

GUIDELINES FOR THE APPLICATION FOR GAS CYLINDER OR OTHER CONTAINER APPROVAL [UNDER DANGEROUS GOODS ORDINANCE (CAP. 295)]

1. Introduction

- 1.1 Pursuant to Regulation 64 of the Dangerous Goods (General) Regulations, Chapter 295B, Laws of Hong Kong, no person shall use, cause or permit to be used, for the storage of any gas in any cylinder or other container except of a type appropriate to the storage of such gas and approved by the "Authority" i.e. the Director of Fire Services.
- 1.2 Furthermore, in accordance with Regulation 68 of the said Regulations, the Director of Fire Services shall be notified of the destruction of cylinder(s) or cylinder(s) which failed the periodical testing and/or examination.
- 1.3 In Hong Kong, many national standards for gas cylinder(s)/other container(s) adopted by foreign countries have been recognised and adopted. It is the responsibility of the owner or importer of the gas cylinder(s)/other container(s) to keep records of the approved design documents and manufacturer's certificates/inspection and test reports of those cylinder(s)/other container(s) as long as they are in use in Hong Kong. Such practice is one of the effective means of control adopted by many other countries.

2. Application and Approval Procedures

2.1 All applications for approval of gas cylinder(s)/other container(s) shall be submitted to the Investigation and Research Section of the Hong Kong Fire Services Department (FSD) for processing according to the procedure as shown in the flowchart at Appendix I.

2.2 Application Form

Applicants for all applications (i.e. New Application and Re-Application) are required to complete the "Application Form for Gas Cylinder or other Container Approval" (hereinafter

as "Application Form"). The Application Form can be downloaded from FSD website at *http://www.hkfsd.gov.hk/eng/source/licensing/product/gc_app_form.pdf*.

2.3 Submission of documents

Each application shall be accompanied by the duly completed Application Form and bound supporting documents in Chinese or English in triplicate indicating that the gas cylinder(s)/other container(s) submitted for approval have been manufactured and tested to a standard/design specification acceptable to the Director of Fire Services. One set of the supporting documents will be referred to the Boilers and Pressure Vessels Division (BPVD) of the Labour Department (LD) for technical advice on the acceptability of the gas cylinder(s)/other container(s). LD will only assess the technical acceptability of the cylinder(s)/other container(s) referred by the Director of Fire Services.

	Required document	New Application			Re- Application /
Item		Initial		Initial	Submission of
			Batch	and	Supplementary
				Batch	Information
(a)	Model and Type of Cylinder(s)/Other	\checkmark		\checkmark	
	Container(s)			v	
(b)	Technical Details and Drawing(s)	\checkmark		\checkmark	
(c)	Design Specification and Calculation	\checkmark		\checkmark	
(d)	Gas(es) Details	\checkmark		\checkmark	
(e)	Valve Specification	\checkmark		\checkmark	
	For filament-wound composite cylinders	\checkmark		~	
	(if applicable):				
(f)	(i) Life extension plan;				
	(ii) NDE scheme; and				
	(iii) Maintenance manuals				As specified in FSD's Reply
(g)	Manufacturer's Certificate	\checkmark	\checkmark	\checkmark	
	Inspection Report issued by recognised				
(h)	independent inspection authority/body	\checkmark	\checkmark	\checkmark	Letter
	(please see Appendix II)				Letter
(i)	Report of Physical Test	\checkmark	\checkmark	\checkmark	
(j)	Report of Chemical Analysis of Material	\checkmark	\checkmark	\checkmark	
(k)	Other Test Report(s)	\checkmark	\checkmark	\checkmark	
(1)	Details of any heat treatment	\checkmark	\checkmark	\checkmark	
(m)	Serial numbers of Cylinder(s)/Other		\checkmark	\checkmark	
(m)	Container(s)		•		
(n)	Previous FSD's approval letter(s) for				
	respective design/type of respective		\checkmark		
	Cylinder(s)/Other Container(s)				-
(0)	Other documents requested by FSD (if				
	any)				
(p)	Copy of FSD's Reply Letter(s)				\checkmark

The documents required for different types of Applications are listed in the following table:

2.3.1 New Application

• Initial Approval

Only applicable to the application for approval of gas cylinder(s)/other container(s) in respect of which the design/type is introduced for use in Hong Kong for the first time. Applicants must submit the documents as specified in items (a) to (l) of the table in paragraph 2.3. For the avoidance of doubt, in case where the applicant fails to produce any previous FSD's approval letter for the respective design/type of gas cylinder(s)/other container(s) under application, the design/type of the respective cylinder(s)/other container(s) shall be considered to be introduced in Hong Kong for the first time.

Batch Approval

Only applicable to the application for approval of gas cylinder(s)/other container(s) in respect of which the design/type was previously approved by the Director of Fire Services and the applicant can produce any FSD's approval letter for such cylinder(s)/other container(s). It is sufficient to submit the documents as specified in items (g) to (n) of the table in paragraph 2.3 for assessment, provided that the approved design drawing number of such type/model and approval reference provided by the Director of Fire Services can be identified and the type of cylinder/other container valve remains unchanged.

• Initial and Batch Approval

Only applicable to the application for approval of gas cylinder(s)/other container(s) in respect of which the applicant intends to apply for both Initial and Batch approval in one go. Applicants must submit all the documents as specified in items (a) to (m) of the table in paragraph 2.3.

