## Dangerous Goods (Amendment) Bill 2000

# Administration's response to issues raised at the Bills Committee meeting held on 22 May 2001

## **Application of international standards in local legislation**

For illustration purposes, the following paragraphs set out two examples in which local legislation has adopted an international standard or practice as may be amended from time to time.

- 2. In the Merchant Shipping (BCH Code) Regulations (Cap. 413 sub. leg.), regulation 3 provides that certain chemical tankers shall be constructed, fitted etc in accordance with relevant requirements of the BCH Code. The BCH Code is defined in regulation 1(2) as "the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (1993 Edition) published by the International Maritime Organisation, as amended from time to time". A copy of the two regulations is attached at **Annex I** for Members' reference.
- 3. In the Merchant Shipping (IBC Code) Regulations (Cap. 413 sub. leg.), regulation 3 provides that every ship to which the Regulations apply shall be constructed, equipped and operated in accordance with relevant requirements of the IBC Code. The IBC Code is defined in regulation 1(2) as "the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (1994 Edition) published by the International Maritime Organization, as amended from time to time". A copy of the two regulations is attached at **Annex II** for Members' reference.

## Control on Storage and Conveyance of Dangerous Goods (DG) in Small Packs

4. As explained to members at the previous Bills Committee meeting, FSD has commissioned consultants to study how best to regulate the storage and conveyance of dangerous goods in small packs in the subsidiary legislation to be made. The study has included a review of the existing practices of the trade and the relevant overseas regulations and standards. The study has now

- been completed and a copy of the executive summary is attached at **Annex III** for members' reference.
  - 5. The consultants have confirmed that DG in small packs do pose a hazard to the public and therefore cannot be exempted from the application of the DGO altogether (see para.1.5.1). However, having regard to the nature of the hazard posed by DG in small packs and the other fire safety measures already in place in Hong Kong, the consultants are of the view that there should be a tailored regulatory regime for DG in small packs, with relaxed controls when compared with that for DG in general (see para. 1.5.2-1.5.3). To come under this regime, the DG must be packed in inner packaging or receptacle with quantities not exceeding the maximum given in Column 3 of Table 1.4.
  - 6. Regarding storage, the consultants recommend a 3-tier system of control which is briefly described as follows (para. 1.6) –

Tier	Storage Quantity	<u>Requirements</u>
0	Less than "exempted quantity" (Table 1.3)	Exempted from control
Ι	Greater than "exempted quantity"	Operators will be required to exercise a general duty of care and observe some basic safety requirements (para.1.6.3)
II	Greater than "notifiable quantity" (Table 1.4)	Operators will be further required to notify FSD of the use of the premises for such storage to enable FSD officers to undertake inspections and render specific advice (para. 1.6.5)
III	Greater than "licensing quantity" (Table 1.5) (applicable to warehouses only)	Operators will be further required to obtain a licence and to observe tailored conditions (para. 1.6.6).

7. The proposed exempted quantity (Table 1.3) will be set at a sufficiently high level to exempt ordinary storage in residential or domestic

premises from control. The proposed exempted quantity will also be larger than the exempted quantity specified in the existing DGO (Table 1.1).

- 8. For retail outlets, there will be additional storage control to ensure public safety. The aggregate quantity of all classes of DG in small packs stored must not exceed 1,000 kg (or litre) per 1,000 m<sup>2</sup> of area of the retail premises, subject to a maximum of 5,000 kg (or litre) of DG in total for a single retail outlet. See para.1.6.5.
- 9. For warehouses, a storage licence will only be required if the quantity in a fire compartment\* exceeds an aggregate of 10,000 kg (or litre) for DG in Classes 8 & 9 and an aggregate of 5,000 kg (or litre) for the remaining Classes. The licence conditions will also be tailored to deal with DG in small packs and different from those for control of DG in general. See para. 1.6.6-1.6.7.
- 10. As regards conveyance, operators may be exempted from control when the amount of DG in small packs carried in a vehicle does not exceed the same exempted quantity for storage in non-industrial premises (Table 1.3). They should be required to exercise a general duty of care and follow basic safety requirements if the amount is larger. See para. 1.7.
- 11. We have discussed the consultancy findings with the Hong Kong Retail Management Association (HKRMA) on 28 November 2001 which finds the proposed approach agreeable in general (see a copy of the letter of 4 December 2001 from the HKRMA at **Annex IV**).
- 12. In overall terms we believe that the proposed controls and exemptions have struck a balance between ensuring public safety and facilitating business. We accept the consultancy recommendations in principle and would like to incorporate them into the new subsidiary legislation which is under preparation and to be made following passage of the current Bill. During the drafting process, we will continue the existing dialogue and undertake necessary consultations with parties concerned (including the

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<sup>\* &</sup>quot;Fire compartment" is defined in the Code of Practice for Minimum Fire Service Installations and Equipment as an enclosed space in a building that is separated from all other parts of the building by enclosing construction providing a fire separation that may be required to have a fire-resisting rating.

HKRMA and the Security Panel) to ensure that the detailed controls are in line with the recommendations and reasonable.

## **Committee Stage Amendments to be proposed**

Having had the benefit of discussion with Members on the Bill, we are of the view that the Bill can be improved through introduction of some Committee Stage Amendments (CSAs). A draft of the CSAs to be proposed is attached. Brief explanation is set out in the following paragraphs.

## Clause 2(c)

14. In response to the letter of 19 October 2000 from the Assistant Legal Adviser of the Legislative Council, the Chinese rendition of the term "junk" will be proposed to be amended to follow that of the same term under the Shipping and Port Control Ordinance. Counsel has also advised that it is not necessary to define the terms "ship" and "junk" in the Bill. The Shipping and Port Control Ordinance has substantive provisions that use the terms "junk" and "ship" to distinguish them from other provisions that apply to "vessels". We have no such distinction in the DGO. The substantive provisions all refer to "vessels". The only place that "ship" and "junk" appear is in the definition of "vessel" to indicate they are included in that broader class.

#### Clause 4(a)

- Clause 4(a)(ii) and (ix) of the Bill will be proposed to be amended to ensure the scope of the empowering provisions is broad enough to cover all the envisaged circumstances under which an exemption would need to be made. (Please see paragraph 10 of "Information requested by the Bills Committee at its meeting held on 8 March 2001 (1<sup>st</sup> part)" CB(1)1255/00-01(01).)
- 16. To better reflect our policy intent, the new section 5(1)(md) will be proposed to be amended to enable regulations be made to provide for the general taking of remedial measures in the event of an emergency such as an accident. (Please see paragraphs 4-6 of "Information requested by the Bills Committee at its meeting held on 6 February 2001 regarding Dangerous Goods (Amendment) Bill 2000" CB(1)764/00-01(02).)

#### Clause 8

17. Clause 8 of the Bill will be proposed to be amended to directly provide for in the principal ordinance the power of detention of vessels or vehicles until a failure to comply with the requirements in the DGO has been rectified. (Please see paragraphs 2 & 3 of "Information requested by the Bills Committee at its meeting held on 6 February 2001 regarding Dangerous Goods (Amendment) Bill 2000" – CB(1)764/00-01(02).)

