Guidance Note GU 18: Safety of LPG Lighters





2nd Edition

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Guidance Note on Safety of LPG Lighters

1. Scope and Foreword

- 1.1 The Electrical and Mechanical Services Department (EMSD) has launched a Liquefied Petroleum Gas (LPG) lighters listing scheme since 2011, requiring importers and local manufacturers of LPG lighters to apply for listing of their LPG lighters that are for sale and use in Hong Kong. The aim of the scheme is to promote self-regulation by the trade regarding the quality and safety standards of their LPG lighters.
- 1.2 The purpose of this Guidance Note is to provide guidelines on the safety standards of <u>LPG cigarette lighters</u> marketed in Hong Kong and establish a management platform by means of the listing scheme to enable the public to identify which LPG lighters are in compliance with the safety standards, thereby gradually phasing out products with no safety certification.
- 1.3 This Guidance Note is applicable to both refillable and disposable LPG lighters.
- 1.4 Importers, local manufacturers and suppliers of LPG lighters must ensure that their products are in compliance with all safety standards and legislations of Hong Kong.
- 1.5 This Guidance Note is neither exhaustive nor intended to relieve any person from undertaking his statutory obligations imposed under the legislations.
- 1.6 This Guidance Note does not purport to address all of the safety concerns associated with the safety requirements therein. It is the responsibility of the applicant (i.e., the importer or local manufacturer) to establish their own appropriate safety, health and environmental practices, and to determine the applicability of relevant regulatory

requirements prior to use.

- 1.7 The listing of the product does not derogate the responsibilities of the importer or the local manufacturer from complying with the codes of practice, approval requirements and the statutory requirements laid down by other government departments and bodies.
- 1.8 Although the listing of the LPG lighter indicates that the lighter has been able to provide proof of safety, the importers and local manufacturers are fully responsible for the quality of their LPG lighters and must take all reasonable measures to monitor the performance of their manufacturers. They must take remedial measures for any problems arising from product safety or quality.

1.9 The Gas Authority will not:-

- (a) make any representations, warranties or endorsements whatsoever about the suitability of proprietary products and related services for individual users / applications, safety of products, fitness for purposes, merchantable quality; and
- (b) be liable for any loss or damage to property, or any injury or death arising directly or indirectly as a result of referring to or using any information contained in the list.

2. Definitions

Lighter – (for the purpose of this Guidance Note) means a LPG lighter that uses LPG as a fuel and designed for igniting cigarettes. It includes both refillable and disposable lighters.

Disposable LPG Lighter — means a LPG lighter which is not constructed or intended to be refuelled with LPG after once containing such fuel.

Refillable LPG Lighter – means a LPG lighter which is constructed or intended to be refuelled.

Gas Authority – means the Director of Electrical and Mechanical Services of the Government of the Hong Kong Special Administrative Region. The Director of Electrical and Mechanical Services is appointed as the Gas Authority under Section 5 of the Gas Safety Ordinance (Cap 51) and is responsible for discharging the relevant duties.

Importer – (for the purpose of this Guidance Note) means a person who is engaged in the business of importing LPG lighters for use in Hong Kong.

Supplier – (for the purpose of this Guidance Note) means an organisation which is engaged in the business of selling (including retailing) or supplying of LPG lighters for local use in Hong Kong, excluding the importer and local manufacturer.

Local Manufacturer – means a person who manufactures LPG lighters in Hong Kong for local sale and use.

Chinese Mainland Manufacturer – means a recognised manufacturing enterprise registered with the General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and is given a unique identification number (enterprise code) for labelling purpose.

Liquefied Petroleum Gas (LPG) – means any gas which is a mixture of

- (a) hydrocarbons primarily consisting of butane, butylene, propane or propylene; or
- (b) all or any of the hydrocarbons referred to in paragraph (a).

Recognised Safety Standard – means an international or national design and manufacturing standard recognised by the Gas Authority (Appendix 1 refers).

Test Certificate – means a certificate issued by a recognised certification body certifying that the LPG lighter is in compliance with the recognised safety standard.

Test Report – means a test report issued by a recognised laboratory verifying that samples of a particular LPG lighter model have been tested and is in compliance with the recognised safety standard.

Responsible Person – (for the purpose of this Guidance Note) means the applicant of the listing application or a person who is responsible for the management of the product at the time of application.

