

Economic Commission for Europe**Inland Transport Committee**

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Working Party on the Transport of Dangerous Goods

English

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)

Thirty-eighth session

Geneva, 23–27 August 2021

Item 4 (b) of the provisional agenda

**Proposals for amendments to the regulations annexed to the ADN:
other proposals**

Carriage of fumigated bulk cargoes in cargo holds and fumigated cargo holds of dry-cargo vessels

Submitted by the Government of Austria

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| <i>Summary</i> | |
| Executive Summary: | The German delegation has submitted a proposal for regulations regarding the carriage of fumigated bulk cargoes in cargo holds and fumigated cargo holds of dry-cargo vessels. The Austrian delegation supports the goal of the proposal, but would like to submit an alternative solution for discussion. |
| Action to be taken: | Add a new special provision 804 to section 3.3.1 of ADN. Amend the provisions applicable to fumigated cargo transport units in section 5.5.2 with provisions applicable to fumigated cargo holds. Consequential amendments to sub-section 2.2.9.3 ADN und in der Table B. |
| Related documents: | Informal document INF.7 of the thirty-seventh session of the ADN Safety Committee; ECE/TRANS/WP.15/AC.2/76, report of the thirty-seventh session, paragraphs 42 to 45; ECE/TRANS/WP.15/AC.2/2021/22, proposal of the German delegation. |

Introduction

1. Section 5.5.2 of ADN contains the requirements to be met when carrying fumigated cargo transport units. In accordance with Chapter 1.2 of ADN, cargo transport unit only means “a vehicle, a wagon, a container, a tank-container, a portable tank or an MEGC” but not inland waterway vessels or the cargo holds of inland waterway vessels.
2. An extension of Chapter 5.5 of ADN to include provisions for the carriage of fumigated bulk cargoes would help solving the problem. As is the case of fumigated cargo transport units (UN No. 3359), the carriage in a fumigated state of bulk cargoes that are not to be classified as dangerous goods themselves would become subject to the applicable provisions of Chapter 5.5 only.
3. The German delegation has submitted a proposal with ECE/TRANS/WP.15/AC.2/2021/22, whose goals are explicitly supported by the Austrian delegation. The Austrian delegation would however like to submit an alternative solution due to several reasons.

4. The new identification number 9007 proposed in ECE/TRANS/WP.15/AC.2/2021/22 would not cover two cases: fumigated cargo holds that have not been ventilated after unloading and fumigated cargo holds that are containing other goods than bulk cargo (e.g. textiles). We would therefore propose to keep close to the name and description of UN 3359, which is covering such cases.

5. The duplication of section 5.5.2 in a new section 5.5.5 with small amendments proposed in ECE/TRANS/WP.15/AC.2/2021/22 does not seem necessary. The existing section 5.5.2 could instead be amended regarding fumigated cargo holds.

Proposal

6. In **2.2.9.3 List of entries**, add a new classification code M13 at the end:

| | | |
|---|------------|-----------------------------|
| “Fumigated cargo holds of dry cargo vessels HOLD“. | M13 | 9007 FUMIGATED CARGO |
|---|------------|-----------------------------|

7. In 3.2.1 Table A List of dangerous goods in numerical order, add the following new line:

| UN No. or ID No. | Name and description | Class | Classification Code | Packing group | Labels | Special provisions | Limited and excepted quantities | | Carriage permitted | Equipment required | Ventilation | Provisions concerning loading, unloading and carriage | | | Number of cones/blue lights | Remarks |
|------------------|----------------------|-------|---------------------|---------------|--------|--------------------|---------------------------------|---------|--------------------|--------------------|-------------|---|-------|-------|-----------------------------|---------|
| | | | | | | | 3.4 | 3.5.1.2 | | | | 3.2.1 | 8.1.5 | 7.1.6 | | |
| (1) | (2) | (3a) | (3b) | (4) | (5) | (6) | (7a) | (7b) | (8) | (9) | (10) | (11) | | | (12) | (13) |
| 9007 | FUMIGATED CARGO HOLD | 9 | M13 | | | 804 | | | | PP | | | | | | |

8. In 3.2.2 Table B List of dangerous goods in alphabetical order, insert the following new line:

| Name and description | UN No. or ID No. |
|----------------------|------------------|
| FUMIGATED CARGO HOLD | 9007 |

9. In section 3.3.1, add the following new special provision:

“804 Fumigated cargo holds that are not to be classified as dangerous goods themselves shall only be subject to the provisions of 5.5.2.