## Clause 10

18. To ensure adequate deterrent effect, the penalty for contravention of section 7 will be proposed to be raised to that proposed in the Bill for contravention of section 6 and the penalty for contravention of section 13 will be proposed to be doubled. (Please see paragraphs 7-9 of "Information requested by the Bills Committee at its meeting held on 6 February 2001 regarding Dangerous Goods (Amendment) Bill 2000" – CB(1)764/00-01(02).)

## Clause 11

19. Having regard to Members' views, clause 11 will be proposed to be amended to ensure that the deeming provision (the new section 19A) will cover dangerous goods being conveyed in a journey involving a place or places outside Hong Kong and the place outside Hong Kong will include a place on the Mainland. (Please see paragraph 11 of "Information requested by the Bills Committee at its meeting held on 6 February 2001 regarding Dangerous Goods (Amendment) Bill 2000" – CB(1)764/00-01(02). The current formulation of CSA is better than that originally envisaged with reference to the term "transit" which, as defined in section 2 of the DGO, is restricted to applying to cargo that remains at all times on the vessel.)

## Clause 13(a)

20. In response to Members' views expressed at the meeting held on 22 May 2001 and to promote certainty, section 2(1)(b) of the Merchant Shipping (Safety) Ordinance will be proposed to be amended to require the Director of Marine, as competent authority, to publish a notice in the Gazette to declare the goods the properties of which he would reasonably consider to be

dangerous when carried by sea, before such goods are classified as dangerous goods in the Ordinance.

Security Bureau December 2001

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Section of Enactment

V

Chapter: 413D Title: MERCHANT SHIPPING (BCH Gazette Number:

CODE) REGULATIONS

Regulation: 1 Heading: Citation and interpretation Version Date: 30/06/1997

- (1) These regulations may be cited as the Merchant Shipping (BCH Code) Regulations.
- (2) In these regulations the following expressions have the following meanings -
- "1974 SOLAS Convention" (《1974 年國際海上人命安全公約》) means the International Convention for the Safety of Life at Sea. 1974, as amended (a);
- "BCH Code" (散化規則) means the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (1993 Edition) published by the International Maritime Organization, as amended from time to time; (L.N. 184 of 1995)
- "Cargo Ship Safety Construction Certificate"(貨船構造安全證書), "Cargo Ship Safety Equipment Certificate"(貨船設備安全證書), "Cargo Ship Safety Radiotelegraphy Certificate"(貨船無線電報安全證書)and "Cargo Ship Safety Radiotelephony Certificate"(貨船無線電話安全證書)mean respectively the certificates so entitled issued in conformity with the 1974 SOLAS Convention and, in the case of a Hong Kong ship, under or pursuant to the Merchant Shipping (Safety) Ordinance (Cap 369);
- "Category A" (A 類 ), "Category B" (B 類 ) and "Category C" (C 類 ) mean respectively, in relation to a substance, the category to which a substance listed in column "a" of the table in Chapter 17 of the IBC Code is assigned by having against it in column "c" of that table an entry "A", "B" or "C" respectively; (L.N. 184 of 1995)
- "Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk" (散裝運輸危險化學品商適裝證書) means, in relation to a Hong Kong ship, a certificate issued pursuant to regulation 5 and, in relation to any other ship, a certificate issued in conformity with Chapter I of the BCH Code by or on behalf of the government of the State in which the ship is registered;
- "chemical tanker"(化學品液貨船) means a self-propelled cargo ship constructed or adapted and used for the carriage in bulk of any liquid substance listed in Chapter 17 of the IBC Code; but does not include offshore support vessels or dry cargo ships with deep tanks; (L.N. 184 of 1995)
- "constructed" (建造) in the expressions "constructed on or after" (放... 或之後建造) and "constructed before" (於... 之前建造) means, in relation to a ship, having its keel laid or being at a similar stage of construction; and "similar stage of construction" (相若建造階段) means the stage at which-
- (a) construction identifiable with a specific ship begins; and
- (b) assembly of that ship has commenced comprising at least 50 tonnes or 1 per cent of the estimated mass of all structural material, whichever is the less;
- "Control of Pollution by Noxious Liquid Substances Regulations" (控制有毒液體物質污染規例) means the Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations (Cap 413 sub. leg.);
- "Director" (處長) means the Director of Marine;
- "Hong Kong-trading" (在香港營運的) means operating within the waters of Hong Kong;
- "IBC Code" (國際散化規則) means the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (1994 Edition) published by the International Maritime Organization, as amended from time to time; (L.N. 184 of 1995)
- "in bulk" (散裝) means directly and without intermediate form of containment in a tank forming an integral part of or permanently located on, a ship;
- "internationally-trading" (國際營運的) means engaged otherwise than as a Hong Kong-trading ship;

- "MARPOL 1973/78" (《1973/78 年防污公約》) means the International Convention for the Prevention of Pollution from Ships, 1973, as amended<sup>(b)</sup>.
- (3) In interpreting the BCH Code-
- (a) the provisions of the BCH Code having been made mandatory under regulation 3 the language thereof shall be construed accordingly;
- (b) the definitions set out in Chapter I, paragraph 1.4 thereof, shall apply;
- (c) the foomotes to Part A of Chapter II, to paragraphs 2.14.1, 2.15.6(b), 3.13, 3.14, 3.15.2, 3.16.4 and to Chapter 17 of the IBC Code shall be construed as an integral part of the BCH Code; (L.N. 184 of 1995)
- (d) references to the Administration shall, in relation to Hong Kong ships, be references to the Secretary for Economic Services; and references to the Port Administration shall, in relation to all ships in the waters of Hong Kong, be references to the Director;
- (e) for the second sentence of the footnote to paragraph 3.13 there shall be substituted:
- "All chemical tankers constructed after 20 May 1980 but before 1 September 1984 are to comply with section 3.13 of the 1980 edition of this Code.";
- (f) each of the references to regulations of the 1974 SOLAS Convention listed in columns (1) and (2) of table 1 and table 2 in the Schedule hereto shall be construed as a reference to the corresponding provision contained in regulations made under the Merchant Shipping (Safety) Ordinance (Cap 369) and listed opposite to it in column (3) of those tables.

(37 of 1990 s. 12; L.N. 85 of 1992)

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<sup>(</sup>a) Cmnd. 7874; the Convention was amended by the Protocol of 1978 (Cmnd. 7346) and by amendments adopted by the Maritime Safety Committee of the International Maritime Organization on 20 November 1981, 17 June 1983, 21 April 1988, 28 October 1988 and 11 April 1989.

<sup>(</sup>b) Cmnd. 5748; the Convention was amended in 1978 (Cmnd. 7347) and by amendments adapted by the Marine Environment Protection Committee of IMO on 5 December 1985 and 17 March 1989.

