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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

Thirty-second session
Geneva, 30 June-9 July (a.m.) 2008
Item 6 of the provisional agenda

**MISCELLANEOUS PROPOSALS OF AMENDMENTS TO THE MODEL
REGULATIONS ON THE TRANSPORT OF DANGEROUS GOODS**

UN Portable tank and MEGC identification plates

Transmitted by the expert from Canada*

Background

1. At the thirty-second session of the Sub-Committee in December 2007, the expert from Canada made proposals on this subject in document ST/SG/AC.10/C.3/2007/52 and informal document INF.10. The proposals included a new requirement to mark the UN packaging symbol on the identification plates of UN portable tanks and MEGCs, clarified lists of the specific information required to be marked, and included formatted examples of identification plate markings for MEGCs and each type of UN portable tank. The Sub-Committee approved these proposals in principle and requested that Canada make a revised proposal at the next session to take into account the comments made by other experts at the December 2007 session.

* In accordance with the programme of work of the Sub-Committee for 2007-2008 approved by the Committee at its third session (refer to ST/SG/AC.10/C.3/60, para. 100 and ST/SG/AC.10/34, para. 14) (packing).

2. As a result, the present proposal includes the following changes compared to informal document INF.10:

- (a) A new “entry into force” date for compliance to the new identification plate marking requirements is given as 1 January 2012. As requested, two options are presented to accomplish a transition. The first option would allow portable tanks and MEGCs manufactured before 2012, in compliance with the marking requirements of the 15th revised edition of the UN Model Regulations, to remain in use without re-marking. The second option requires all new and existing UN portable tanks and MEGCs to be in conformity with the new marking requirements starting 2012 and prescribes conditions under which the re-marking of existing tanks would be permitted. The expert from Canada recommends adoption of the first option;
- (b) For portable tanks, a requirement is added to mark the “owner’s name” to complement the existing requirement for marking the “owner’s registration number”. For MEGCs, a requirement is added to mark the “owner’s name” and “owner’s registration number” for consistency with the portable tank markings;
- (c) The words “if applicable” are added to the requirement to mark the test pressure of the most recent periodic test since not all of the prescribed periodic tests include pressure testing. Footnotes to the ‘example’ identification plate marking are also added for this purpose;
- (d) The requirement to mark the test pressure of the most recent periodic test is deleted for tanks intended for refrigerated liquefied gases (6.7.4.15.1) since the prescribed periodic tests for such tanks do not include pressure testing (leak testing only is required);
- (e) The existing requirement to mark the “stamp of the expert who performed or witnessed the most recent test” is changed to “the identification mark of the authorized body that performed or witnessed the most recent test”. This more accurately aligns with the words in the body of the Model Regulations (see 6.7.2.19.9 for example);
- (f) The order within the lists of information required to be included in the identification plate markings (6.7.2.20.1, 6.7.3.16.1, 6.7.4.15.1, and 6.7.5.13.1) is changed to correspond with the order in the ‘example’ identification plate markings.

3. This proposal includes the “S” marking on certain portable tanks pursuant to the Sub-Committee’s decision on ST/SG/AC.10/C.3/2007/56. (See ST/SG/AC.10/C.3/64, para. 54 and annex 1).

4. If these changes are adopted, consequential amendments to subsections 6.1.3.1(a), 6.2.2.7(a), 6.3.4.2(a), 6.5.2.1.1(a), and 6.6.3.1(a) would be required to add a reference to Chapter 6.7 in each subsection.

Proposal 1: Transition provisions

Option 1

5. Add a new section 4.2.6 (or 4.2.0)* to read:

“4.2.6 Transitional measures

Portable tanks and MEGCs manufactured before 1 January 2012, that conform to the marking requirements of 6.7.2.20.1, 6.7.3.16.1, 6.7.4.15.1, or 6.7.5.13.1 of the Model Regulations on the Transport of Dangerous Goods annexed to the 15th revised edition of the Recommendations on the Transport of Dangerous Goods, as relevant, may continue to be used if they comply with all other relevant requirements of the current edition of the Model Regulations.”

Option 2

6. Add a new section 4.2.6 (or 4.2.0)* to read:

“4.2.6 Transitional measures

4.2.6.1 Portable tanks and MEGCs conforming to the marking requirements of 6.7.2.20.1, 6.7.3.16.1, 6.7.4.15.1, or 6.7.5.13.1 of the Model Regulations on the Transport of Dangerous Goods annexed to the 15th revised edition of the Recommendations on the Transport of Dangerous Goods, may be used until 31 December 2011 if they comply with all other relevant requirements of these Model Regulations.

