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**Committee of Experts on the Transport of Dangerous Goods  
and on the Globally Harmonized System of Classification  
and Labelling of Chemicals****Sub-Committee of Experts on the Transport of Dangerous Goods****Fortieth session**

Geneva, 28 November – 7 December 2011

Item 4 (c) of the provisional agenda

**Miscellaneous proposals of amendments to the****Model Regulations on the Transport of Dangerous goods: marking and labelling****Fumigation warning mark and coolant/conditioning unit  
warning mark****Transmitted by the expert from the United Kingdom<sup>1</sup>****Background**

1. At the thirty-ninth session of the Sub-Committee, the expert from the United Kingdom submitted the discussion document ST/SG/AC.10/C.3/2011/5 (Descriptions of labels, placards, symbols, markings and marks). Comments received indicated that the fumigation warning mark specification was problematic, in that the minimum specified letter height was too large to fit the required information on a minimum overall sized mark. The expert from the United Kingdom also notices the same problem with the new coolant/conditioning unit warning mark.

2. This paper therefore proposes to deal with the fumigation warning mark and the coolant/conditioning unit warning mark separately from other markings, as they require substantive amendments beyond the original intent of ST/SG/AC.10/C.3/2011/5.

**Discussion**

3. The main problem with both marks is that the specified minimum text size is too large for the required text to be shown on a minimum sized mark. This paper makes amendments to reduce the required size of lettering, as well as the editorial amendments

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<sup>1</sup> In accordance with the programme of work of the Sub-Committee for 2011-2012 approved by the Committee at its fifth session (refer to ST/SG/AC.10/C.3/76, para. 116 and ST/SG/AC.10/38, para. 16).

originally proposed in ST/SG/AC.10/C.3/2011/5. Other minor amendments are made, as described in the explanations of the proposals. The expert from the United Kingdom has tested the amendments on prototype mock-ups of the marks to ensure the problem is resolved.

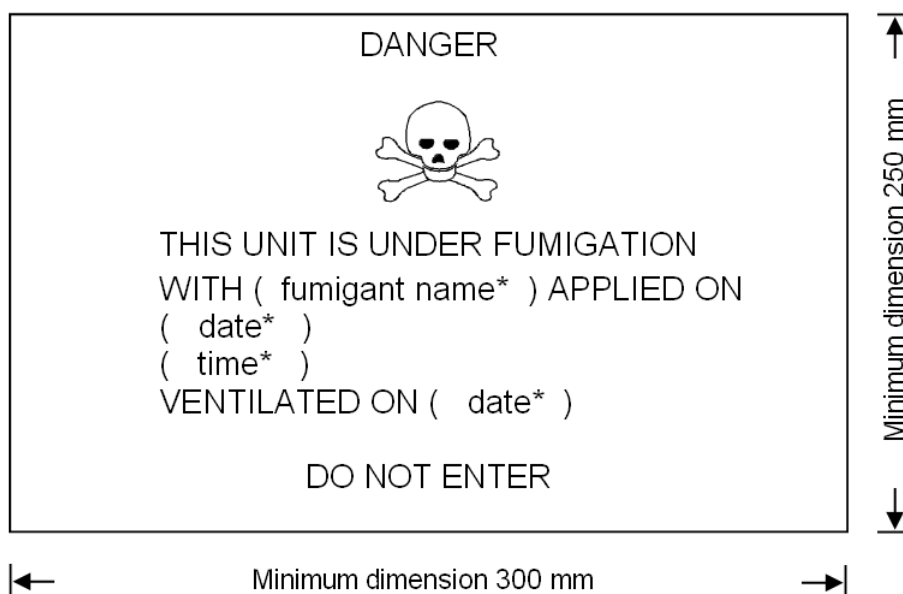
### Proposal 1: Fumigation warning mark

4. The fumigation warning mark already has dimensional arrows. This proposal is to align the description of the mark with the wording found for other marks. The line width is specified as with the limited quantity marking. To allow the lettering to fit on a minimum-sized mark, the minimum letter height is reduced to 10 mm.

