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MSC.1/Circ.1476
9 June 2014

CARRIAGE OF DANGEROUS GOODS
INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG) CODE
ANNEXES AND SUPPLEMENTS

Amendments to the Emergency Response Procedures for
Ships Carrying Dangerous Goods (EMS Guide)

1 The Maritime Safety Committee, at its ninety-third session (14 to 23 May 2014), approved amendments to the Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS) Guide (MSC/Circ.1025, as amended by MSC.1/Circ.1025/Add.1, MSC.1/Circ.1262, MSC.1/Circ.1360 and MSC.1/Circ.1438), set out in the annex, which is consequential to the amendments (37-14) to the IMDG Code, as adopted by resolution MSC.372(93).

2 Member Governments are invited to bring the annexed amendments to the EmS Guide to the attention of all concerned, taking into account the voluntary application date of 1 January 2015 of amendment (37-14) of the IMDG Code pending its envisaged mandatory entry-into-force date of 1 January 2016.

ANNEX

AMENDMENTS TO THE EMERGENCY RESPONSE PROCEDURES FOR SHIPS CARRYING DANGEROUS GOODS (EmS GUIDE) (MSC/Circ.1025, as amended by MSC.1/Circ.1025/Add.1, MSC.1/Circ.1262, MSC.1/Circ.1360 and MSC.1/Circ.1438)

EmS Guide

Fire

Introduction to the Emergency Schedules for FIRE

5 Evacuation

1 In section 5 of the Introduction to the Emergency Schedules for FIRE, the first sentence should be amended to read:

"Within some EmS FIRE SCHEDULES the phrase "Sudden or short-term events (e.g. explosions) may endanger the safety of the ship" or the phrase "The danger of uncontrolled spread of fire should be considered" has been introduced."

10 Special notes on classes of dangerous goods

10.5 Spontaneously combustible substances – class 4.2

2 Replace subparagraph "10.5.2" with the following:

"10.5.2 Although the use of dry inert powdered material to smother the fire would be the preferred option, in most circumstances such a procedure may not be possible. Two methods of dealing with such fires are possible:

- .1 controlled burning: Stay in a well-protected position. Let the goods burn. Many goods of this class react dangerously with water: refer to the relevant EmS FIRE SCHEDULE. In such cases, contact with water may intensify burning. Therefore, it is not recommended to apply water directly on the burning goods. When portable water monitors providing water shield function are available: generate a water screen to prevent spread of fire. The fire involving the goods should be left to burn out completely. If the fire has already spread to the adjacent cargo which is not reacting with water (see relevant EmS FIRE SCHEDULE): fight this fire from a safe distance;
- .2 fight the fire from a safe distance: if the location of the fire makes it possible, copious quantities of water should be used immediately. Although the goods on fire will react with water and create heat, a large quantity of water will cool down the reaction and prevent further heat radiation. However, water should not be used when the location of the fire makes it impossible to apply copious amounts of water directly onto the goods. Refer to the relevant EmS FIRE SCHEDULE."

10.6 Substances dangerous when wet – class 4.3

3 Replace subparagraph "10.6.2" with the following:

"10.6.2 Although the use of dry inert powdered material to smother the fire would be the preferred option, in most circumstances such a procedure may not be possible. Two methods of dealing with such fires are possible:

- .1 controlled burning: stay in a well-protected position. Let the goods burn. All goods of this class react dangerously with water: refer to the relevant EmS FIRE SCHEDULE. Contact with water will intensify burning. Therefore, it is not recommended to apply water directly on the burning goods. When portable water monitors providing water shield function are available: generate water screen to prevent spread of fire. The fire involving the goods should be left to burn out completely. If the fire has already spread to adjacent cargo which is not reacting with water (see relevant EmS FIRE SCHEDULE): fight this fire from a safe distance;
- .2 fight the fire from a safe distance: refer to the relevant EmS FIRE SCHEDULE, since it is possible that firefighting with water may intensify the fire and generate the evolution of flammable gases which could explode in mixtures with air."

Emergency Schedules for FIRE

F-C
NON-FLAMMABLE GASES

4 In the row for special cases, after UN 3157, add ", UN 3513, UN 3515, UN 3518".

F-G
WATER-REACTIVE SUBSTANCES

5 Replace existing schedule with the following:

"

General comments		<p>In a fire, exposed cargoes may explode or their containment may rupture.</p> <p>Liquid material leaking from ruptured receptacles may be ignited and spread the fire.</p> <p>Cargoes in tanks exposed to heat may explode suddenly in or after a fire situation by a <i>Boiling Liquid-Expanding Vapour Explosion</i> (BLEVE).</p> <p>Fight fire from a protected position from as far away as possible. Use of copious quantities of water at once is recommended to cool down the heat radiation and to cool down heated cargo nearby.</p> <p>Water in direct contact with the material will start or intensify burning of that material. Only in locations where direct access to the cargo is possible and where the cargo on fire can be submerged with water, large quantities of water may significantly reduce the thermal reactivity and stop the fire.</p> <p>THE DANGER OF UNCONTROLLED SPREAD OF FIRE SHOULD BE CONSIDERED</p>
Cargo on fire on deck	Packages	<p>DO NOT use water or foam; smother with dry inert powdered material when available or let fire burn.</p> <p>Cool nearby cargo with copious quantities of water.</p>
	Cargo Transport Units	<p>Let the fire burn. Cool nearby cargo with copious quantities of water. Use the water shield function of portable water monitors when available, to prevent the spread of fire.</p> <p>Try to avoid getting water into the cargo transport unit on fire.</p>
Cargo on fire under deck		<p>Stop ventilation and close hatches.</p> <p>The fixed gas fire-extinguishing system should be used.</p> <p>If this is not available:</p> <p>DO NOT use water onto the material in enclosed spaces under deck. Cool nearby cargo with copious quantities of water.</p>
Cargo exposed to fire		<p>If practicable, remove or jettison packages which are likely to be involved in the fire. Otherwise cool the cargo with copious quantities of water. Use the water shield function of portable water monitors when available, to prevent the spread of fire.</p>
Special cases class 4.3 packing group I		<p>In contact with water, large volumes of flammable gases are produced, which when not instantly ignited may form a highly dangerous explosive atmosphere.</p>

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F-I
RADIOACTIVE MATERIAL

- 6 In the row for Special Cases, after UN 2978, add ", UN 3507".

Emergency Schedules for SPILLAGE

S-S
RADIOACTIVE MATERIAL

- 7 In the row for Special Cases, after UN 2978, add ", UN 3507".

Index

- 8 For UN 3422 replace "S-B" with "S-A".
9 Insert the following new entries:

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UN No.	EmS Fire	EmS Spill
3507	<u>F-I</u>	<u>S-S</u>
3508	F-A	S-I
3510	F-D	S-U
3511	F-C	S-V
3512	F-C	S-U
3513	<u>F-C</u>	S-W
3514	F-D	S-U
3515	<u>F-C</u>	S-W
3516	F-C	S-U
3517	F-D	S-U
3518	<u>F-C</u>	S-W
3519	F-C	S-U
3520	F-C	S-W
3521	F-C	S-U
3522	F-D	S-U
3523	F-D	S-U
3524	F-C	S-U
3525	F-D	S-U
3526	F-D	S-U

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