4.2.6.2 Tanks and MEGCs that are otherwise in compliance with these Model Regulations may be remarked with the relevant markings in Chapter 6.7 if:

- (a) Such remarking is done by the manufacturer or by a person delegated for that purpose by the manufacturer; and
- (b) Written approval of the authorized body that issued the relevant design approval certificate required in 6.7.2.18, 6.7.3.14, 6.7.4.13, or 6.7.5.11 is obtained, in advance, for the remarking.”

* Note: The proposed transitional provisions could also be introduced alternatively in each chapter concerned, i.e. as additional text after 4.2.1.1, 4.2.2.1, 4.2.3.1 and 4.2.4.1 as relevant.

Proposal 2: Marking provisions

7. Amend 6.7.2.20.1 to read as follows:

“6.7.2.20.1 Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for inspection. When for reasons of portable tank arrangements the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method.

- (a) Owner information
 - (i) The owner’s name
 - (ii) The owner’s registration number
- (b) Manufacturing Information
 - (i) The country of manufacture
 - (ii) The year of manufacture
 - (iii) The manufacturer’s name or mark
 - (iv) The manufacturer’s serial number
- (c) Approval information
 - (i) The United Nations packaging symbol



This symbol shall not be used for any purpose other than certifying that a packaging complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7.

- (ii) The approval country
- (iii) The authorized body for the design approval
- (iv) The design approval number
- (v) The letters ‘AA’, if the design was approved under alternative arrangements (see 6.7.1.2)
- (vi) The pressure vessel code to which the shell is designed
- (d) Pressures
 - (i) The MAWP (in bar gauge or kPa gauge)²
 - (ii) The test pressure (in bar gauge or kPa gauge)²
 - (iii) The initial pressure test date (month and year)
 - (iv) The identification mark of the initial pressure test witness
 - (v) The external design pressure³ (in bar gauge or kPa gauge)²
 - (vi) The MAWP for heating/cooling system (in bar gauge or kPa gauge)² (when applicable)
- (e) Temperatures
 - (i) The design temperature range (in °C)²
- (f) Materials
 - (i) The shell material(s) and material standard reference(s)
 - (ii) The equivalent thickness in reference steel (in mm)²
 - (iii) The lining material (when applicable)
- (g) Capacity


- (i) The tank water capacity at 20 °C (in litres)²
This indication is to be followed by the symbol ‘S’ when the tank is divided by surge plates into sections of not more than 7500 litres capacity
- (ii) The water capacity of each compartment at 20 °C (in litres)² (when applicable, for multi-compartment tanks)
This indication is to be followed by the symbol ‘S’ when the compartment is divided by surge plates into sections of not more than 7500 litres capacity
- (h) Periodic inspections and tests
- (i) The type of the most recent periodic test (2.5-year, 5-year or exceptional)
- (ii) The date of the most recent periodic test (month and year)
- (iii) The test pressure (in bar gauge or kPa gauge)² of the most recent periodic test (if applicable)
- (iv) The identification mark of the authorized body who performed or witnessed the most recent test

Footnotes:

² The unit used shall be indicated.

³ See 6.7.2.2.10.

Figure 6.7.2.20.1: Example of identification plate marking

Owner			
Owner's registration number			
MANUFACTURING INFORMATION			
Country of manufacture			
Year of manufacture			
Manufacturer			
Manufacturer's serial number			
APPROVAL INFORMATION			
	Approval country		
	Authorized body for design approval		
	Design approval number		‘AA’ (if applicable)
Shell design code (pressure vessel code)			
PRESSURES			
MAWP		bar or kPa	
Test pressure		bar or kPa	
Initial pressure test date:	(mm/yyyy)	Witness Stamp:	
External design pressure		bar or kPa	
MAWP For heating/cooling system (if applicable)		bar or kPa	
TEMPERATURES			
Design temperature range		°C to °C	

MATERIALS							
Shell material(s) and material standard							
References							
Equivalent thickness in reference steel			mm				
Lining material (<i>when applicable</i>)							
CAPACITY							
Tank water capacity at 20 °C			litres	'S' (<i>if applicable</i>)			
Water capacity of compartment ___ at 20 °C (<i>as applicable, for multi-compartment tanks</i>)			litres	'S' (<i>if applicable</i>)			
PERIODIC INSPECTIONS / TESTS							
Test type	Test date	Witness stamp & test pressure*		Test type	Test date	Witness stamp & test pressure*	
	(<i>mm/yyyy</i>)		bar or kPa		(<i>mm/yyyy</i>)		bar or kPa

Footnote

(*) Test pressure if applicable

8. Amend 6.7.3.16.1 to read as follows:

“6.7.3.16.1 Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for inspection. When for reasons of portable tank arrangements, the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method.

