# 2020 Annual Meeting with Appointed Examiners

Date: 1 or 3 September 2020

Time : 3:00 p.m.

Venue : Telephone Conference

#### Agenda

- 1. Staff Movement in the BPVD
  - i) Technical Staff (by PS)
  - ii) Administration Staff (by PS)
- 2. Technical Matters Related to Boilers and Pressure Vessels
  - i) Updated List of RIB (by S(BPV(O))
  - ii) Mostly Used Standards/Codes (by S(BPV(O))
  - iii) Revision of BPVD's Publications (by S(BPV(O))
  - iv) Registration of Pressure Equipment (by S(BPV(O))
  - v) Instruction to Appointed Examiners (AE Circular) issued (by S(BPV(O))
- 3. Briefing on the Work of BPVD
  - i) Work Statistics of BPVD (by EO(BPV))
  - ii) Complaints in Relation to the Contravention of BPVO (by EO(BPV))
  - iii) Accident Case (by EO(BPV))
  - iv) BPV Safety Seminar 2019 (by EO(BPV))
- 4. Monitoring System for the Performance of AEs
  - i) Statistics of Spot Check (by S(BPV(O))
  - ii) Findings for the Performance of AEs (by S(BPV(O))
  - iii) Brief the Spot Check System on the Inspection Work Done by AEs (by S(BPV(O))
- 5. Appointment of AE
  - i) Appointment / Revocations of AEs (by PS)
  - ii) Attachment Programme for Boiler Inspector Candidates (by PS)
- 6. Any Other Business

# Minutes of the 2019 Annual Meeting with Appointed Examiners held at 1500 hours on 21 August 2019

#### at the Conference Room A, 24/F, Harbour Building

Present

Chairman:

KWAN Kan-fat

Principal Surveyor (BPV)(PS(BPV))

Secretary:

Catherine CHAN

Executive Officer (BPV)(EO(BPV))

Attended Members:

Boilers and Pressure Vessels Division (BPVD)

YIP Ting-keung

Surveyor (BPV)(Operation) (S(BPV)(O)) /

Acting Surveyor (BPV) (Support) (Ag. S(BPV)(S))

Boilers and Pressure Vessels Officer (1) (BPVO(1)) /

Acting Surveyor (BPV) (Support) (Ag. S(BPV)(S))

Appointed Examiners (AEs)

CHAN Moon-chung

CHAU Yiu-tak, Eric

CHOW Wai-keung

FONG Tat-kee

HO Hin-wa

LAU Po-leung

LAW Kwok-lai, Samson

LEE Kwok-ching

LO Wah-keung

THAM Wing-kong, Kenny

**TONG Shiu-wing** 

WONG Kit-man

WONG Yum-wah

Opening Remarks Action by

- 1. The Chairman welcomed all Appointed Examiners (AEs) to the annual meeting between AEs and the Boilers and Pressure Vessels Division (BPVD) in 2019.
- 2. The meeting confirmed the minutes of the last meeting which was held 6 September 2018 without amendments.
- 3. The Chairman briefed the agenda of the meeting.

#### Staff Movement in the BPVD

4. The Chairman introduced the functions of the three sections of BPVD and duties of the BPVD officers.

- 5. The Chairman briefed that there have been some staff movement in the division since last meeting.
- 6. Mr. YIP Ting-keung assumed the post of S(BPV)(O) since November 2018 while Mr. YUE hung-fai, ex-S(BPV)(S) was posted out of Labour Department in January 2019. Currently, Mr. YIP Ting-keung, S(BPV)O and Mr. CHAU Yiu-tak, BPVO(1) have been each doubling sideways 50% of the S(BPV)(S) post until further notice.
- 7. Ms. Catherine CHAN assumed the post of EO(BPV) in October 2018 vice ex-EO(BPV) Ms. Jasmine WONG, who transferred out of Labour Department.
- 8. Two inspectors have been transferred out of Labour Department while one inspector has been posted to BPVD since last meeting in September 2018. There have been no changes in senior inspectors. One new Clerical Officer was posted to BPVD in October 2018.
- 9. The Chairman informed that adequate training will be provided to the new joining staff to ensure that the quality and standard of work would remain the same.