These provisions shall apply where the cargo holds of the vessel are fumigated after being filled with the bulk cargoes prior to or during carriage or where the bulk cargoes have been fumigated prior to or after filling them into the cargo holds, e.g. during an immediately preceding carriage operation in another sea-going ship or inland waterway vessel or at the point of loading.”

10. In section 5.5.2, make the following amendments:

“5.5.2 Special provisions applicable to fumigated cargo transport units (UN 3359) and fumigated cargo tanks (ID 9007)

5.5.2.1 General

5.5.2.1.1 Fumigated cargo transport units (UN 3359) and fumigated cargo holds (ID 9007) containing no other dangerous goods are not subject to any provisions of ADN other than those of this section.

5.5.2.1.2 When the fumigated cargo transport unit or the fumigated cargo hold is loaded with dangerous goods in addition to the fumigant, any provision of ADN relevant to these goods (including placarding, marking and documentation) applies in addition to the provisions of this section.

5.5.2.1.3 Only cargo transport units or cargo holds that can be closed in such a way that the escape of gas is reduced to a minimum shall be used for the carriage of cargo under fumigation.

5.5.2.1.4 Fumigated cargo holds shall not be entered.

5.5.2.2 Training

Persons engaged in the handling of fumigated cargo transport units or fumigated cargo holds shall be trained commensurate with their responsibilities.

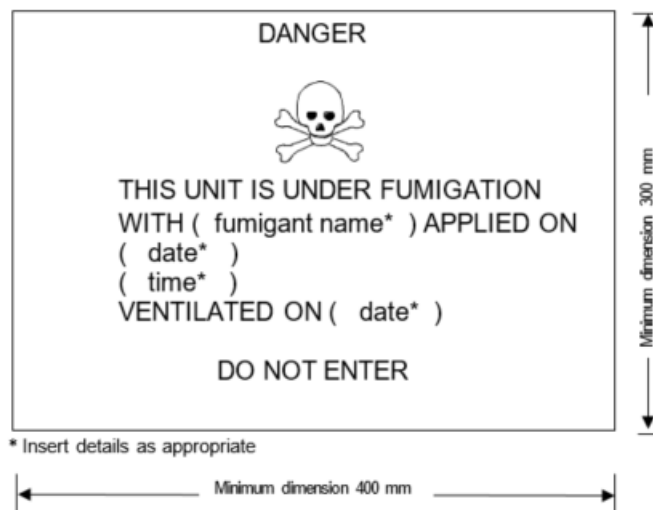
5.5.2.3 Marking and placarding

5.5.2.3.1 A fumigated cargo transport unit shall be marked with a warning mark, as specified in 5.5.2.3.2, affixed at each access point in a location where it will be easily seen by persons opening or entering the cargo transport unit. This mark shall remain on the cargo transport unit until the following provisions are met:

- (a) The fumigated cargo transport unit has been ventilated to remove harmful concentrations of fumigant gas; and
- (b) The fumigated goods or materials have been unloaded.

5.5.2.3.2 The fumigation warning mark shall be as shown in Figure 5.5.2.3.2.

Figure 5.5.2.3.2



Fumigation warning mark

The mark shall be a rectangle. The minimum dimensions shall be 400 mm wide x 300 mm high and the minimum width of the outer line shall be 2 mm. The mark shall be in black print on a white background with lettering not less than 25 mm high. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

- 5.5.2.3.3 If the fumigated cargo transport unit has been completely ventilated either by opening the doors of the unit or by mechanical ventilation after fumigation, the date of ventilation shall be marked on the fumigation warning mark.
- 5.5.2.3.4 When the fumigated cargo transport unit has been ventilated and unloaded, the fumigation warning mark shall be removed.
- 5.5.2.3.5 Placards conforming to model No. 9 (see 5.2.2.2.2) shall not be affixed to a fumigated cargo transport unit except as required for other Class 9 substances or articles packed therein.
- 5.5.2.3.6 A cargo hold concerned shall be marked with a warning mark, as specified in 5.5.5.3.2, affixed at each access point in a location where it will be easily seen by persons opening or entering the cargo hold. Two warning marks each on the port side and on the starboard side shall be sufficient. The required warning marks shall remain affixed until the following provisions are met:
- (a) the cargo hold has been ventilated to remove harmful concentrations of fumigant gas; and
 - (b) the bulk cargoes have been unloaded.
- 5.5.2.3.7 If the cargo hold has been completely ventilated either by opening the hatch covers or by mechanical ventilation after fumigation, the date of ventilation shall be marked on the fumigation warning mark.
- 5.5.2.3.8 When the cargo hold has been ventilated and unloaded, the fumigation warning marks shall be removed.