- (a) Owner information
 - (i) The owner's name
 - (ii) The owner's registration number
- (b) Manufacturing information
 - (i) The country of manufacture
 - (ii) The year of manufacture
 - (iii) The manufacturer's name or mark
 - (iv) The manufacturer's serial number
- (c) Approval information
 - (i) The United Nations packaging symbol



This symbol shall not be used for any purpose other than certifying that a packaging complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7.

- (ii) The approval country
- (iii) The authorized body for the design approval
- (iv) The design approval number
- (v) The letters 'AA', if the design was approved under Alternative Arrangements (see 6.7.1.2)
- (vi) The pressure vessel code to which the shell is designed
- (d) Pressures
 - (i) The MAWP (in bar gauge or kPa gauge)²
 - (ii) The test pressure (in bar gauge or kPa gauge)²
 - (iii) The initial pressure test date (month and year)
 - (iv) The identification mark of the initial pressure test witness
 - (v) The external design pressure³ (in bar gauge or kPa gauge)²
- (e) Temperatures
 - (i) The design temperature range (in °C)²
 - (ii) The design reference temperature (in °C)²
- (f) Materials
 - (i) The shell material(s) and material standard reference(s)
 - (ii) The equivalent thickness in reference steel (in mm)²
- (g) Capacity
 - (i) The tank water capacity at 20 °C (in litres)²
- (h) Periodic inspections and tests
 - (i) The type of the most recent periodic test (2.5-year, 5-year or exceptional)
 - (ii) The date of the most recent periodic test (month and year)
 - (iii) The test pressure (in bar gauge or kPa gauge)² of the most recent periodic test (if applicable)
 - (iv) The identification mark of the authorized body who performed or witnessed the most recent test


Footnotes:

² *The unit used shall be indicated.*

³ *See 6.7.3.2.8.*

Figure 6.7.3.16.1: Example of identification plate marking

Owner	
Owner's registration number	
MANUFACTURING INFORMATION	
Country of manufacture	
Year of manufacture	
Manufacturer	
Manufacturer's serial number	

APPROVAL INFORMATION							
	Approval country						
	Authorized body for design approval						
	Design approval number					‘AA’ (if applicable)	
Shell design code (pressure vessel code)							
PRESSURES							
MAWP		bar or kPa					
Test pressure		bar or kPa					
Initial pressure test date:	(mm/yyyy)	Witness stamp:					
External design pressure		bar or kPa					
TEMPERATURES							
Design temperature range		°C to °C					
Design reference temperature		°C					
MATERIALS							
Shell material(s) and material standard References							
Equivalent thickness in reference steel		mm					
CAPACITY							
Tank water capacity at 20 °C		litres					
PERIODIC INSPECTIONS / TESTS							
Test type	Test date	Witness stamp & test pressure *		Test type	Test date	Witness stamp & test pressure *	
	(mm/yyyy)		bar or kPa		(mm/yyyy)		bar or kPa

Footnote

(*) Test pressure if applicable

9. Amend 6.7.4.15.1 to read as follows:

“6.7.4.15.1 Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for inspection. When for reasons of portable tank arrangements, the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method.

- a) Owner information
 - i) The owner’s name
 - ii) The owner’s registration number
- b) Manufacturing information
 - i) The country of manufacture

- ii) The year of manufacture
- iii) The manufacturer's name or mark
- iv) The manufacturer's serial number
- c) Approval information

- i) The United Nations packaging symbol




This symbol shall not be used for any purpose other than certifying that a packaging complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7.

- ii) The approval country
- iii) The authorized body for the design approval
- iv) The design approval number
- v) The letters 'AA', if the design was approved under alternative arrangements (see 6.7.1.2)
- vi) The pressure vessel code to which the shell is designed
- d) Pressures
 - i) The MAWP (in bar gauge or kPa gauge)²
 - ii) The test pressure (in bar gauge or kPa gauge)²
 - iii) The initial pressure test date (month and year)
 - iv) The identification mark of the initial pressure test witness
- e) Temperatures
 - i) The minimum design temperature (in °C)²
- f) Materials
 - i) The shell material(s) and material standard reference(s)
 - ii) The equivalent thickness in reference steel (in mm)²
- g) Capacity
 - i) The tank water capacity at 20 °C (in litres)²
- h) Insulation
 - i) Either "Thermally insulated" or "Vacuum insulated" (as applicable)
 - ii) The effectiveness of the insulation system (heat influx) (in Watts)²
- i) Hold times – For each refrigerated liquefied gas permitted to be transported in the portable tank:
 - i) The name, in full, of the refrigerated liquefied gas
 - ii) The reference holding time (in days or hours)²
 - iii) The initial pressure (in bar gauge or kPa gauge)²
 - iv) The degree of filling (in kg)²
- j) Periodic inspections and tests
 - i) The type of the most recent periodic test (2.5-year, 5-year or exceptional)
 - ii) The date of the most recent periodic test (month and year)
 - iii) The identification mark of the authorized body who performed or witnessed the most recent test