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Chapter: 413D Title: MERCHANT SHIPPING (BCH Gazette Number:

CODE) REGULATIONS

Regulation: 3 Heading: Compliance with Code Version Date: 30/06/1997

Chemical tankers to which these regulations apply shall comply with the requirements of the BCH Code as follows-

- (1) (a) every internationally-trading chemical tanker for which the building contract was placed on or after 2 November 1973; and
- (b) every Hong Kong-trading chemical tanker which was constructed on or after 1 July 1983.
- shall be constructed, fitted, equipped, arranged and operated in accordance with the requirements relevant to it of Chapters II-VI inclusive and VIII of the BCH Code; (L.N. 184 of 1995)
- (2) (a) every internationally-trading chemical tanker for which the building contract was placed before 2 November 1973; and
- (b) every Hong Kong-trading chemical tanker of 1600 tons gross tonnage or over which was constructed before 1 July 1983, shall be constructed, equipped and operated in accordance with the requirements relevant to it of the BCH Code except to the extent provided in sub-paragraphs 1.7.3(a)-(f) thereof.
- (3) Every Hong Kong-trading chemical tanker of less than 1600 tons gross tonnage which was constructed before 1 July 1983 shall be operated in accordance with the requirements of Chapters V and VA of the BCH Code.

(Enacted 1987)

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Section of Enactment

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Chapter: 413E Title: MERCHANT SHIPPING (BCH Gazette Number:

CODE) REGULATIONS

Regulation: 1 Heading: Citation and interpretation Version Date: 30/06/1997

- (1) These regulations may be cited as the Merchant Shipping (IBC Code) Regulations.
- (2) In these regulations the following expressions have the following meanings-
- "1974 SOLAS Convention"(《1974 年國際海上人命安全公約》) means the International Convention for the Safety of Life at Sea, 1974, as amended <sup>(a)</sup>;
- "1983 IGC Code"(1983 年國際氣體規則) means the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk set out in the Annex to Resolution MSC. 5(48) adopted by the Maritime Safety Committee of the International Maritime Organization on 17 June 1983; (L.N. 185 of 1995) "1993 IGC Code"(1993 年國際氣體規則) means the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk published by the International Maritime Organization, as amended from time to time; (L.N. 185 of 1995)
- "BCH Code" (散化規則) means the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (1993 Edition) published by the International Maritime Organization, as amended from time to time; (L.N. 185 of 1995)
- "Cargo Ship Safety Construction Certificate"(貨船構造安全證書), "Cargo Ship Safety Equipment Certificate"(貨船設備安全證書), "Cargo Ship Safety Radiotelegraphy Certificate"(貨船無線電報安全證書)and "Cargo Ship Safety Radiotelephony Certificate"(貨船無線電話安全證書)mean respectively the certificates so entitled issued in conformity with the 1974 SOLAS Convention and, in the case of a Hong Kong ship, under or pursuant to the Merchant Shipping (Safety) Ordinance (Cap 369);
- "chemical tanker"(化學品液貨船) means a self-propelled cargo ship constructed or adapted and used for the carriage in bulk of any liquid substance listed in Chapter 17 of the IBC Code; but does not include offshore support vessels or dry cargo ships with deep tanks;
- "constructed"(建造) in regulation 2 means, in relation to a ship, having its keel laid or being at a similar stage of construction; and "similar stage of construction" (相若建造階段) means the stage at which-
- (a) construction identifiable with a specific ship begins; and
- (b) assembly of that ship has commenced comprising at least 50 tonnes or 1 per cent of the estimated mass of all structural material, whichever is the less;
- "Control of Pollution by Noxious Liquid Substances Regulations" (控制有毒液體物質污染規則) means the Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations (Cap 413 sub. leg.);
- "Director" (處長) means the Director of Marine;
- "IBC Code" (國際散化規則) means the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemical in Bulk (1994 Edition) published by the International Maritime Organization, as amended from time to time; (L.N. 185 of 1995)
- "in bulk" (散裝) means directly and without intermediate form of containment in a tank forming an integral part of, or permanently located on, a ship;
- "International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk" (國際散裝運輸危險 化學品適裝證書) means, in relation to a Hong Kong ship, a certificate issued pursuant to regulation 5 and, in relation to any other ship, a certificate issued in conformity with Chapter 1 of the IBC Code by or on behalf of the government of the State in which the ship is registered;
- "MARPOL 1973/78" (《1973/78 年防污公約》) means the International Convention for Prevention of Pollution from

Ships, 1973, as amended (b);

"pollution hazard substance" (有污染危險的物質) means a substance listed in column "a" of the table in Chapter 17 of the IBC Code and having against it in column "d" thereof an entry "p" only.

(L.N. 185 of 1995)

- (3) In interpreting the IBC Code-
- (a) the provisions of the IBC Code having been made mandatory under regulation 3 the language thereof shall be construed accordingly;
- (b) the definitions set out in Chapter I, paragraph 1.3 thereof, shall apply;
- (c) references to the Administration shall, in relation to Hong Kong ships, be references to the Secretary for Economic Services; and references to the Port Administration shall, in relation to all ships in the waters of Hong Kong, be references to the Director;
- (d) each of the references to regulations of the 1974 SOLAS Convention listed in column (2) of the table in the Schedule hereto shall be construed as a reference to the corresponding provisions contained in regulations made under the Merchant Shipping (Safety) Ordinance (Cap 369) and listed opposite to it in column (4) of that table; (L.N. 185 of 1995)
- (e) each of the references to regulations of the MARPOL 1973/78 listed in column (3) of the table in the Schedule hereto shall be construed as a reference to the corresponding provisions contained in regulations made under the Ordinance and listed opposite to it in column (4) of that table. (L.N. 185 of 1995)

(37 of 1990 s. 12; L.N. 86 of 1992)

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<sup>(</sup>a) Cmnd. 7874; the Convention was amended by the Protocol of 1978 (Cmnd. 7346) and by amendments adopted by the Maritime Safety Committee of the International Maritime Organization on 20 November 1981, 17 June 1983, 21 April 1988, 28 October 1988 and 11 April 1989.

<sup>(</sup>b) Cmnd. 5748; the Convention was amended in 1978 (Cmnd. 7347) and by amendments adopted by the Marine Environment Protection Committee of the International Maritime Organization on 5 December 1985 and 17 March 1989.

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Chapter: 413E Title: **MERCHANT SHIPPING** (BCH Gazette Number:

**CODE) REGULATIONS** 

**Compliance with Code** Regulation: 3 Heading: Version Date: 30/06/1997

Every ship to which these regulations apply shall be constructed, equipped and operated in accordance with the requirements relevant to it of Chapters 2-17 inclusive, 19 and 20 of the IBC Code.

(Enacted 1987; L.N. 185 of 1995)

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# Storage and Conveyance of dangerous Goods in Consumer Pack: EXECUTIVE SUMMARY

#### **Introduction**

ERM Risk was commissioned by the Fire Services Department (FSD) to undertake a comprehensive review to determine appropriate controls or exemptions that may apply to the storage and transport of Dangerous Goods (DG) in small packs intended for household use. The objective of this review was to ensure that the control measures are commensurate with the hazards and risks posed to the public and do not pose an unnecessary burden on the part of the retail trade in terms of compliance.