3. Listing Scheme for LPG Lighters

3.1 Listing Application and Renewal Application

- 3.1.1 Approval in writing by the Gas Authority must first be sought for the LPG lighter. Each importer or local manufacturer shall apply for listing of each model of their LPG lighters that are intended to be imported into / manufactured in Hong Kong. Applicant shall complete the relevant application form and submit the following documents for vetting. Details of the application process are given in Appendix 2.
 - copy of (a) certified true recognised certificate and test report provided by the manufacturer certifying that the LPG lighter is in compliance with the recognised safety standard. (The laboratory concerned shall be a laboratory that is either recognised by a certification body which itself shall also be accredited by the Hong Kong Accreditation Service, or a laboratory recognised under the Cooperation Arrangement on Electrical and Mechanical Products Safety and Efficiency.) In Chinese Mainland, a recognised certification authority/laboratory refers to the dedicated 7 Entry-Exit Inspection and

Quarantine Bureaux. For details, please refer to Appendix 3;

- (b) a HOKLAS, or equivalent endorsed test report issued by a laboratory in Hong Kong certifying that the LPG lighter is in compliance with the recognised safety standard. The test date on the test report shall fall within the half-year period immediately before the submission date of the listing application;
- (c) product catalogue of the LPG lighter containing the model number;
- (d) drawing of the LPG lighter including information of its length, width and height (in millimetre) as well as the aggregated nominal water capacity of the container, and photos of the LPG lighter etc;
- (e) brochure of the manufacturer including information on company profile, country of manufacture and factory address of works etc;
- (f) export licence issued by the country of origin (if applicable);
- (g) copy of business registration certificate;
- (h) proposed labelling (please refer to Appendix 4 for more details);
- (i) 30 samples of the LPG lighter; and
- (j) manual of remedial measures (the measures aim at (i) minimising the risk of injury to the public and/or property damage, and (ii) restoring public confidence, as appropriate).
- 3.1.2 Upon the acceptance of application, the Gas Authority will notify the applicant in writing of the

listing number assigned to the particular model of his LPG lighter. The Gas Authority will also publish the details, including the name of manufacturer / importer, model number, photo and relevant features etc., of all LPG lighters that have been assigned with listing numbers. Such information would be posted onto the EMSD website and/or other public media for public reference. Applicant shall, within 30 days of the issue of the notification, submit 5 samples of the LPG lighter with labels attached to EMSD for identification.

- 3.1.3 The Gas Authority will indicate in the notification both the commencement date and expiry date of the listing. The listing period shall last for three years. Upon expiry of the listing period, the listing approval will automatically lapse and the relevant LPG lighter model will be withdrawn from the list. In order to maintain the listing status of the LPG lighter, the importer or local manufacturer shall submit his renewal application within one to three months prior to the listing expiry date and the Gas Authority shall vet the application in accordance with the latest requirements.
- 3.1.4 The importer or local manufacturer shall complete the relevant application form and submit the following documents for renewal application:-
 - (a) a HOKLAS, or equivalent endorsed test report issued by a laboratory in Hong Kong certifying that the LPG lighter is in compliance with the recognised safety standard. The test date on the test report shall fall within the half-year period immediately before the listing expiry date;
 - (b) copy of business registration certificate;

- (c) declaration of the manufacturer with respect to the following:
 - (i) the quality assurance system for the LPG lighter is in compliance with international/national standards (if applicable);
 - (ii) each batch of LPG lighters is in compliance with recognised safety standard; and
 - (iii) place of manufacture is the same as that quoted in the application for listing. (If the LPG lighter is manufactured in Chinese Mainland, the enterprise code of manufacturer should remain unchanged.)
- (d) declaration of the importer with respect to the following:
 - (i) all the certificates of compliance as stipulated in section 3.2.1 have been kept; and
 - (ii) records of importation and supply of the LPG lighter for at least the last two years have been kept so as to facilitate the Gas Authority to carry out any necessary audit inspection(s) at the importer/manufacturer's place of business; and
- (e) report on the manufacturing, importation and supply of the LPG lighter as prepared by the importer.