Footnote:

² *The unit used shall be indicated.*

Figure 6.7.4.15.1: Example of identification plate marking

Owner					
Owner's registration number					
MANUFACTURING INFORMATION					
Country of manufacture					
Year of manufacture					
Manufacturer					
Manufacturer's serial number					
APPROVAL INFORMATION					
	Approval country				
	Authorized body for design approval				
	Design approval number			'AA' (if applicable)	
Shell design code (pressure vessel code)					
PRESSURES					
MAWP				bar or kPa	
Test pressure				bar or kPa	
Initial pressure test date:	(mm/yyyy)	Witness Stamp:			
TEMPERATURES					
Minimum design temperature				°C	
MATERIALS					
Shell material(s) and material standard References					
Equivalent thickness in reference steel				mm	
CAPACITY					
Tank water capacity at 20 °C				litres	
INSULATION					
'Thermally insulated' or 'Vacuum insulated' (as applicable)					
Heat influx				Watts	
HOLD TIMES					
Refrigerated liquefied gas(es) permitted	Reference hold time	Initial pressure	Degree of filling		
	days or hours	bar or kPa	kg		
PERIODIC INSPECTIONS / TESTS					
Test type	Test date	Witness stamp	Test type	Test date	Witness stamp
	(mm/yyyy)			(mm/yyyy)	

10. Amend 6.7.5.13.1 to read as follows:

“6.7.5.13.1 Every MEGC shall be fitted with a corrosion resistant metal plate permanently attached to the MEGC in a conspicuous place readily accessible for inspection. The metal plate shall not be affixed to the elements. The elements shall be marked in accordance with Chapter 6.2. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

- (a) Owner information
 - (i) The owner’s name
 - (ii) The owner’s registration number
- (b) Manufacturing information
 - (i) The country of manufacture
 - (ii) The year of manufacture
 - (iii) The manufacturer’s name or mark
 - (iv) The manufacturer’s serial number
- (c) Approval information
 - (i) The United Nations packaging symbol



This symbol shall not be used for any purpose other than certifying that a packaging complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7.

- (ii) The approval country
- (iii) The authorized body for the design approval
- (iv) The design approval number
- (v) The letters ‘AA’, if the design was approved under alternative arrangements (see 6.7.1.2)
- (d) Pressures
 - (ii) The test pressure (in bar gauge)²
 - (iii) The initial pressure test date (month and year)
 - (iv) The identification mark of the initial pressure test witness
- (e) Temperatures
 - (i) The design temperature range (in °C)²
- (f) Elements / Capacity
 - (i) The number of elements
 - (ii) The total water capacity (in litres)²
- (h) Periodic inspections and tests
 - (i) The type of the most recent periodic test (5-year or exceptional)
 - (ii) The date of the most recent periodic test (month and year)
 - (iii) The identification mark of the authorized body who performed or witnessed the most recent test

NOTE: *No metal plate may be fixed to the elements.*

Footnote:

² *The unit used shall be indicated.*

Figure 6.7.5.13.1: Example of identification plate marking

Owner						
Owner's registration number						
MANUFACTURING INFORMATION						
Country of manufacture						
Year of manufacture						
Manufacturer						
Manufacturer's serial number						
APPROVAL INFORMATION						
	Approval country					
	Authorized body for design approval					
	Design approval number				'AA' (if applicable)	
PRESSURES						
Test pressure						bar
Initial pressure test date:	(mm/yyyy)	Witness Stamp:				
TEMPERATURES						
Design temperature range				°C	to	°C
ELEMENTS / CAPACITY						
Number of elements						
Total water capacity						litres
PERIODIC INSPECTIONS / TESTS						
Test type	Test date	Witness stamp	Test type	Test date	Witness stamp	
	(mm/yyyy)			(mm/yyyy)		

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