

**COMMITTEE OF EXPERTS ON THE TRANSPORT
OF DANGEROUS GOODS**

**(Twenty-first session,
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agenda item 2 (b))**

**WORK OF THE SUB-COMMITTEE OF EXPERTS
ON THE TRANSPORT OF DANGEROUS GOODS**

**Draft amendments to the Model Regulations
on the Transport of Dangerous Goods**

**Editorial and technical amendments to the UN Model Regulations
proposed by the expert from the United States of America (USA)**

1. To facilitate discussions on IMO's proposals contained in document ST/SG/AC.10/2000/2, the expert from the United States submits the proposals provided in Annex 1.

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ANNEX 1

The following proposals are submitted to facilitate consideration and adoption of the proposals in ST/SG/AC.10/2000/2:

Part 2 Amendments

1. IMO proposed several amendments to indicate that the word "SAMPLE" is used to supplement the proper shipping name under the conditions specified in 2.0.4.1 for the transport of samples. The following is proposed to take IMO's concerns into account:

(a) In 2.0.4.1 on page 42 in the first line of the paragraph the begins with "Where this provision is used..." change "sample" to "SAMPLE". Additionally the text "(e.g. FLAMMABLE LIQUID, N.O.S. Sample)" should be changed to "(e.g. FLAMMABLE LIQUID, N.O.S. SAMPLE)"

(b) In paragraph 3.1.2 under the heading "Proper shipping name" add Notes 2 and 3 (renumbered as 1 & 2) from Amendment 30. Although note 2 pertains to limited quantities not samples, we believe it should also be added for consistency with Amendment 30. The notes should be added as follows:

Note 1: For proper shipping names to be used for dangerous goods shipped as limited quantities, see 3.4.5 and 3.4.6.

Note 2: For proper shipping names used for the transport of samples, see 2.0.4.

(c) In 5.4.1.4.3 (see ST/SG/AC.10/2000/7) a new paragraph (e) should be added as follows:

"(e) *Samples*: When dangerous goods are transported as samples according to the provisions of 2.0.4 the proper shipping name shall be supplemented with the word "SAMPLE" (e.g. FLAMMABLE LIQUID, N.O.S. SAMPLE) unless a proper shipping name which already includes the word sample is used.

2. IMO indicated that several of the references at the end of the List of Self-reactive substances need to be corrected. The following amendments refer to the paragraph references under "Remarks"

- In Remarks (1), (4) and (6) on page 67 change "7.1.4.2 to 7.1.4.3.1.3" to "7.1.4".

Justification: All of the temperature control requirements in section 7.1.4 apply.

Dangerous Goods List Amendments

3. IMO proposed to make amendments to the Seed Cake entry under UN 1386 and to delete special provision 36. The following is a more detailed explanation of why this is necessary:

- (a) There are two seed cake entries in the UN Model Regulation
- SEED CAKE *with more than 1.5% oil and not more than 11% moisture*, UN 1386
 - SEED CAKE *with more not than 1.5% oil and not more than 11% moisture*, UN 2217

The difference between the two entries is that for UN 2217 the oil content is *not more than 1.5% oil*. The 1386 entry is intended for seed cake with higher oil or oil and moisture content. However, the way it is currently listed in the UN Model Regulation, the oil content has no upper bound and the moisture content is limited to 11% whereas the IMDG Code allows up to 20% oil and moisture content and sets the maximum oil content at 10% (higher oil content would not necessarily be suitable for transport because of instability problems). According to the IMDG Code, Amendment 30, the UN 1386 entry may have a maximum oil content of 10% and a moisture and oil content up to 20%. In Amendment 30 the UN 1386 entry was changed by replacing the text “*with more than 1.5% oil and not more than 11% moisture*” with “*containing vegetable oil with not more than 10% of oil or more than 20% of oil and moisture combined*”. The properties and observations for these substances were amended to take into account the fact that some seed cake may contain up to 10% oil or 20% oil and moisture combined. In the Code different stowage requirements and emergency procedures and special provisions are applied to the two entries on the basis of the oil or oil and moisture content. The expert from the United States questions whether two entries are really necessary considering that the classification, packaging and other DGL column entries are the same and is not entirely convinced that different stowage and emergency schedules are necessary in the Code for seed cake with different oil content. We see two possible solutions depending on whether the Committee believes two entries are necessary:

- (i) Delete the UN 2217 entry and add SP 142 to UN 1386.
 - (ii) Change the italicized light type text for UN 1386, SEED CAKE to “*containing vegetable oil with not more than 10% of oil or more than 20% of oil and moisture combined*” in both the DGL and the Index.
- (b) SP 36 was deleted in the IMDG Code because it makes absolutely no sense to ship Seed cake under the more generic name FIBRES OR FABRICS, ANIMAL OR VEGETABLE OR SYNTHETIC, N.O.S. It is proposed that SP 36 deleted from the DGL and Chapter 3.3.
4. IMO proposed to add the word “SOLID” to a number of proper shipping names and to add a number of liquid/solid shipping names. It is proposed that these proposals be deferred until next biennium on the basis of the Netherlands proposal to develop guiding principles to assign the correct UN number to a substance, mixture or solution.
5. The IMO paper proposed to delete a number of special provisions which indicate that substances are prohibited for transport (i.e. SP 48, 60, 103 and 206) and to replace them with a single general special provision with a list of all prohibited substances. It is agreed that this could be deferred until the issue of prohibited substances is addressed in a comprehensive proposal.
6. For UN 2754, ETHYLTOLUIDINES, IMO proposed to add " see SP 162" in column 4 because according to the IMDG Code some isomers may have a flashpoint less than 60.5 °C and therefore may require a Class 3 subsidiary risk label. The IMDG Code indicates a flash point range of 7 °C to 92 °C. Incorporation of IMO’s proposed amendment would highlight the fact that some isomers or mixtures shipped under this entry may require communication of the flammable sub risk. However, The expert from the United States was unable to locate any information on any isomers having a flash point below 60.5 °C . On this basis, it is recommended that this proposal not be adopted.

7. IMO proposed that UN 2455, Methyl Nitrite should be prohibited. This substance is prohibited for transport in the IMDG Code, ICAO TI, US 49 CFR, RID and ADR (see the Note at the end of marginal 2201, 2⁰A, page 79 of the english text). It should be removed from the Dangerous Goods List and the index should be revised to show that it is prohibited for transport.

8. IMO proposed that SP 29 be amended by adding the text :

"However, packages of UN 1386 SEED CAKE, 2216 FISH MEAL and 2217 SEED CAKE transported as a single commodity in a transport unit are excepted from displaying the class number provided the transport unit in which they are packed is marked with the UN number."

The expert from the United States does not support this exception because it is not consistent with the hazard communication requirements of the UN Recommendations. We see no reason to provide exceptions for these materials and don't believe these exceptions are in the best interests of emergency responders. Furthermore, incorporation of this exception in the UN Model Regulation could lead to parties asking for similar exceptions for substances like UN 1373, FIBRES or FABRICS, ANIMAL or VEGETABLE or SYNTHETIC, N.O.S. *with oil* or UN 1363 COPRA. It is proposed that this exception not be included in the UN Model Regulations and that IMO be requested to consider removing it from the IMDG Code.

9. The United States does not support adding the sentence "This entry shall not be used for solids containing a Packing Group I liquid." to SP 218 and SP 216. We do not agree that the corrosive and flammable liquids absorbed in solids pose as great of a risk as the toxic liquids covered by SP 217.

10. Concerning the proposals on Part 4, Chapter 4.1, Organic Peroxides and Self-Reactive Substances, the United States supports the comments made by the International Council of Chemical Associations (ICCA).

11. Concerning the proposed note explaining the relevance of the proper shipping name and UN number, the US does not agree that this note is necessary.

12. Concerning the IMO proposal to add special labeling provisions for self-reactive substances the US supports the proposal in principle. The following slightly modified text is proposed:

5.2.2.1.12 *Special provisions for the labeling of self-reactive substances*

A Class 1 subsidiary risk label shall be applied for type B self-reactive substances, unless the competent authority has permitted this label to be dispensed with for a specific packaging because test data have proved that the self-reactive substance in such a packaging does not exhibit explosive behavior."

We agree that consideration should be given to reorganizing section 5.2.2.1 as proposed by IMO. This could be done by the UN Secretariat.

13. While the US generally supports the proposed amendments concerning marking of transport units and bulk packagings, acceptance of all of the proposals at this time is difficult because the UN does not include a definition for *bulk packaging*. The proposed amendments should be deferred to the 2001-2002

biennium pending further discussion on bulk packaging requirements and further consideration of other needed consequential amendments.

14. The US does not support the IMO proposal to include the wording:

"In addition to the elevated temperature mark, the maximum temperature of the substance expected to be reached during transport shall be durably marked on both sides of the portable tank or insulation jacket, immediately adjacent to the elevated temperature mark, in characters at least 100 mm high."

The US sees no reason for including the maximum temperature of the substance expected to be reached during transport. We believe that the elevated temperature mark provides sufficient warning to convey the elevated temperature hazard and that the actual temperature is superfluous and unnecessarily burdensome.

15. Concerning the IMO proposal to amend the package marking examples in 6.1, the US agrees that amendments are necessary and is willing to participate in the development of a comprehensive proposal to be considered in the 2001-2002 biennium.
