

**Proposed Amendments to
the Dangerous Goods (General) Regulations, Cap. 295B and
the Dangerous Goods (Application and Exemption) Regulation 2012,
Cap. 295E
related to Category 1 Dangerous Goods**

Consultation Paper

PURPOSE

1. The purpose of this consultation paper is to seek views and comments from the industry and members of the public on proposed amendments to the Dangerous Goods (General) Regulations, Cap. 295B, and the Dangerous Goods (Application and Exemption) Regulation 2012, Cap. 295E, relating to category 1 dangerous goods (to be known as “Schedule 1 dangerous goods” in the proposed amendments) under the authority of the Commissioner of Mines (“CoM”)¹.

BACKGROUND

Principal Objective of the Proposed Amendments

2. The Dangerous Goods Ordinance, Cap. 295 (“DGO”) and its four regulations, namely the Dangerous Goods (Application and Exemption) Regulations, Cap. 295A, Dangerous Goods (General) Regulations, Cap. 295B (“DG(G)R”), Dangerous Goods (Shipping) Regulations, Cap. 295C and Dangerous Goods (Government Explosives Depots) Regulations, Cap. 295D, provide for the control on land and at sea of about 1,100 types of dangerous goods (“DG”) under 10 categories, in accordance with their inherent characteristics (e.g. explosive, flammable, corrosive, toxic, etc.). When the DGO was enacted in 1956, there were no international standards governing the classification, labelling and packaging of DG. Over the years, international codes on the transportation of DG have been published, based on the system developed by an expert committee under the United Nations (“UN”) Economic and Social Council. Hong Kong’s major trading partners, such as mainland China, the United States, the European Union and Australia, have gradually aligned their national rules on DG with the UN system, but Hong Kong has yet to do so.

3. The Government commenced a comprehensive review of the DGO in 1995 and concluded that the local DG control system should follow, as far as possible, the International Maritime Dangerous Goods (“IMDG”) Code. The IMDG Code, which is published by the International Maritime Organization, is based on the UN system. The review also recommended that the list of DG under the DGO should make reference to the IMDG Code, subject to minor variations to suit local circumstances.

¹ The Director of Fire Services is the regulatory authority for other categories of DG under the DG(G)R, except those at sea and within cargo terminals. Consultation on the proposed legislative amendments related to DG under the authority of the Director of Fire Services has been conducted separately.

4. To harmonise local legislation with the IMDG Code, amendments to the DGO and its subsidiary legislation are required.

Preceding Legislative Amendments

5. In 2000, the Dangerous Goods (Amendment) Bill 2000 (“**The Bill**”) was introduced into the Legislative Council (“**LegCo**”). The Bill contained specific provisions for:

- (a) increasing the penalties for offences under the DGO to preserve the deterrent effect eroded by inflation over time;
- (b) empowering the Director of Fire Services and the Director of Marine to issue codes of practice to promulgate detailed guidelines and safety practices to be followed by the trades in the handling of DG;
- (c) providing the basis of further amendments to the subsidiary legislation for other proposals, such as:
 - (i) aligning the classification of DG (from the existing 10 categories to 9 classes under the IMDG Code), packaging, marking, labelling and other requirements concerning DG with international standards,
 - (ii) improving the regulatory regime on the conveyance of DG, and
 - (iii) updating the exempt quantities of DG to cater for changes in local circumstances.

6. The Bill was passed in March 2002 but has not commenced operation (the amended Dangerous Goods Ordinance will be referred hereunder as “**DG(A)O 2002**”), pending detailed controls to be set out by way of new subsidiary legislation under the DGO.

7. In 2012, two amendment regulations were introduced into and passed by LegCo, as follows:

- (a) Dangerous Goods (Application and Exemption) Regulation 2012, Cap. 295E (“**DG(A&E)R 2012**”), which aligns the classification of DG with the IMDG Code, expands the control of DG from around 1,100 types to 2,300 types, updates the exempt quantities of DG under regulation and, once in operation, will repeal Cap. 295A; and
- (b) Dangerous Goods (Shipping) Regulation 2012, Cap. 295F, which aligns the classification of DG and regulatory regime of DG in Hong Kong waters with the IMDG Code and, once in operation, will repeal Cap. 295C.