3.2 Post-listing Conditions

In order to maintain the listing status of the LPG lighter model, the importer or local manufacturer shall continuously comply with the following conditions:-

3.2.1 Each batch of LPG lighters manufactured shall be accompanied by a certificate of compliance

prepared by the manufacturer confirming that:

- (a) the quality assurance system for the LPG lighters manufactured is in compliance with internationally or nationally recognised standards (if applicable);
- (b) the LPG lighters manufactured are in compliance with recognised safety standard; and
- (c) place of manufacture is the same as that quoted in the application for listing.
- 3.2.2 Should gas leakage, defect or safety problems are found in the listed LPG lighter, the model of that LPG lighter in question shall be withdrawn from the list. The importer or local manufacturer shall take necessary action swiftly and effective action as required, in accordance with the manual of remedial measures. Whenever necessary, he shall stop supplying and selling the problem LPG lighters and recall them at his own cost.
- 3.2.3 The listing shall be effective so long as all the relevant certification documents are in force and it is the responsibility of the importer or local manufacturer to ensure that all these certification documents are valid. Should any amendments be made to any of those documents depicted in item 3.1.1, the manufacturer shall notify the recognised certification body and the importer immediately, whereas the importer or local manufacturer shall notify the Gas Authority in writing of such amendment within 14 days. If the amendment involve substantial changes such as invalidation of the test certificate or change of manufacture, the listing approval will be withdrawn automatically. Under such circumstances, the importer or local

manufacturer shall make a new application for listing approval and submit relevant valid documents in accordance with the latest requirements.

- 3.2.4 The importer or local manufacturer shall maintain records of import or manufacture and supply of all listed LPG lighters for a period of not less than 2 years for inspection by the Gas Authority.
- 3.2.5 In order to ensure compliance with this Guidance Note and the relevant legislative requirements, the Gas Authority may, at any time, conduct ad-hoc or scheduled audit at the importer or manufacturer's office(s), warehouse(s), showroom(s) or sales outlet(s). The importer or local manufacturer shall co-operate with the Gas Authority to ensure that the said audit is conducted smoothly.
- 3.2.6 If any importer or local manufacturer fails to comply with any of the post-listing conditions, the Gas Authority may take disciplinary action against him including warning, reprimand, temporary suspension or withdrawal of the LPG lighter from listing.

4. Storage, Transport and Sale of LPG Lighters

4.1 Storage

4.1.1 Pursuant to regulation 3 of the Gas Safety (Gas Supply) Regulations^{note1}, LPG with an aggregate water capacity of more than 130 litres is not permitted to be placed in a store, unless prior approval of the Gas Authority is obtained. (The number of lighters permitted to be stored may vary according to the design by different manufacturers. For example, for an LPG lighter which has a water capacity of 6 millilitres, the maximum number of LPG lighters permitted to be stored in a chamber is

21 000.)

4.1.2 If LPG with an aggregate water capacity of more than 130 litres is to be stored due to operational needs, the requirements stipulated in regulation 3 of the Gas Safety (Gas Supply) Regulations and the safety requirements given in the Code of Practice for Hong Kong LPG Industry, Module 1 - LPG Compounds and Cylinder Stores^{note 2} must be followed.

4.2 Transport

Pursuant to regulation 25(2) of the Gas Safety (Gas Supply) Regulations note1, no person shall use a motor vehicle to carry on a road-

- (a) Any cylinder which has a water capacity of not less than 130 litres; or
- (b) Any combination of cylinders which have a combined water capacity of not less than 130 litres.

unless -

- (i) The vehicle is a cylinder wagon; and
- (ii) There is a valid permit issued in respect of the wagon note3.

4.3 Retail

- 4.3.1 For safety sake, the aggregate water capacity of LPG lighters that is stored in the display and sales area should be less than 30 litres in general. (The quantity of LPG lighters that may be stored is subject to the design as different manufacturers would have different design of LPG lighters. For example, if an LPG lighter has a water capacity of 6 millilitres, it is advised that not more than 5 000 pieces may be stored.)
- 4.3.2 Shelves used for the storage of LPG lighters shall be

made of non-combustible materials.