#### **Current Provisions**

The DG Ordinance, Chapter 295 and its four subsidiary Regulations administered by FSD, serve to regulate the storage, conveyance, manufacture and use of DG in Hong Kong. They have been in force for over 40 years and cover explosives, gases, flammable liquids, corrosives, toxics, oxidisers and others. Explosives are however, not relevant to this Study as they are not permitted to be stored or transported by the retail sector. Gases such as Liquefied Petroleum Gas (LPG), natural gas and towngas are governed separately by the Gas Safety Ordinance and are therefore excluded. However, reference has been made in this Study to provisions that apply to gaseous products used in the household (such as aerosols containing LPG).

The DG Regulations contain requirements for packaging and labelling, general safety provisions, the quantities for which no licence is required (referred to as the 'exempted quantity', see *Table 1.1* for examples) and the conditions for the granting of a licence for storage, transport, manufacture and use.

#### Table 0.1 Exempted Quantity under Existing DG Legislation

UN Class	Dangerous Goods (examples)	Exempted Quantity for Individual	Exempted Quantity for Aggregate of all
		DG	DG of that Class
Class 3, Packing Group II	Acetone	20L	40L
(flammable liquids with flash	Ethyl acetate	20L	
point less than 23 <sup>0</sup> C)			

UN Class	Dangerous Goods (examples)	Exempted Quantity for Individual DG	Exempted Quantity for Aggregate of all DG of that Class
Class 3, Packing Group III	Thinner	20L	40L
(flammable liquids with flash	Turpentine substitute	20L	
point greater than 23°C but less			
than 66 <sup>0</sup> C)			
Class 3, Manufactured products of	Paints	None	250L
flammable liquids			
Class 4.1, Flammable solids	Naphthalene	50kg	None
Class 5.1, Oxidising substances	Bleaching powder	250kg	None
	Hydrogen peroxide solution	25L	
Class 8, Corrosives	Hydrochloric acid	25L	None
	Sodium hydroxide solution	50L	
	Sodium hypochlorite solution	250L	

The provisions in the Regulations are supplemented by Codes of Practice on Fire Service Installations and Fire Resisting Construction and Technical Specifications (which contain details on ventilation, spill containment etc). These requirements are enforced as licensing conditions.

#### <u>Inadequacy of Current Provisions to DG in Small Packs</u>

The current provisions in the DG Regulations evolved primarily for the control of DG handled by the industry or for some specific (eg hospital) use. These usually come in large packages, between 30 to 200 L and include dangerous substances such as cyanides, highly flammable liquids and highly corrosive substances.

On the other hand, DG for household use are typically packaged in 500mL or 1 L containers and are formulated to ensure that, with reasonable precautions, the products are safe to be handled by consumers. Examples of DG used in the household include cleaning liquids, bleaches, pesticides, aerosols and naphthalene balls. Other less common DG used in the household, include paints and thinners which come in slightly larger packages of about 5L.

Furthermore, DG for household use are handled by the retail sector along with other consumer items such as foodstuff, paper products and personal care products.

Most of the current provisions are considered inappropriate to DG in small packs as they are not commensurate with the nature of hazards and risks posed by such goods. Examples include:

- prohibition on mixed storage;
- prohibition on storage of more than 1,350 L in upper floors of industrial buildings;
- provision of automatic fixed installations (such as sprinklers, gas or foam systems) based on the type of DG and
- provision of ignition protected equipment for gases and flammable liquids.

It must be said that the some of the current provisions already cater for some of the DG in small packs such as potable spirits and paints. However, the exempted quantity is higher than that of DG for industrial use.

#### Need for Review

The FSD is currently finalising the amendments to the DG Ordinance and Regulations, following a comprehensive review of all the provisions. However, those concerning DG in small packs needs further consideration.

This Study was therefore commissioned to review, in detail, the current practices adopted by the retail sector, the practices, standards and regulations adopted in overseas countries such as UK, USA, Australia, Japan and Singapore and the hazards and risks posed by DG in small packs. Based on this review, a number of options were considered and recommendations made.

#### **Options**

The options considered in this Study include broadly:

- Exemption of DG in small packs from the DG legislation; or
- Alternatively:
  - should DG in small packs be exempted from licensing requirements?
  - should the licensing quantity be raised?
  - should requirements be developed that are more appropriate to DG in small packs?

## Exemption from DG Legislation

The option of complete exemption of DG in small packs from the DG legislation was considered but ruled out on account of the following factors.

The DG legislation is the only legislation that provides the means to ensure public safety due to handling, storage and transport of DG. Other legislation which govern the retail sector such as the Occupational Health and Safety Ordinance is limited to employee safety.

A survey by the Consultants showed that the quantity of household DG stored in warehouses is of the order of several tonnes, and therefore a blanket exemption is not possible without assessing its risks.

The Consultants carried out a review of fire incidents worldwide in warehouses and retail premises to identify the nature of hazards and risks posed by DG. Past incidents demonstrate that DG in small packs could initiate a fire upon spill. For example, spillage from a few damaged bottles of turpentine substitute (flammable liquid) led to major fire losses in one warehouse in the US. The presence of DG could also significantly accelerate the spread of fire that initiates elsewhere involving ordinary combustibles (such as cardboard packaging, wooden pallets and plastics). Aerosols, flammable liquids, oxidisers and flammable solids all contribute to the escalation of fire. Corrosives and toxics present a different kind of danger and their involvement in a fire could result in toxic combustion products and contamination of fire water run-off. Therefore when large quantities of consumer DG packages are stored in a general warehouse, the hazard potential can no longer be defined by the size of the package but rather needs to consider both the total quantity and the storage environment.

The Consultants visited a number of warehouses and retail stores to assess the safety practices being adopted in Hong Kong. Discussions were also held with the trade to ascertain their level of awareness of safety issues. The general standard of storage was found to be average to poor. Significant over storage and storage in aisle space was observed. Little attention was paid to escape routes. There is also a lack of awareness as to which products constitute DG and what sort of safety precautions are required. However, greater awareness was demonstrated by some in the measures taken by EMSD in recent years with regard to aerosols (containing LPG) which seemed to have an impact in improving the standards for storage as well as raising the awareness level amongst the retail sector.

The Consultants reviewed legislation in overseas countries. The Australian DG legislation has provisions similar to that in Hong Kong in terms of the licensing requirement to store more than the exempted quantity, even if the

goods are packaged in consumer commodities. The exempted quantities are of a similar order of magnitude. The safety requirements for retail stores or retail distribution centres storing consumer commodities however, are more simple and less stringent than would apply for DG used in industrial applications.

In the UK, the legislative control is limited to a general duty of care, supplemented by guidance notes. The US relies more on a standards based approach as provided by the National Fire Protection Association (NFPA).

All the countries surveyed provide exemption from transport rules (other than the need to comply with basic safety requirements) for DG in small packs.