#### Technical Matters Related to Boilers and Pressure Vessels

Updated List of Recognised Inspection Bodies (RIB)

10. BPVO(1)/ Ag. S(BPV)(S) briefed that there is no change on the RIB list since last meeting. The RIB list is enclosed in Annex 1 for information.

#### Mostly Used Standards/Codes

- 11. BPVO(1)/Ag. S(BPV)(S) informed that guidelines or regulations such as PD5500, AEs TSG, TRD and TRG should not be classified as standards/codes and had been removed from the list of most commonly used standards. The following are the latest version of the list (at Annex 2):
  - British Standard and Code (BS)
  - Chinese National Standards (GB, GB/T, JB/T)
  - American Standards (ASME Boiler and Pressure Vessel Codes)
  - Japanese Industrial Standards (JIS)
  - German AD Codes (DIN, AD)
  - European Standards (EN)

#### Revision of BPVD's Publication

12. S(BPV)(O) reported that the revision of "Code of Practice for Steam Receivers" All had been completed and renamed as "Code of Practice for the Safe Operation of Steam Receivers" (CoPSR). The major revisions included the inclusion of new

information regarding safety devices, autoclave, sterilizers and update of contact information. The Chairman also noted that the penalties of violating BPVO and BPVR have been deleted from the CoPSR as advised by Department of Justice. The CoPSR has been published by gazette in June 2019 and is available on Labour Department's website and at BPVD's office counter.

13. S(BPV)(O) informed that revision of "Code of Practice for Fossil-fuel Boilers" BPVD (CoP) has been commenced. The CoP was published in 1994 with minor updating in 2002. There have been changes in boiler technology such as boiler construction, fuel burning installations and etc. The revision of the CoP will update the information accordingly.

#### Registration of Pressure Equipment

14. S(BPV)(O) reported that there were 28660 air receivers, 2871 boilers and 2071 steam receivers registered and active as at 31 July 2019.

#### Updated List of Instruction to AE

15. S(BPV)(O) and BPVO(1)/ Ag. S(BPV)(S) briefed the two Instructions to AEs issued on 12 October 2018 and 29 April 2019 since last meeting. The Circular 3/2018 titled "Exemption of PVHO from fusible plug when safety valve not fitted directly on the chamber" and the revised circular 1/2018 titled "Pressure unit on the pressure gauge (Revised)" are enclosed in Annex 3a and 3b for information.

#### **Briefing on the Work of BPVD**

Work Statistics of BPVD

- 16. S(BPV)(O) gave a brief report on the work statistics of BPVD for 2018:
  - The number of newly registered equipment was approximately 2116;
  - The number of CoF issued was approximately 11006;
  - The number of Exemption Certificates issued was approximately 351;
  - The number of Prohibition Order issued was approximately 14; and
  - The number of warning letter issued was approximately 3119

There were no substantial differences in the figures in comparison with 2017.

## Complaints in Relation to the Contravention of BPVO Cap.56

17. The Secretary reported that a total of 7 complaints in relation to the contravention of BPVO Cap.56 were received in 2018. The complaints were mainly related to operation of boilers and pressure equipment without direct supervision of Competent Person, use of unregistered boilers and pressure equipment and use of equipment with irregularities. The investigations of these cases were completed with replies to complainants being provided within 2 weeks.

#### Accident Cases in 2018

18. The Chairman reported that there was no accident case involving the use of boilers and pressure vessels in 2018.

#### BPV Safety Seminar 2019

19. The Secretary informed that the 26<sup>th</sup> BPV Safety Seminar will be held on 20.11.2019 at Holiday Inn Golden Miles with 5 overseas speakers and 3 local speakers presenting on the theme of "Safety, Environment, Innovations & Regulations". AEs were cordially invited to participate in the Seminar.

#### Monitoring System for the Performance of AEs

Statistics of AE Spot Checks

20. S(BPV)(O) reported that a total number of 69 AE spot checks were conducted AEs since the last AE meeting which involved 12 AEs. Among these spot checks, 18 were boiler spot checks, 16 were steam receiver spot check and 35 were air receiver spot checks.