- 4.3.3 Good access and means of escape shall be provided at the display area. Adequate access in and out of the display area should also be provided and maintained to ensure unimpeded and rapid means of escape in the event of an incident involving the LPG lighters.
- 4.3.4 LPG lighters placed in window display or lighted cabinet shall not be exposed to direct sunlight, concentrated artificial light or placed close to light bulbs, heaters, hot pipes, hot air vents or other heat sources. Suppliers may also consider displaying dummy packs for display purpose.
- 4.3.5 In the retail outlet, at least one fire extinguisher suitable for extinguishing LPG fire shall be easily accessible in the display area and the stock area.
- 4.3.6 Training shall be given to staff who work at the retail outlet so as to ensure that they are familiar with the emergency procedures, use of fire extinguishers and the means of escape. In the event of a gas incident, staff and members of the public shall be evacuated as soon as possible.
- 4.3.7 Places that are used for storing, displaying and selling of LPG lighters shall be clean and tidy.
- 4.3.8 LPG lighters shall not be displayed or stored at staircase, passageway, exit, near inflammable materials or in any other areas that may obstruct the escape route. No smoking and naked lights shall be allowed at the LPG lighters store or display area.
- 4.3.9 LPG lighters that are damaged or found to have gas leakage problem shall be placed at a well-ventilated and safe place. Defective LPG lighters shall also be returned to the respective supplier or importer.

- 4.3.10 Due care shall be exercised during the delivery of LPG lighters. Do not drop them and avoid crashing.
- 4.3.11 Suppliers (including retailers) should keep the relevant LPG lighters supply invoices until they are no longer selling those LPG lighters.

5. Use of LPG lighters

Attention shall be drawn to the following when using LPG lighters:

5.1 User should:-

- 5.1.1 Keep the LPG lighter away from fire, flame or places with a temperature over 50°C (e.g. cooking appliances, heated containers or fan heaters). The LPG lighter should be kept in a dry, cool and well-ventilated area out of reach of children;
- 5.1.2 Only purchase and use listed LPG lighters;
- 5.1.3 Handle the LPG lighter with care and avoid crashing it, e.g. by dropping from height or pressing;
- 5.1.4 Use the LPG lighter properly and keep it intact;
- 5.1.5 Release the ignition button of the LPG lighter immediately after use and check that the flame is completely extinguished;
- 5.1.6 Avoid touching the part of the LPG lighter with intense heat, and take care not to sustain burn injury or cause a fire when touching the LPG lighter or putting it away; and
- 5.1.7 Read and follow the instruction/warning label before using the LPG lighters.

5.2 User should not:-

- 5.2.1 Store excessive quantity of LPG lighters;
- 5.2.2 Purchase LPG lighters purely based on their attractive appearance as children may mistakenly regard these lighters as toys;
- 5.2.3 Ignite LPG lighters near the face, clothing, inflammable gas or materials, chemicals such as solvents;
- 5.2.4 Put LPG lighters in any enclosed area or place subject to high temperature, e.g. in an enclosed vehicle compartment, so as to prevent gas incidents arising from prolonged exposure to sunlight or high temperature;
- 5.2.5 Puncture LPG lighters or put them in fire;
- 5.2.6 Shake, hit or press LPG lighters with force;
- 5.2.7 Use LPG lighters that are found damaged, defective or leaking gas;
- 5.2.8 Allow children to play with LPG lighters;
- 5.2.9 Attempt to refuel disposable LPG lighters; and
- 5.2.10 Keep the flame lit for more than 10 seconds or put lighter in an upside down position when using it, so as to avoid overheating, burn injury, fire or explosion.