Based on the above review, it is concluded that DG in small packs do pose a hazard to the public and therefore cannot be exempted completely from the application of the DG legislation.

## **Exemption from Licensing**

The Consultants examined the option of exempting DG in small packs from licensing control while retaining some control under the DG legislation. The following factors were considered:

The current control regime relies very much on licensing to impose safety requirements and ensure through a system of annual renewal that such requirements are adopted. As a corollary, exempted quantities have been set low and quantities below exemption limits are completely exempt from any obligations under the legislation to adopt safe practices.

The licensing system of control has been in force for many years and has served Hong Kong well in preventing major accidents. It is considered appropriate for Hong Kong given the high density of population, the proximity of population to industrial buildings, the storage of DG in high rise buildings and the limited awareness of the hazards posed by DG amongst workers employed by the trade.

The system of licensing control for small quantities is not practised elsewhere such as in the UK or in the US. However, it is adopted in Australia which requires licensing of small quantities similar to the levels in Hong Kong, but the safety requirements are graded according to the size and nature of storage.

Any significant departure from the present control regime, ie raising the level of exemption for licensing or providing complete exemption from licensing to DG in small packs could be accepted provided sufficient provisions are

contained within the legislation on the general duties on operators to ensure safe storage, transport and handling. Similar provision exists in other national legislation, for example, in the UK under the Health and Safety at Work Act and in Australia under the DG Regulations which require adoption of Australian Standards even if the quantity is less than the exempted quantity.

Based on the above, it is concluded that the licensing system of control for the retail sector may be relaxed provided that a general duty of care provision is introduced in to the legislation which places a duty on the operators to adopt safe practices.

## Increase in Licensing Quantity

Based on the nature of the hazard posed by DG in small packs in the context of retail operations and also based on the consideration that a general duty of care would apply to all operators, an increase in the licensing quantity from the current low levels is considered appropriate. For storage higher than the increased limit, more stringent requirements would apply.

Precedents exist in the current DG Regulations for adopting a different threshold level for licensing of consumer commodities, such as potable spirits, bleaching powder and paints. These limits are higher than for other dangerous goods and have operated satisfactorily over the years.

Also, some control measures arising from the building fire safety legislation are already in place. These include the requirement for fire compartmentation (ie, maximum compartment volume permitted), sprinkler systems, means of escape, etc, which apply irrespective of whether or not DG are stored on the premises. The requirement for automatic fixed fire service installations for all warehouses and retail premises in Hong Kong is much more stringent than those adopted in Australia or the UK.

Therefore, raising the licensing limits is not considered to compromise public safety. The precise value for the new licensing limits is of course a matter of judgement and fire engineering. The general principle adopted is that the quantity or the proportion of DG as a percentage of the total goods stored within a premises is small enough not to present a significant hazard to warrant stringent controls. This principle has been adopted in both the Australian Regulations and the Australian Standards.

Similar considerations have also been adopted by the NFPA (National Fire Protection Association in the US) in setting the maximum quantity levels for

different standards of fire protection.

In proposing new licensing limits for Hong Kong, reference to the NFPA and Australian standards have been made and to considerations such as the operating environment.

## Recommended Provisions for Storage of DG

A 3-tier system of control is proposed for regulating storage of DG in small packs as given in *Table 1.2*.

## Table 0.2 Proposed Control Regime for DG in Small Packs

Tier	Storage quantity	Requirements
0	Less than Exempted quantity <sup>a</sup>	None for less than exempted quantity;
I	Greater than Exempted quantity <sup>a,b</sup>	Basic safety requirements <sup>c</sup> will apply
II	Greater than Notifiable quantity <sup>b,c</sup>	Notify FSD
III	Greater than Licensing quantity <sup>b,c</sup>	Licence to store; fire safety requirements as
		appropriate for DG

- (a) Same as in the DG (Amendment) Bill 2000 but storage greater than exempted quantity will not automatically require a licence (see Tier II & III) unlike DG for industrial use.
- (b) These new threshold levels and requirements will apply to only DG in small packs
- (c) Basic safety requirements will also apply to Tier-II and III storage

## Application

The proposed rules concerning DG in small packs would apply to DG listed (as per United Nations Classification) in column 1 of *Table 1.4* in maximum quantities per inner packaging or receptacle as given in column 3.

Others such as Packing Group (PG) <sup>(1)</sup> I substances, UN Class 2.3, UN Class 4.1 PG II, UN Class 4.2, UN Class 4.3 and UN Class 5.2 (other than specified in *Table 1.4*) are too dangerous and unlikely to be sold to consumers. Therefore, they would continue to be governed by the main provisions for DG (ie, those applicable to DG for general use). Also, packages of size greater than given in Column 3 of *Table 1.4* would also be governed by the main provisions for DG.

ERM Risk

<sup>(1)</sup> Substances are assigned to Packing Groups (PG) under the UN system according to the degree of danger they present.

PG I represents high danger, PG II medium danger and PG III low danger

## **Exempted Quantity**

It is recommended that the exempted quantities to be proposed in the new DG Regulations following the passage of the DG (Amendment) Bill be applied to DG in small packs as well. This is shown in *Table 1.3*. These quantities have been set a level that they do not pose a significant hazard and are sufficient for normal use in the household or other applications. Therefore such quantities are exempted from any of the requirements in the DG legislation. This exemption may also apply to the retail sector.

## Table 0.3 Exempted Quantity

Type of DG	Exempted Quantity (Aggregate)	
	Non-industrial buildings	Industrial buildings
Class 2	300 L	450 L
Class 3	100 L	150 L
Class 3, Manufactured Products (eg paints)	250 L	250 L
Class 4.1, 5.1, 5.2, 6.1, 8 and 9	100 kg (or L)	1000 kg (or L)

#### Notes:

- (a) In addition to above, exempted quantity for individual substances in each DG Class would also apply (as specified in the DG (Amendment) Bill 2000). For example, the exempted quantity for hydrochloric acid (Class 8) is 50L.
- (b) For pesticides in Class 6.1, the aggregate exempted quantity is 250 L (in industrial or non-industrial building)

## **General Safety Provisions**

In order to ensure that the trade or any person handling dangerous goods carry a degree of responsibility towards adopting safe practices, it is recommended to include a provision for a general duty of care within the regulation which would apply for any quantity exceeding the exempted quantity. Such a provision would raise the safety standards within the industry and also provide a mechanism for the regulators to take appropriate action against those who adopt practices that may pose a danger to the public.

The general duty of care provision may be drafted in general terms or in terms of basic safety requirements that the operators need to comply, such as:

- provision of hazard information;
- organisation and arrangements;
- basic safe storage requirements including housekeeping; and
- safety provisions including fire safety.

The above could be elaborated further in Code of Practice.

## Notifiable Quantity for DG in Small Packs The proposed notifiable quantities for storage of DG in consumer packs is given in Table 1.4.