5. Amend 5.5.2.3.2 and Figure 5.5.1 to read as follows:

"5.5.2.3.2 The fumigation warning mark shall be as shown in Figure 5.5.1.

**Figure 5.5.1: Fumigation warning mark**



\* Insert details as appropriate.

#### Fumigation warning mark

The marking shall be a rectangle. The minimum dimensions shall be 300 mm wide x 250 mm high and the minimum width of the outer line shall be 2 mm. The marking shall be in black print on a white background with lettering not less than 10 mm high. The skull and crossbones symbol shall be in proportion to that shown."

### Proposal 2: Coolant/conditioning unit warning mark

6. The coolant/conditioning unit warning mark, introduced in the 17<sup>th</sup> revised edition of the Model Regulations now falls under the scope of this paper. The expert from the United Kingdom notices some discrepancies with the description of the mark. If the diagram is scaled up to the minimum size, the "warning" lettering is in fact 20 mm, not the 25 mm specified. More seriously, specifying 25 mm lettering for the details of the coolant/conditioner proper shipping name (in the space taken up by the asterisk in the

existing Figure 5.5.2) results in lettering far too large to fit in the space provided at the minimum size.

7. The size of lettering for the proper shipping name is proposed to be specified at 12 mm. This is small enough to fit “CARBON DIOXIDE” on a minimum size label. However to allow for longer proper shipping names on one line, a reduced size lettering provision is included.

8. The provisions for the wording of the proper shipping name and “AS COOLANT”/“AS CONDITIONER” is rewritten to overcome the problems identified with the existing text and to increase the clarity of what is required. No reduced size provision is provided for “AS COOLANT”/“AS CONDITIONER” as 12 mm high lettering will fit on a minimum-sized mark on one line.

9. For clarity and tidiness, the proper shipping name is specified to fit on only one line. The same applies to the “AS COOLANT”/“AS CONDITIONER” text below it.

10. This paper proposes to make alterations to the artwork in Figure 5.5.2 by increasing the size of the lettering of “WARNING” to be in proportion to the overall dimension. Printer’s marks are also added to the bottom corners to aid clarity. The wording on the dimensional arrows is aligned to the other proposals in this text. Paragraph 5.5.3.6.2 is restructured to be aligned with the proposal for the fumigation warning mark.

11. Delete the existing paragraph 5.5.3.6.2 and replace with a new paragraph 5.5.3.6.2 to read as follows:

5.5.3.6.2 The warning mark shall be as shown in Figure 5.5.2

**Figure 5.5.2:**



Coolant/conditioning warning mark for cargo transport units

\* Insert proper shipping name of the coolant/conditioner. The lettering shall be in capitals, all be on one line and shall be at least 12 mm tall. If the length of the proper shipping name is too long to fit in the space provided, the lettering may be reduced to the maximum size possible to fit. For example: CARBON DIOXIDE, SOLID.

\*\* Insert “AS COOLANT” or “AS CONDITIONER” as appropriate. The lettering shall be in capitals, all be on one line and be at least 12 mm high.

The marking shall be a rectangle. The minimum dimensions shall be 150 mm wide x 250 mm high. The word “WARNING” shall be in red or white and be at least 25 mm high. The “WARNING” lettering and graphical illustration in the diagram shall be in proportion to that shown.

## **Transitional measures**

12. The existing requirements suffer serious faults, and the coolant/conditioning unit text not yet being transposed to the modal regulations. Therefore the expert from the United Kingdom is of the view that the transitional period should be the minimum time possible, January 2015.

13. The expert from the United Kingdom also suggests that the Sub-Committee should advise the modes to bear in mind the errors in the coolant/conditioning warning mark for cargo transport units to avoid it being perpetuated in the modes. This should prevent the errors being put into actual working regulations.

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