5.5.2.4 *Documentation*

- 5.5.2.4.1 Documents associated with the carriage of cargo transport units that have been fumigated and have not been completely ventilated before carriage shall include the following information:
- "UN 3359, fumigated cargo transport unit, 9", or "UN 3359, fumigated cargo transport unit, class 9";

- The date and time of fumigation; and
- The type and amount of the fumigant used.

Documents associated with fumigated cargo holds that have not been completely ventilated before carriage shall include the following information:

- “9007 FUMIGATED CARGO HOLD, 9” or “9007 FUMIGATED CARGO HOLD, Class 9”;
- The date and time of fumigation; and
- The type and amount of the fumigant used.

These particulars shall be drafted in an official language of the forwarding country and also, if the language is not English, French or German, in English, French or German, unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise.

- 5.5.2.4.2 The documents may be in any form, provided they contain the information required in 5.5.2.4.1. This information shall be easy to identify, legible and durable.
- 5.5.2.4.3 Instructions for disposal of any residual fumigant including fumigation devices (if used) shall be provided.
- 5.5.2.4.4 A document is not required when the fumigated cargo transport unit or the fumigated cargo hold has been completely ventilated and the date of ventilation has been marked on the warning mark (see 5.5.2.3.3 and 5.5.2.3.4).
- 5.5.2.4.5 If the fumigant is used during the voyage, the master shall draw up a document with the above particulars.”

Justification

11. This issue needs to be regulated in ADN. The cargoes are fumigated to protect them from pest infestation during a transport operation lasting several days. The persons that come close to, or into contact with, fumigated cargoes during carriage or that enter empty holds that are still fumigated must be protected from risks to their health or life posed by the fumigants released during carriage (including unloading).

12. This is not a matter to be dealt with by the shipping police, since it does not concern the safety and efficiency of navigation on the waterway. Regulating this matter only in the provisions of the Central Commission for the Navigation on the Rhine is not sufficient, as the transport operations in question often already begin on the Danube.

13. In the proposed amendment of section 5.5.2, no reference is made to paragraph 1.1.4.6.2 of ADN. Thus, ADN will not be given priority over other rules and regulations that generally apply to the carriage of goods on inland waterways. More stringent work safety regulations at national or European Union level on the fumigation of transport units, if any, that have not been introduced for reasons of safety of carriage will remain applicable.

14. A general ban on carrying fumigated bulk cargoes or bulk cargoes in fumigated cargo holds would be disproportionate and is therefore out of question. The carriage of oil seeds and animal feeds from the Danube region or the Amsterdam-Rotterdam-Antwerp (ARA) ports to Germany is indispensable for the agricultural sector and cannot be replaced by road or rail transport operations in a sensible and economically viable way.

15. The existing section 5.5.2 Special provisions applicable to fumigated cargo transport units (UN 3359) is amended with regard to fumigated cargo holds.

16. The risks posed to persons involved in the transport operation are comparable to the risks posed by the fumigation of CTUs.

17. Fumigated cargo transport units usually do not contain dangerous goods either and are only regulated in RID/ADR/ADN due to their fumigated state.

18. The supplementing provisions in section 5.5.2 serve to ensure that persons involved in the transport operation (including unloading) are appropriately informed. The information on the fumigated state of the cargo holds or the cargo draw the attention of all persons involved in the way necessary for taking the safety measures required for handling the cargo.

19. The closure of the cargo holds prevents an uncontrolled release of the fumigant during the voyage.

Safety

20. The proposed provisions will largely prevent risks posed by fumigants released in an uncontrolled way to the personnel employed on board the vessels during carriage and to the personnel tasked with unloading the vessels.

Feasibility

21. No problems are expected on the implementation. In several contracting parties that are members of the European Union, there are similar provisions in health and safety law, which continues to be applicable.

22. The implementation results in minor expenditures for the carriers for drawing up the accompanying documents and for the purchase and installation of warning marks.

23. It is assumed that even today only vessels equipped with cargo hold covers are used for the carriage of fumigated bulk cargoes. If this is not the case, the cargo holds can be additionally sealed with little effort to minimize the release of fumigants.