## Table 0.4 Notifiable Quantity for Storage of DG in Small Packs

UN Classification	Examples	Maximum Package Size kg (or L)	Notifiable Quantity kg (or L)	
Class 2.1 and 2.2, Gases	Aerosols (excluding those containing LPG which are governed by the Gas Safety Ordinance, Cap 51)	1	500	
Class 3, Packing Group II <sup>1</sup> (Flammable liquids)	Nail polish remover, alcohol based mouth wash, mineral turpentine, adhesives, polishes with flammable liquid base <sup>2</sup>	1	150	
Class 3, Packing Group III <sup>1</sup> (Flammable liquids)	Nail polish remover, alcohol based mouth wash, mineral turpentine, perfumes, adhesives, polishes with flammable liquid base <sup>2</sup>	5	500	
Class 3, Manufactured Products (Flammable Liquids)	Paints, lacquer, enamel, stain, shellac solution, varnish, polish, liquid filler and liquid lacquer base	5	1000	
Class 3, Potable Spirits (Flammable liquids)	Alcoholic beverages (>35% ethyl alcohol)	5	1000	
Class 4.1, Flammable solids	Naphthalene balls or fire lighters and other solids containing flammable liquid	3	2000	
Class 5.1, Oxidising substances	Hydrogen peroxide (≥8%) or hydrogen peroxide- based hair bleach, bleaching powders such as calcium hypochlorite (≥10% Cl)	1	500	
Class 5.2, Organic peroxide	Organic peroxide in polyester resin kit, peroxide based hardeners for fibre glass	0.1	25	
Class 6.1, Toxics	Pesticides	1 L in Liquid 3 kg in Solid	500	
Class 8, Corrosives	Bleaches such as sodium hypochlorite (≥10% Cl), alkalis such as sodium or potassium hydroxide as solid or solution (≥2%) or ammonia solutions (≥10%) and acids such as sulphuric, nitric or hydrochloric acid		2000	
Class 9, Miscellaneous goods	Mothballs	5	1000	
Aggregate quantity (of all DG class) - for warehouses in industrial buildings				
aggregate quantity (of all DG class) - for retail premises & other premises in non-industrial uildings but excluding residential premises <sup>3</sup>				

#### Notes to Table 1.4:

- (a) Although the notifiable quantity (2000 kg (or L)) for Class 4.1 and 8 is higher than aggregate quantity for retail premises (1000 kg (or L)), the aggregate quantity will govern.
- (b) Aggregate limit is subject to individual notifiable limit not being exceeded.
- (c) The aggregate limit for retail premises includes products in the display area as well as in the

back store

- (d) Further examples of consumer products identified as DG is given in *Annex A*.
- (1) Packing Group II flammable liquids has flash point less than 23<sup>o</sup>C and initial boiling point greater than 35<sup>o</sup>C. Packing Group III flammable liquids has flash point between 23<sup>o</sup>C to 61<sup>o</sup>C and initial boiling point greater than 35<sup>o</sup>C
- (2) These products could fall into either Packing Group II or III depending on the flash point and initial boiling point of the substance
- (3) Residential/domestic premises are not permitted to store more than exempted quantity as given in *Table 1.3*

Although the notifiable quantity proposed for any one class of DG is the same for both warehouses and retail premises, the aggregate quantity is much lower for retail premises on account of potential exposure to the public.

In the case of storage in a warehouse or an industrial building, the notification requirements would apply only if the storage quantity in a fire compartment (as defined in the Buildings Code) exceeds the notifiable quantity.

The proposed notifiable quantity is based on the principle that when the proportion of DG in a storage compartment is small and scattered, it does not present a significant hazard warranting additional controls than already provided (such as fire compartmentation and sprinklers).

## **Notification Requirements**

A notification system requiring operators to notify the FSD as to the nature of their operations is proposed when the storage quantity for any class of DG exceeds the notifiable quantity for that class or the aggregate quantity specified in *Table 1.4*.

The notification requirements may include the location, the name of the operator, the type of DG stored, the quantity stored and a brief description of the safety measures adopted. Such a notification would enable the FSD to maintain a record of such premises, undertake inspections as required and also enable the development of emergency plans and undertaking of fire drills as required.

Furthermore, the operators are required to adopt the following maximum limits (referred to as 'Storage Requirements for Notifiable Quantity'):

For Retail Premises

• the aggregate quantity of DG of all Classes should not exceed 1,000 kg (or L) per 1,000m<sup>2</sup> of area of a retail premises and should be subject to a maximum of 5,000 kg (or L)

The above storage requirement may be specified within the legislation or separately in a Code of Practice. The latter option would provide flexibility to modify the requirements as appropriate at a later date.

## Licensing Quantity for DG in Small Packs

The proposed licensing quantity for storage of DG in consumer packs is given in *Table 1.5*.

## Table 0.5 Licensing Quantity

Type of DG	Licensing Quantity, kg (or L)			
Aggregate quantity of DG Class 2.1, 2.2, 3, 4.1, 5.1, 5.2 and 6.1 a	5,000			
Aggregate quantity of DG Class 8, 9	10,000			
(a): For DG of Class 5.2, the licensing quantity would be 100 kg (or L)				

In the calculation of aggregate quantity, Class 2 products containing LPG, which are governed by EMSD under the Gas Safety Ordinance, should also be included, although controls on LPG products will be administered by EMSD.

Retail premises are not permitted to store more than 5,000 kg (or L) as specified in the notification requirements for retail premises in *Section 1.6.5* and hence the licensing provision would not apply. This is also consistent with the current approach which does not permit issue of DG licenses to premises in non-industrial buildings.

## Licensing Requirements

In the case of licensed premises, additional provisions may apply as follows (referred to as 'Storage Requirements for Licensing Quantity'):

 automatic fixed installations (such as sprinklers, gas or foam systems) in accordance with the risk posed by the DG (2) (as specified in the UK Loss Prevention Council Rules);

<sup>(2)</sup> The automatic fixed installations (such as sprinklers) provided in warehouses are designed mainly for ordinary combustible materials rather than DG. If DG in small packs is stored in licensing quantity, the maximum storage height may need to be reduced as per the LPC Rules or the sprinkler system upgraded to that required for 'high hazard' goods.

- requirement to segregate incompatible goods; and
- maximum height for locating a store in a high rise building to be limited to 30m.

The above storage requirements may be specified as licensing conditions or separately in a Code of Practice.

A licensing system would also ensure that such premises are inspected annually by the FSD and that the FSD are satisfied that the operations are being carried out safely.

## Segregation Requirements

It is proposed that the following simple segregation requirements be adopted:

- oxidisers should be segregated from other goods, particularly flammables (Class 2, 3, 4);
- corrosives should be kept segregated from other goods, particularly liquids, mainly to prevent damage to other containers in the event of leakage;
- DG should be kept segregated from foodstuffs

A separation distance of 1 to 3m is considered appropriate.

The above requirements may be imposed on those premises which store quantities for which licensing is required. However, it may be adopted by operators storing quantities that fall within notification limits as a matter of good practice.

