Committed to 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

Twenty-sixth session
Geneva, 29 November-7 December 2004
Item 2 of the agenda

Texts adopted by the sub-committee at its twenty-third, twenty-fourth and twenty-fifth sessions and related proposals

Transport of aerosols for disposal

Comments on ST/SG/AC.10/C.3/2004/105 (United States of America)

Transmitted by the expert from the United Kingdom

1. The Sub-Committee will recall the discussions that have taken place during the current biennium on developing Model Regulations for the transport of aerosols for disposal. During the 25th session the expert from the United Kingdom presented ST/SG/AC.10/C.3/2004/53. After discussion text was agreed, see ST/SG/AC.10/C.3/2004/105. Two areas of the text were left in brackets to be considered in December for editorial amendment. Apart from the areas in square brackets the expert from the United Kingdom had thought that no further amendments were required. However since then three further papers have appeared, ST/SG/AC.10/C.3/2004/105 from the expert from the United States of America, supported by INF 14 submitted by VOHMA, and ST/SG/AC.10/C.3/2004/100 from the Secretariat. The expert from the United Kingdom has the following comments on each of the papers.

ST/SG/AC.10/C.3/2004/105 (United States of America)

2. The expert from the United Kingdom has consistently made the point, recognised by many others, that there is a real need to address the transport of aerosols for disposal in the Model Regulations now as industry are, in some cases, operating out with the existing, unnecessarily restrictive, international regulations and consigning such aerosols for disposal by both land and sea transport through ad hoc local arrangements. Some 4.5 billion aerosols are filled in Europe annually and, inevitably, a number of these are rejected from the production line principally as a result of minor deformation of the cans, mis-printing or some other minor fault unrelated to the safety of the aerosol for use or transport. A very small number of cans are rejected because they are found to be leaking. When FEA undertook research in proposing an alternative to the water bath test, some 115 ‘leakers’ were found in the test sample of 12 million cans i.e. 0.0009%. The United Kingdom believes that there are issues related to safety of personnel in the workplace that will already adequately address the issue of leaking product from aerosols, such that few, if any, will find their way into the transport chain.

3. In paragraph 1(a) of his paper, the expert from the United States of America suggests that consignment of aerosols for disposal contradicts the requirements of section 1.1.3 of the Model Regulations which require that substances or articles offered for transport do not give off dangerous gases or emissions. However the expert from the United Kingdom reminds the Sub-Committee as already stated in paragraph 3(d) of his earlier paper, 20032/35, that provisions already exist within the Model Regulations for transport of leaking packages - see 7.1.5.2. However, in order to address
the concerns expressed, the United Kingdom proposes to amend the proposed text to make it clear that any leaking or severely damaged aerosols for disposal must be consigned in accordance with the existing provisions of 4.1.1.17 (use of salvage packagings).

4. In paragraph 1(b) of his paper the expert for the United States of America notes that the provisions do not provide for hazard communication, suggesting that those handling these products will not know about vapours emanating from the package and the risks posed by the possible build up of dangerous gases. However, the United Kingdom made clear in paper 2004/53 that once a Packing Instruction in Chapter 4.1 is used, the normal hazard communication provisions of Part 5 will apply unless a Special Provision specifies otherwise. No such Special Provision has been proposed.

5. The text already agreed for PP87 and LP02 states that packaging and large packaging 'shall be adequately ventilated to prevent the creation of flammable atmosphere and the build up of pressure'. With the amendment to the proposal set out in paragraph 3 above, there should be little scope for such conditions arising. However, if concerns such as those expressed by VOHMA remain in respect of stowage on board a vessel, the United Kingdom believes that it would be the responsibility of IMO to address such risks proportionately.

6. In paragraph 1 (c) of his paper the expert from the United States of America contends that permitting the transport of aerosols for disposal under Packing Instruction P003 may cause confusion to consignors of other articles such as batteries for disposal. The United Kingdom does not accept this contention. If the regulatory text is clear, and the United Kingdom believes that it is, there should be no scope for such confusion. It would appear that there are no other special provisions for faulty dangerous goods, particularly articles, which need careful handling for disposal e.g. lithium batteries. However, it is certain that these have to be transported for safe disposal.

7. In 1(d) of his paper the expert of the United States of America states that the proposed packaging contradicts the requirements of 4.1.1.5. However the expert from the United Kingdom does not agree since 4.1.1.5 deals with inner packagings and not articles. Aerosols are articles and that is why the United Kingdom proposed the addition of the absorbent requirement to L2 and PP87. The United Kingdom understands that the United States of America itself has an existing exemption for land transport that allows this type of operation with similar requirements for absorbent material.

8. The comments made by the expert from the United States of America in paragraph 1(f) on operations, the expert from the United Kingdom believes are dealt with in paragraphs 4 and 5 above.
Conclusion

12. The expert from the United Kingdom very much regrets the confusion that may arise in the minds of the Sub-Committee as a result of further written comments submitted following the adoption of text in July. He has made a genuine attempt to try to satisfy these comments where they seem, at least in part, justified as it is felt that this matters needs to be properly addressed in the Model Regulations in this, rather than a later, biennium.

13. In order to help consideration of adopting text, attached as Annex is the complete, revised proposed text in respect of aerosols for disposal.
ANNEX

Consolidated text:

(a) Add a new special provision XXX in Chapter 3.3, applicable to UN 1950, to read as follows:

"XXX aerosols, other than toxic aerosols or those that are leaking or severely deformed, may be transported under this entry for the purpose of recycling or disposal, provided that they are packed in accordance with packing instructions P003 and special provision PP87, or packing instruction LP02 and special packing provision L2. When packed in accordance with P003, special packing instruction PP87 does not apply if the aerosols meet the requirements of special provision 190 and of 6.2.4.2. Leaking or severely deformed aerosols shall be carried in accordance with the provisions of 4.1.1.17."

(b) Add a new 4.1.1.17.3

"Appropriate measures shall be taken to ensure there is no dangerous build up of pressure when transporting leaking or severely deformed aerosols."

(c) LP02 and L2 should be listed in columns (8) and (9) against UN 1950 (since they are authorized for ALL aerosols);

(d) P003, PP87, the first sentence should be amended to read:

"For UN 1950, aerosols which do not meet the provisions of special provision 190 or of 6.2.4.2, transported for the purposes of reprocessing or disposal in accordance with special provision XXX of Chapter 3.3, the packagings shall have a means of retaining any free liquid that might escape during transport e.g. absorbent material. The packaging shall be adequately ventilated to prevent the creation of flammable atmosphere and the build-up of pressure. Toxic aerosols shall not be transported under this special packing provision.

(e) LP02, L2, should be amended to read:

"For UN 1950, aerosols transported for the purposes of reprocessing or disposal in accordance with special provision XXX of Chapter 3.3, inner packagings are not required. The large packaging shall meet the Packing Group III performance level. Large packagings shall have a means of retaining any free liquid that might escape during transport e.g. absorbent material. The large packaging shall be adequately ventilated to prevent the creation of flammable atmosphere and the build-up of pressure. Toxic aerosols shall not be transported under this packing instruction."

(f) '7.1.4 Special provisions applicable to the carriage of gases

7.1.4.1 Aerosols transported for the purposes of reprocessing or disposal under the provisions of P003 (PP87) or LP02 (L2) shall be carried in well-ventilated transport units."