Note 2: Please refer to the Codes of Practice issued by the Gas

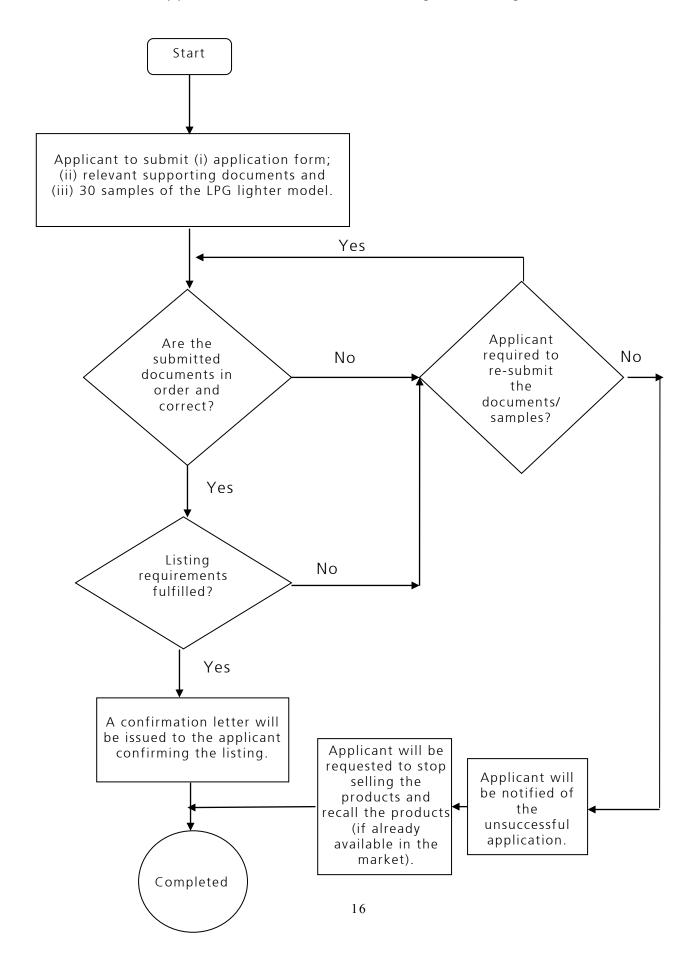
Note 1: Please refer to the Bilingual Laws Information System http://www.legislation.gov.hk/blis/eng/index.html

Appendix 1

List of Recognised Safety Standards

- (a) BS EN ISO 9994:2006+A1:2008 or its latest version
- (b) EN ISO 9994:2006+A1:2008 or its latest version
- (c) ISO 9994:2005+A1:2008 or its latest version
- (d) ASTM F400-10 or its latest version

Application Procedures for Listing of LPG Lighters



Recognised Certification Authority / Laboratory for LPG Lighters (List of Authority / Laboratory in China)

In Chinese Mainland, a recognised certification authority/laboratory refers to the following 7 dedicated Entry-Exit Inspection and Quarantine Bureaux:-

- 1. Beijing Entry-Exit Inspection and Quarantine Bureau
- 2. Tianjin Entry-Exit Inspection and Quarantine Bureau
- 3. Ningbo Entry-Exit Inspection and Quarantine Bureau
- 4. Wenzhou Entry-Exit Inspection and Quarantine Bureau
- 5. Jiangxi Entry-Exit Inspection and Quarantine Bureau
- 6. Guangdong Entry-Exit Inspection and Quarantine Bureau
- 7. Guangxi Entry-Exit Inspection and Quarantine Bureau

Labels for LPG Lighters 石油氣打火機的標籤

- "警告" "WARNING"
- "應放置在兒童不能觸及的地方" "KEEP OUT OF REACH OF CHILDREN" 或 or "勿讓兒童接觸"
 - "KEEP AWAY FROM CHILDREN"
- "燃點打火機時要遠離面部和衣物" "Ignite lighter away from face and clothing"
- "確保打火機用後火焰完全熄滅" "Be sure flame is out after use"
- "內含加壓易燃氣體" "Contains flammable gas under pressure"
- "切勿暴露在溫度超過攝氏 50 度或長時間陽光曝曬的地方" "Never expose to heat above 50°C or to prolonged sunlight"
- "切勿刺破或投入火中" "Never puncture or put in fire"
- "火焰上方溫度極高,必須份外小心以免灼傷或引致火警" "Extreme heat is present above the visible flame. Extra care should be taken to prevent burn injury or fire" (This statement shall accompany all premixing burner lighters.) (此警告字句須印於前混式石油氣打火機的標籤上。)
- "切勿持續燃點超過 10 秒" "Do not keep lit for more than 10 seconds" (This statement shall accompany all premixing burner lighters.) (此警告字句須印於前混式石油氣打火機的標籤上。)

備註 1. 標籤須以繁體中文及英文書寫。 Notes: Labels should be in traditional Chinese and English.

> 2. 詳情請參閱 BS EN ISO 9994:2006+A1:2008 第六節有關使用說明及 警告的部分。 For details, please refer to BS EN ISO 9994:2006+A1:2008 Section

6 for Instructions and Warning Details.