#### Findings for the Performance of AE

- 21. S(BPV)(O) noted that 13 reminding letters were sent to AEs to remind on the AEs findings found during/after spot checks.
- 22. S(BPV)(O) noted that 4 reminding letters were related to Certificate of Fitness with AEs typo error.
- 23. S(BPV)(O) noted that another 4 reminding letters were related to pressure gauge AEs not in pascals or multiples of pascals. As required under Regulations 3(1)(a)(iii), 4(1)(c) and 5(1)(c) of Cap.56A, pressure units on pressure gauges of boiler, steam receiver or air receiver should be in pascals or multiples of pascals.
- 24. S(BPV)(O) noted that another 4 reminding letters were related to steam pipes not AEs properly lagged. According to Cap.56A Reg.13, every pipe that conveys oil or steam under pressure shall be lagged to the satisfaction of the Authority with fireproof material.

#### Appointment of AE

Appointment and Revocation of AE

25. The Chairman informed that there was no appointment of AE since last meeting BPVD while 3 Appointed Air Receiver Inspector applicants are undergoing familiarization programme.

The Chairman also noted that 3 revocations of AE have been announced by gazette BPVD 26. since last meeting. Mr. William WU, a Boiler Inspector, who passed away, was removed from the list in October 2018. Mr. David HOLMES, an Air Receiver Inspector and Mr. LEUNG Hing-ki, a Boiler Inspector, have resigned their appointments as AE in June and July 2019 respectively. Currently, there are 28 AEs on the list while 13 are Boiler Inspectors and 15 are Air Receiver Inspectors. An updated list of Appointed Examiners can be found on website of Labour Department.

# Recruitment of Boiler Inspector

The Chairman noted that the average age of Boiler Inspectors in the industry has BPVD 27. reached 70 years old while the current requirement of steam exposure/experience for boiler inspector is deemed to be outdated and too difficult to be met by the would-be boiler inspector candidate(s). In order to solve the foreseeable boiler inspector shortage, the following new initiative is proposed to allow appointment of current Motor Class 1 Certificate of Competency (CoC) holders or qualified engineers with boiler operation/design experience as Boiler Inspectors:

- attending a six-month special attachment programme in steam plant of watertube boiler(s) with superheater(s) in pressure and evaporation capacity not less than 20 bar and 10 tonnes/hr.;
- completing engineering logbook meeting the competency requirement; and
- passing an examination of Steam Engineering knowledge (SEK) offered by LD.
- Mr. K.M. WONG (A.E.) concerned that the power utilities used for attachment 28. programme should be boilers registered under BPVD which matched with the definition of "Boilers" under Section 2(1) of BPVO.
- Mr. H.W. HO (A.E.) agreed on holding SEK examination as a test of knowledge BPVD 29. after the attachment programme but enquired that if the two local power utilities -CLP and HKE are receptive to the idea of having a special attachment programme with them to enable the proposed alternative route for new boiler inspector appointment.
- The Chairman replied that the framework for proposed new Boiler Inspector BPVD 30. appointment initiative is still under revision while the local power utilities would be consulted in the near future.
- In general, there was no objection from the Appointed Examiners on the initiative. AEs 31.

#### **Any Other Business**

32. S(BPV)(O) reported that BPVD had received an accident case related to an air BPVD receiver which was used as a compressed air operated lubricator vessel for drilling AEs rig. Oil lubricator vessel may not be classified as air receiver under BPVO if it vents out directly to atmosphere with no stop valve fitted at discharge side. However, investigation into the case revealed that a stop valve was fitted and compressed air could be retained inside the vessel which fell into the definition of air receiver. In this case, registration and examination of pressure equipment will be required.

There being no other business, the meeting was adjourned at 16:15 hours.

Chairman

Distribution: All Appointed Examiners

AC (OS) DC(OSH)

BPVD Officers - w/o encl.

Filing: ( ) in LD BPV/400/25 c.c.: ( ) in LD BPV/400/20



# Recognized Inspection Bodies 認可檢驗機構

## (a) China Special Equipment Inspection and Research Institute

中國特種設備檢測研究院

Headquarter:

2 Building, Xiyuan, Hepingjie, Chaoyang District, Beijing, 100029, P.R. China.

中華人民共和國北京市朝陽區和平街西苑2號

Tel: +86 10 59068899

Fax: +86 10 59068966

Website: http://www.csei.org.cn

#### (b) Lloyd's Register Verification Ltd.

勞氏船級社

Headquarter:

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Tel: +44 20 7423 2428

Fax: +44 20 7423 1525

Website: http://www.lr.org

Hong Kong office:

Rooms 5304-05, 53rd Floor, Hopewell Centre, 183 Queen's Road East Wanchai,

Hong Kong

香港灣仔告灣仔皇后大道東 183 號合和中心 5304-05 室

Tel: +852 2287 9333

Fax: +852 2845 2616

Website: http://www.lr.org

#### (c) Nippon Kaiji Kyokai

#### 日本海事協會

Headquarter:

3-3, Kioi-cho, Chiyoda-ku, Tokyo, 102-0094 Japan.