These amendment regulations have not commenced operation, pending the drafting of the amendment regulation to revamp the DG(G)R, Cap. 295B².

² No amendments to the Dangerous Goods (Government Explosives Depots) Regulations, Cap. 295D are considered necessary.

THE PROPOSALS

8. With a view to completing the legislative amendment exercise and bringing the new classification system under the IMDG Code into effect as soon as possible, and taking the opportunity to revise some provisions that are obsolete, only those amendments that are absolutely necessary for the implementation of the new classification system will be dealt with in this exercise. Other amendments that are less pressing and non-essential to the implementation of the new classification system will be dealt with at a later stage.

Amendments to the DG(A&E)R 2012

9. In view of the technical/technological advancement and updates to the IMDG Code since the passage of the DG(A&E)R 2012, further amendments will be introduced to the DG(A&E)R 2012. The principal amendments are set out in paragraphs 10 to 16.

Reviewing exemptions in respect of Schedule 1 DG (Section 8 of DG(A&E)R 2012)

10. Schedule 1, Group 8 DG are not Class 1 DG under the IMDG Code. Our policy intent is to regulate their use in blasting only. Provisions will be introduced to exempt Schedule 1, Group 8 DG from the requirement of conveyance and storage licences.³

11. Although Schedule 1, special Class 9 DG contain a small quantity of pyrotechnics, because of the way they are packaged, they are classified as Class 9 DG under the IMDG Code and will not pose a significant hazard to public safety during conveyance. In line with the practices adopted by most overseas jurisdictions, we will introduce exemption for Schedule 1, special Class 9 DG from the requirement of conveyance licence.

12. To assist the air cargo industry, exemptions from the requirement of conveyance and storage licences will be provided for Schedule 1, Class 1 DG in Division 1.4 and Schedule 1, special Class 9 DG within Hong Kong International Airport that are to be directly taken out of Hong Kong, within a period of 24 hours, subject to a specified separation distance during transshipment. Similarly, exemption from the requirement of a conveyance licence will be provided for Schedule 1 DG contained in a freight container within an approved container terminal.

Amendments to Class 1 DG (Section 5, Part 2 of Schedule 1 of DG(A&E)R 2012)

13. The list of Class 1 DG will be repealed and replaced with the latest DG list given in the IMDG Code, 2018 Edition.

³ When a Schedule 1, Group 8 DG (blasting article) is also a Schedule 2 DG, its storage and conveyance will be controlled under the requirements for Schedule 2 DG.

Amendments to special Class 9 DG (Section 6, Part 2 of Schedule 1 of DG(A&E)R 2012)

14. The interpretation of special Class 9 DG will be amended to exclude those DG that do not contain any Class 1 DG under the IMDG Code.

15. The list of special Class 9 DG will be updated to correspond with the IMDG Code, 2018 Edition. Two new items of Class 9 DG will be added to the list, namely UN 2990 and UN 3072, both of which are life-saving appliances.

Reviewing the list of prohibited goods (Schedule 4 of DG(A&E)R 2012)

16. The interpretation of Schedule 1 DG is not identical to that for category 1 DG under the extant regulations. To align the local regulations with the classification system under the IMDG Code, the list of prohibited goods will be updated to include explosives which are defined as category 1 DG under the extant regulations but unable to be classified as Schedule 1 DG, i.e. those are unduly sensitive or so reactive as to be subject to spontaneous reaction and accordingly too dangerous to transport.

Amendments to the DG(G)R

17. The extant DG(G)R relating to the control of category 1 DG will be repealed and replaced by a new regulation to bring the control system in line with the IMDG Code, DG(A)O 2002 and DG(A&E)R 2012. The principal amendments are set out in paragraphs 18 to 40.

Licensing regime

18. The licensing mechanism in the extant DG(G)R will be retained for the conveyance, storage, manufacture and use of Schedule 1 DG. These licences are subject to the terms and conditions imposed by the CoM. The breach of any term or condition of a licence will constitute an offence.

19. R.183(5) of the extant DG(G)R, which states that, except where otherwise specified, a licence to store DG is deemed to include a licence to use such DG, is considered obsolete. To maintain the current scope of regulatory control, whilst minimising any inconvenience to the industry, a new combined storage and use licence will be introduced for Schedule 1, Groups 6 and 7 DG.