## Recommended Provisions for the Transportation of DG

It is recommended that the transportation of DG in small packs be exempted from notification or licensing requirements. However, as in the case of storage, a general duty of care provision should apply to transport of DG (in small packs) more than the exempted quantity in *Table 1.3*. This provision may be supplemented by detailed safety requirements which may be developed by FSD in the form of Code of Practice or incorporated within the legislation as appropriate. The safety requirements should include the following:

- the size of packages should not exceed those specified in *Table 1.4*;
- the vehicle used to transport DG is suitable;

- any vehicle engaged in carriage to a retail distribution centre or retail outlet is not stopped or parked unnecessarily. If parked, the vehicle should be supervised at all times or else all reasonable arrangements should be made to secure the vehicle and its contents;
- the operator and any other person involved in the carriage should take all reasonable precautions to ensure that the DG are loaded, stowed and unloaded in such a way as to prevent any breakage, leakage or dangerous reaction with other consumer commodities. Packages should be stowed so as to prevent their movement during carriage;
- smoking should be prohibited within the vehicle during carriage or nearby when it is being loaded or unloaded;
- the drivers are provided adequate training on the hazards posed by DG and the actions to be taken in the event of an emergency.

#### Other Recommendations

#### **Hazard Information**

It is important for the retail sector to recognise the hazards posed by DG. The trade has a primary responsibility to obtain necessary information from the manufacturers and importers as regards the classification and the properties of the DG they handle and it is proposed that such a requirement be included within the legislation.

Such hazard information is readily available with the manufacturers and suppliers and can be obtained by the retail trade (ie, in the form of Material Safety Data Sheets or shipping document). Some of the manufacturers located in this region however, may not be familiar with the UN/IMDG classification rules or have not been adopting such rules to classify their product or providing appropriate safety information. In such cases, the retail trade in Hong Kong, as importers of such products, would have to ensure that the manufacturers comply with the rules of Hong Kong.

The FSD and the Government Laboratory may assist the trade in this respect during the initial phase of implementation, by providing guidelines for identification and classification of DG.

## **Implementation**

The proposals presented above may be implemented as amendments to the DG legislation which would subsequently require widespread dissemination to the retail sector.

The premises which fall under the notification requirements may be inspected as required by the FSD. During the initial period however, FSD may need to be pro-active in identifying such premises in co-operation with the retail operators.

Appropriate resources in terms of funding and manpower may need to be considered for the FSD to oversee the safety measures adopted by the retail trade with regard to consumer products containing DG.

#### **Conclusions**

The Study has reviewed the current provisions in the DG Ordinance, the practices adopted by the trade, the legislation and standards adopted overseas and the hazards and risks posed by DG in small packs for household use.

Based on this review, the Study has recommended a number of proposals which simplify the requirements that need to be adopted by the trade while at the same time ensuring that public safety is not compromised.

## Annex A

Classification of Household Chemicals according to IMDG Classes

Table A1 Classification of Household Chemicals according to IMDG Classes

IMDG Classification	IMDG Description	Typical Substances	Products
3	Flammable liquids	Solvent based adhesives	3303P VITREMER GLASS IONOMER PRIMER
		Rubber cement	3M Brand EXTRACTION CLEANER CONCENTRATE
		Disinfectant alcohol	3M Brand PRETREATMENT CLEANER CONCENTRATE
		Nail lacquer	3M Brand QUAT DISINFECTANT CLEANER CONCENTRATE
		Metal polish	3M Primer/Degreaser, P.N. 08683/30 mL; 08685/125 mL; 08691/5.91 mL
		Perfumery products	3M SINGLE BOND ADHESIVE
		Pesticides	4242 3M SCOTCHBOND 1 ADHESIVE
		Methylated spirits	BAYGON GENIUS-PLUG/SET
		White spirit	BEAUTIFLOR
		Kerosene	Brasso Metal Polish
		Potable spirit (>35%)	D.E.R. 530-A80 EPOXY RESIN
			EPOXY RESIN MRA NPL 585
			NPL-585L
			NPL585L EPOXY RESIN
			SCOTCH-CLAD ™ SELF-LEVELING GRAY BASECOAT 5893
			Silvo Polish
			STARANE* 200 HERBICIDE
			STP® Fuel Injector and Carburetor Cleaner
			STP® Premium Synthetic Fuel Injector Cleaner
			XU 19066.00 EXPERIMENTAL EPOXY RESIN

IMDG Classification	IMDG Description	Typical Substances	Products
			XZ 92505.00 DEVELOPMENTAL RESIN ADDITIVE
			XZ 92505.00 EXPERIMENTAL EPOXY RESIN
4.1	Flammable solids	Camphor in block	BAYGON MATS
		Naphthalene balls	
		Fire lighters	
		Safety matches	
5.1	Oxidising substances	Hydrogen peroxide (20-60%)	3M NEXCARE ™ COLD COMFORT INSTANT COLD PACK(Cat.#2640)
		Swimming pool chlorine	CLOROX AUTOMATIC TOILET BOWL CLEANER
		Bleaching powder (>10% Cl)	OPTIMUM 280 PRESOAK DESTAINER

6.1	Poisonous (toxic) substances	Pesticides	DBNPA 100 PTECH
		Hair colours	DELFOS* 3 INSECTICIDE
		Correction fluid	DURSBAN* FM INSECTICIDAL CHEMICAL
		Paint strippers	DURSBAN* TC TERMITICIDE CONCENTRATE
			EMPEROR (CHP + Spinosad) EC
			EMPIRE* 20 MICROENCAPSULATED INSECTICIDE
			LORSBAN* 4E INSECTICIDE, SMC: 01545
			LORSBAN* 4E INSECTICIDE, SMC: 47602
			MAGISTER* 100 EC
			NURELLE* D 505 EC INSECTICIDE
			PROFESSIONAL LAUNDRY SOUR

IMDG Classification	IMDG Description	Typical Substances	Products
			VORANATE* T-80 TYPE I TDI
8	Corrosive substances	Nitric acid (>70%)	3M Brand BATHROOM CLEANER CONCENTRATE
		Nitric acid (<70%)	3M Brand PHENOLIC DISINFECTANT CLEANER CONCENTRATE
		Sulphuric acid (>5%)	7423 and 3007 SCOTCHBOND LOW VISCOSITY ETCHING GEL
		Hydrochloric acid	7523 SCOTCHBOND ETCHING GEL
		Potassium hydroxide	BASE FOR JUBILEE
		Sodium hydroxide	BATHROOM DUCK
		Drain cleaners	BIG BARE® WATER-BASED INDUSTRIAL CLEANER/DEGREASER
		Lavatory cleaners	BRAVO® EXTRA HEAVY DUTY STRIPPER
		Oven cleaners	BREAK-UP - DILUTED
		Ammonia solution (10-35%)	BREAK-UP®
		Bleaching solution (>10% Cl)	CLOROX FLORAL FRESH BLEACH
		Phosphoric acid (rust converter)	CREW SHOWER, TUB & TILE CLEANER HC (HYPER-CONC.)
			CREW TUB & TILE CLEANER FOR SOLUTIONS CENTER
			D.E.H. 39 EPOXY CURING AGENT
			EMEREL® READY-TO-USE
			FORMULA 409 ALL PURPOSE CLEANER LEMON FRESH
			FORWARD DC
			FREEDOM STRIPPER
			FRESH SCENT CLOROX BLEACH
			GLANCE HC (HYPERCONCENTRATE)
			GP FORWARD SC (SUPERCONCENTRATE)
			GP FORWARD® GENERAL PURPOSE CLEANER

