable basis.

10. Feasibility

The proposed provision relates to fillers and carriers of heavy fuel oils, and gives a reasonable time for completion of an exposure assessment during loading operations and also implementation of any possible identified measures needed to reduce or minimise exposure.

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