20. Under R.47 of the extant DG(G)R, an “authorized person” is limited to a person authorized by the Authority to use explosives for blasting. We propose to expand the scope of such authorization to the use of non-blasting explosives, which is not covered by exemptions on use under the DG(A&E)R 2012 or the proposed combined storage and use licence (see para. 19).

21. With respect to permission required for blasting, the existing regulatory control framework will also be maintained (R.46 and R.47 of the extant DG(G)R). To carry out blasting, a contractor has to obtain a “blasting permit”, which comprises a storage (possession) licence and a discharge permit for Schedule 1 DG. Only authorized

persons, who are in possession of a mine blasting certificate or otherwise authorized by the CoM, are allowed to use explosives for blasting.

Conveyance of Schedule 1 DG

22. Most of the current exemptions, restrictions and requirements for conveyance of explosives stipulated under R.4 to R.8 of the extant DG(G)R will be retained. Paragraphs 23 and 24 provide the main revisions in relation to conveyance of Schedule 1 DG.

23. To enhance public safety, we propose to delete the current exceptions allowing conveyance of manufactured fireworks, safety cartridges and cartridges for small arms on public vehicles.

24. The requirement for a vehicle carrying explosives to display a red flag is obsolete. In line with other international standards, we propose to replace this with a requirement for placarding of vehicles carrying Schedule 1, Class 1 DG.

Storage of Schedule 1 DG

25. The two explosives stores in the extant DG(G)R, namely a Mode A store and a Mode B store, will be retained. Therefore, we propose to maintain most of the existing regulations related to storage of explosives (R.9 to R.27 of the extant DG(G)R), but update some provisions to tie in with the terminology and classification system according to the IMDG Code, as well as to enhance the safety and security of the explosives stores.

26. Some specifications and requirements for the construction of explosives stores (e.g. materials) are obsolete and will be removed from the new regulation. These technical details will be provided in guidance notes issued by the CoM, which will be updated, when required, to reflect developments in storage standards and technology.

27. To enhance safety and security, some regulations for Mode A stores (e.g. contents of the store, situation of the store, maintaining a stock book) will be extended to cover Mode B stores. These requirements are currently in operation and have already been adopted by the industry.

28. In addition to the marking (warning signs) for an explosives store required under the extant DG(G)R, we propose that DG placards shall be displayed outside the store in line with international practice.

29. The exception of manufactured fireworks from the inspection, report, removal and destroy requirements for deteriorated/damaged explosives in a store will be withdrawn to ensure public safety.

30. The existing provisions on explosives to be stored separately do not correspond with the IMDG classification system. We propose to replace these with the compatibility requirements for different explosives under the IMDG Code. A new provision on the segregation of detonators in a Mode A store will also be provided.

31. The storage limit in a Mode B store for Schedule 1, Groups 6 and 7 DG of Hazard Divisions 1.1 or 1.2 will be reduced to a net explosive content of 25 kg. Other storage limits in Mode B stores will remain unchanged.

Manufacture of Schedule 1 DG

32. R.29 to R.38 of the extant DG(G)R relate to the manufacture of explosives, primarily in a factory, and R.31A specifically relates to the manufacture of explosives outside a factory. We will retain the essential elements of these provisions for the manufacture of explosives in a factory. The use of a mobile manufacturing unit has now become the principal method for manufacturing explosives on blasting sites. Therefore, we propose to introduce specific provisions governing the manufacture of Schedule 1, Group 2 DG for immediate use on a blasting site. These provisions are currently provided in the guidance notes issued by the CoM and have already been adopted by the industry.

Use of Schedule 1 DG

33. R.50 to R.58 of the extant DG(G)R provide safety and security restrictions relating to the use of explosives in blasting. We propose to retain the main elements of the extant regulations, but to update some of these requirements which have become obsolete due to the development of blasting technology. For example, some prescribed requirements for removal of explosives for blasting, preparing, loading and firing of charges for blasting and handling misfires will be withdrawn. These provisions, if still applicable, will be specified in the conditions of the blasting permit for the permittee and authorized shot firers to follow.