2.3.2 Re-Application and Submission of Supplementary Information

Only applicable to the application in respect of which additional information has been requested by the FSD or supplementary information is provided by the applicants. Applicants must complete the Application Form and applicants of Re-Application are also required to submit a copy of FSD Reply Letter (i.e. Section 2.3 (p)) and documents

as specified therein.

- 2.4 The inspection report as mentioned in item (h) of the table in paragraph 2.3 should be issued by recognised independent inspection authority/body authorised by the relevant local regulatory authority. Authorisation documents should be provided, when considered necessary, as follows :-
 - Australian Standard (AS) -

to be approved by the Standards Australia as required in AS 2337

• British Standard (BS) -

to be approved by the UK Health & Safety Executive

• Canadian Transport Commission (CTC) -

to be approved by the Canadian Transport Commission

• US Department of Transportation (DOT) -

to be approved by the US Department of Transportation Associate Administrator for Hazardous Materials Safety

• Chinese National Standard (GB) -

to be approved by the Bureau of Boilers and Pressure Vessels Safety Administration of the China State Bureau of Quality and Technical Supervision for cylinder importation to Hong Kong

• Japanese Industrial Standard (JIS) -

to be approved by the Japanese Ministry of International Trade and Industry (MITI) or by the High Pressure Gas Safety Institute of Japan (KHK) under the Japanese High Pressure Control Law

3. <u>Standards/Specifications</u>

3.1 Currently, the following standards/specifications together with the appertaining standards on material, welder qualification, testing standards and specifications are acceptable to the Director of Fire Services:-

American Standards	<u>Australian Standards</u>	<u>Canadian Standards</u>
	A.C. D.110	
DOT 3A	AS B110	CTC 3A
DOT 3AX	AS B111	CTC 3AX
DOT 3AA	AS B113	CTC 3AA
DOT 3AAX	AS B114	CTC 3AAX
DOT 3AL	AS B115	CTC 3AL
DOT 4B	AS B189	CTC 4B
DOT 4BA	AS B239	CTC 4BA
DOT 4BW	AS 1777	CTC 4BW
DOT 4L	AS 2030	CTC 4L
DOT 8AL	AS 2468	CTC 8AL
DOT 8	AS 2469	CTC 8
DOT 39	AS 2470	CTC 8WC
DOT FRP-1 Type 3FC	AS 2527	
	AS 2875	
Chinese Standards	British Standards	Japanese Standards
GB 5099	BS 5045	JIS B8234
GB 5100	BS 6061	JIS B8241
GB 11638	HOAL	JHPGCL
GB 11639	HSE-AL-FW2	
GB 11640	HSE-TP-FW3	

3.2 Engineering Standard other than those listed above may also be considered for acceptance. The applicant is required to provide the relevant standard/specification and evaluation report when necessary. Any documents not written in English or Chinese must be accompanied by the corresponding English or Chinese translation in order to facilitate evaluation. Additional time may then be needed on top of the time normally required for cylinder approval.

4. <u>Processing of Application</u>

- 4.1 Applications are generally dealt with on a first come, first served basis. All applications will be processed as soon as possible. Under normal circumstances, processing of application for approval of gas cylinder(s)/other container(s) will not exceed 45 working days.
- 4.2 For any technical irregularities and supplementary information related to the submitted

documents, BPVD of LD may contact the applicant direct for clarification. Additional supporting documents shall be submitted to LD via the Director of Fire Services.

4.3 When such irregularities have been rectified, and approval for the gas cylinder(s)/other container(s) is recommended by LD, a letter of approval together with one set of duly endorsed supporting documents will be issued to the applicant by the Director of Fire Services if he considers all conditions for approval are met and decides to grant an approval.

5. Enquiry

For further information and advice regarding:-

(a) the approval procedures for gas cylinder(s) /other container(s), please contact :-

Investigation & Research Section Licensing & Certification Command Fire Services Department 5/F, Fire Services Headquarters Building, 1 Hong Chong Road, Tsim Sha Tsui East, Kowloon.

Tel. No. : (852) 2733 7827 or (852) 2733 7557 Fax No. : (852) 2367 3631

or

(b) the technical requirements and assessment, please contact :-

Boilers & Pressure Vessels Division,
Labour Department,
Unit 01-02, 20/F, Millennium City 6,
392 Kwun Tong Road,
Kwun Tong, Kowloon.

TeI. No. : (852) 3107 3445 or (852) 3107 3446 Fax. No. : (852) 2517 0875



List of recognised independent inspection authority/body (for Application for Approval of Gas Cylinder(s) or Other Container(s))

(Note: The list hereunder is for reference only and by no means exhaustive.)

	Name of the inspection authority / body
1	APRAGAZ, Belgium
2	Arrowhead Industrial Services, Inc., USA
3	Authorized Testing Inc., USA
4	Bureau Veritas, Vienna
5	Det Norske Veritas, Norway
6	SAQ Kontroll AB, Sweden
7	T.H. Cochrane Laboratories, Ltd., USA
8	TÜV CERT Certification body, Germany
9	TÜV Industrie Service GmbH, Germany
10	TÜV NORD Czech, s.r.o. Germany
11	上海市鍋爐壓力容器檢驗所, China
12	北京市特種設備檢測中心, China