IMDG Classification	IMDG Description	Typical Substances	Products
			Harpic Powder
			Jeyes Bleach Toilet Cleaner With Abrasives
			JOHNSON BLOCK WHITENER
			J-SHOP 600
			LEMON FRESH CLOROX BLEACH
			LEMON FRESH FORMULA 409 ALL PURPOSE CLEANER
			LEMON FRESH FORMULA 409 ALL PURPOSE CLEANER I
			LIQUID KLEEN BOWL
			LIQUID-PLUMR® FOAMING PIPE SNAKE
			OPTIMUM 102 DISHMACHINE DETERGENT
			OPTIMUM 131 WAREWASH DETERGENT
			OPTIMUM 137 WAREWASH DETERGENT
			OPTIMUM 138 WAREWASH DETERGENT
			OPTIMUM 182 DISHMACHINE SANITIZER
			OPTIMUM 281 LIME SCALE REMOVER
			OPTIMUM 282 OVEN AND GRILL CLEANER
			OPTIMUM VENT HOOD DETERGENT
			PROFESSIONAL FORWARD
			PROFESSIONAL HEAVY DUTY LAUNDRY DETERGENT
			PROFESSIONAL HEAVY DUTY STRIPPER
			PROFESSIONAL IRON CONTROLLING LAUNDRY SOUR
			PROFESSIONAL LAUNDRY ALKALI BOOSTER
			PROFESSIONAL LAUNDRY DETERGENT

IMDG Classification	IMDG Description	Typical Substances	Products
			SCOTCH-BRITE ™ QUICK CLEAN GRIDDLE LIQUID (NO. 700 AND NO. 701)
			SOFT SCRUB LIQUID WITH BLEACH
			STEP-OFF®
			SURE TRAC®
			ULTRA CLOROX 2 BLEACH FREE LAUNDRY BOOSTER (DRY)
			ULTRA CLOROX BRAND LEMON FRESH BLEACH
			ULTRA CLOROX LEMON FRESH BLEACH
			ULTRA CLOROX REGULAR BLEACH
			VIREX* 256
9	Misc. dangerous substances	Mothballs	DOWFAX* 20A612 NONIONIC SURFACTANT
			DURSBAN* PRO INSECTICIDE
			MANCOZEB 80 WP FUNGICIDE

## Letterhead of HONG KONG RETAIL MANAGEMENT ASSOCIATION 香港零售管理協會的信頭

4 December 2001

Mr Lau Kwai-shan Chief Fire Officer Fire Services Department

By fax: 2723 2197

Dear Mr Lau,

CONSULTANCY STUDY ON STORAGE AND CONVEYANCE OF DANGEROUS GOODS IN CONSUMER PACK

Thank you for the fruitful meeting held on 28 November 2001 and the presentation by your consultant on the captioned subject.

We are in general in agreement with what was proposed by the consultant in the captioned review and we do not have extra comments to add as to what was discussed during the meeting.

Thank you for your kind assistance on the subject.

Yours sincerely,

Anita Bagaman (Miss) Executive Director

c.c. Mr Tam Chi-chung, Fire Services Department.Mr Peter Lam Yau-wing, Fire Services Department.Mr Logan Taylor, HKRMA.

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## Dangerous Goods (Amendment) Bill 2000

## Committee Stage

## Amendments to be moved by the Secretary for Security

## Clause **Amendment Proposed** In the proposed definition of "船隻", in paragraph (a), by deleting 2(c) "中國式帆船" and substituting "中式帆船". By deleting subparagraph (ii) and substituting -4(a) (a) by repealing paragraph (b) and substituting -"(ii) "(b) the exemption from the operation of this Ordinance or any part thereof of -(i) any -(A) substance, material or article; or

(B) group or description of substances,

materials or articles

to which this Ordinance applies, or any quantity thereof; or

(ii) any group or description of persons,

by reference generally or by reference to any circumstances as may be specified and subject to such terms and conditions as may be specified;".".

- (b) By deleting the proposed paragraph (ma) and substituting 
  "(ma) empowering the -
  - (i) Director of Marine, in respect of dangerous goods at sea; and
  - (ii) Director of Fire Services, in respect of dangerous goods on land,

to grant an exemption, in respect of a

specific case or a specific person, from all or any of the provisions of this Ordinance or a regulation, subject to such terms and conditions as the Director of Marine or the Director of Fire Services may specify.".

- (c) By deleting the proposed paragraph (mb).
- (d) By deleting the proposed paragraph (md) and substituting -

"(md) measures to be taken in the event of an emergency occurring while dangerous goods are being transported by a vehicle;".

By deleting the clause and substituting -

## "8. Power of entry, etc.

Section 12 is amended -

- (a) in subsection (1)
  - officer of the Marine

    Department not below the

    rank of Marine Inspector

    II" after "Commissioner

    of Mines,";
  - (ii) in paragraph (b), by adding ", material or article" after "substance"
- (b) in subsection (2) -

8

- (i) by repealing "and" at the end of paragraph (d);
- (ii) by repealing the full stop at the end of paragraph (e) and substituting "; and";
- (iii) by adding
  - detain any vessel "(f) or vehicle which he is empowered to stop, board and search and any person on board such vessel or vehicle where, in the opinion of the officer or member, anything liable to seizure under subsection (1) (e) results in a danger to public safety, and such detention may continue until the officer or

member is satisfied that the danger to public safety has been removed.".

- 10(a)
- (a) In the proposed paragraph (a), by adding "or 7" after "section 6"
- (b) In the proposed paragraph (b), by deleting "7,".
- 10(b) By deleting "level 2" and substituting "level 3".
- In the proposed section 19A -
  - (a) in subsection (1), by deleting "Where dangerous goods are being carried, or intended to be carried, on board a vessel" and substituting -

"Where dangerous goods -

- (a) are being carried on board a vessel from a place cutside HongKong to Hong Kong; or
- (b) are intended to be carried on board a vessel from Hong Kong to a place outside Hong Kong,".
- (b) in subsection (2), by deleting "as part of an international journey" and substituting "as

part of a journey from a place outside Hong Kong to another place outside Hong Kong".

- (c) by adding -
  - "(3) Subsection (1) also applies to dangerous goods where the vessel carrying or intended to carry such goods arrives at or departs from a port outside Hong Kong and the goods are transported by vehicle between Hong Kong and such vessel.".
- 13(a) In the proposed new definition of "dangerous goods" -
  - (a) by adding "or" at the end of paragraph (a).
  - (b) by repealing paragraph (b) and substituting -
    - "(b) the properties of which are, in the opinion of the Director, dangerous when carried by sea and the Director has, by notice in the Gazette, declared them to be so,".