34. To enhance blasting safety, new provisions will be introduced for authorized shot firers to ensure that:

- (a) any explosives not loaded by them are loaded by a person who works under their direction and supervision (e.g. shot firer trainee, operator of mobile explosives manufacturing unit, etc.);
- (b) the exploder for firing or a detachable device from the exploder (e.g. a key), which by its removal renders the exploder inoperable to fire any charge, is in their possession when the charges are being prepared, loaded and connected; and
- (c) when using an electric/electronic exploder, the circuit is tested for continuity and resistance with a specified tester.

35. Given the dense urban and noisy environment in Hong Kong, the audible warning and signage distance of 150 metres under the extant DG(G)R is impracticable in most cases. This provision will be updated to reflect our policy intent, which is that the authorized shot firers must take all necessary precautions to provide sufficient warning to approaching people, including people in vehicles, of an imminent blast.

36. For safety reasons, the use of detonating fuses for firing in blasting will be prohibited.

Packing, Marking and Labelling (PML) Requirements

37. The existing PML requirements (R.39 to R.45 of the extant DG(G)R) will be repealed and replaced by new provisions, which aim to align the local requirements with the IMDG Code. In other words, if the DG are packed, marked and labelled in accordance with the IMDG Code, the DG will be deemed to comply with the PML requirements under the new regulation. The local provision of PML requirements will be elaborated in guidance notes issued by the CoM.

38. Accurate marking and labelling of DG can provide proper information to the industry, as well as early warning to members of the public, and is therefore of paramount importance to safe conveyance, storage and use of explosives. To this end, the new regulation will include provisions requiring all DG to be marked and labelled accurately.

39. There will be exemptions to the PML requirements for:
- (a) any explosives which have been removed from their packaging for the purpose of immediate use, or which are manufactured for immediate use;
 - (b) any explosives which are in the process of manufacture under a manufacture licence, including any examination or testing carried out in the place of manufacture;
 - (c) any explosives which are in transit and not to be unloaded in Hong Kong; or
 - (d) any explosives the storage of which are exempt from the DGO.

Penalties

40. The imprisonment period will remain unchanged and the fine will be adjusted in accordance with the level of fines stipulated in Schedule 8 of the Criminal Procedure Ordinance (Cap. 221) as follows:

	<u>Original Fine</u>		<u>New Fine in the proposed DG(G)R</u>
(a)	\$1,000	to	Level 2 (currently at \$5,000)
(b)	\$2,000	to	Level 3 (currently at \$10,000)
(c)	\$5,000	to	Level 4 (currently at \$25,000)
(d)	\$10,000	to	Level 5 (currently at \$50,000)
(e)	\$25,000	to	Level 6 (currently at \$100,000)

TIMETABLE

41. We plan to commence the legislative amendment process by 2020, so that the DG(A)O 2002, DG(A&E)R 2012 and the above amendments on the DG(A&E)R 2012 and DG(G)R can be brought into effect in 2021 at the earliest.

42. To ensure a smooth transition from the extant DG(G)R to the new regulation, the following savings and transitional provisions will be included for a period of 24 months from the date of commencement (“the transitional period”) so that the industry can have sufficient time to adapt to the revised regulation:

- (a) a licence/permit granted under the extant DG(G)R before and during the transitional period is deemed to be a licence/permit granted under the new regulation; in particular, following the repeal of R.183(5) of the extant DG(G)R, a “licence to store Category 1 DG” in a Mode B store is deemed to be a “combined storage and use licence for Schedule 1, Groups 6 and 7 DG”; and
- (b) compliance with existing relevant requirements under the extant DG(G)R during the transitional period is deemed to be in compliance with the new placarding requirements for explosives carrying vehicles (para. 24) and explosives stores (para. 28), as well as the new PML requirements (para. 37 to 39).

INVITATION OF VIEWS AND COMMENTS

43. Your views on the proposed amendments to the DG(G)R and DG(A&E)R 2012 as set out in this consultation paper are sought. Please send your view and comments to the address below on or before 25 October 2019.

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44. Any part of your submission considered confidential or private that you do not wish to be disclosed should be clearly marked. If no such markings are indicated, we assume that you have no objection to us publishing all or part of the views and comments received and, where appropriate, disclosing the identity of the source in such a manner as we consider necessary.

45. Should you require further information or clarification, please contact us at 3842 7230.

**Civil Engineering and Development Department
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