Tel: +81-3-5226-2175

Fax: +81-3-5226-2177

Website: http://www.classnk.or.jp

Hong Kong office:

Room 3705, Shun Tak Centre, West Tower, 200 Connaught Road Central,

Hong Kong.

中環干諾道中 200 號信德中心西座 3705 室

Tel: +852 2517 7023

Fax: +852 2857 7401

## (d) ABSG Consulting Inc.

#### 美國船檢局集團咨詢公司

Headquarter:

ABS Plaza 16855 Northchase Drive, Houston, TX 77060, USA.

Tel: +1-281-673-2800

Fax: +1-281-877-5946

Website: http://www.abs-group.com

Regional office:

Room 1909, LJZ Plaza, 1600Century Avenue, Pudong New Area, Shanghai,

200122, P.R. China.

中華人民共和國上海市浦東新區世紀大道 1600 號(陸家嘴商務廣場) 1909 室

Tel: +86 21 68769266

Fax: +86 21 68769255

Website: http://www.abs-group.com.cn

#### (e) TÜV NORD Systems GmbH & Co. KG

Headquarter: Langemarckstr. 20, 45141, Essen, Germany.

Tel: +49 201 825 2678

Fax: +49 201 825 2858

Website: http://www.tuv-nord.com

Hong Kong office: Suite No. 1911A,19/F., Skyline Tower,39 Wang Kwong Road, Kowloon Bay,

Kowloon, Hong Kong

香港九龍九龍灣宏光道 39 號宏天廣場 19 樓 1911 室

Tel: +852 2376 0783

Fax: +852 2376 1801

#### (f) Japan Boiler Association

#### 日本鍋爐檢驗協會

Headquarters:

3-1 Shimbashi, 5-chome, Minato-ku, Tokyo,  $\mp$ 105-0004, Japan.

Tel: +81-3-5473-4500

Fax: +81-3-5473-4520

Website: http://www.jbanet.or.jp

# (g) Bureau Veritas

#### 必維國際檢驗集團

Headquarter: Sièg

Siège social Immeuble "Le 1828", 67/71 Boulevard du Château – 92200

Neuilly-sur-Seine - France

Tel: +33 1 55 24 70 00

Fax: +33 1 55 24 70 33

Website: http://www.bureauveritas.com

Regional office:

No 1288, Waima Road, Huang Pu District, Shanghai, People's Republic of China

中華人民共和國上海市黃浦區外馬路 1288 號

Tel: +86 21 2319 0001

Fax: +86 21 6886 1421

Website: http://www.bureauveritas.cn/

Hong Kong office:

Room 1023-25, 10/F, Pacific Trade Centre, 2 Kai Hing Road, Kowloon Bay,

Kowloon, Hong Kong.

香港九龍九龍灣啟興道 2號太平洋貿易中心 10 樓 1023-25 室

Tel: +852 2815 2092

Fax: +852 2545 3287

Website: http://www.bureauveritas.com

# (h) TÜV Rheinland Industrie Service GmbH

## 德國萊茵 TUV 集團

Headquarters: Am Grauen Stein, D-51105 Cologne, Germany

Tel: +49 221 806-2015

Fax: +49 221 806 1354

Website: <a href="https://www.tuv.com/germany/de/">https://www.tuv.com/germany/de/</a>

Hong Kong office: 3-4, 11/F., Fou Wah Industrial Building, 10-16 Pun Shan Street, Tsuen Wan, N.T.,

Hong Kong

香港新界荃灣半山街 10-16 號富華工業大廈 3-4, 11 樓

Tel: +852 21921000

Fax:+852 21921027

Website: <a href="https://www.tuv.com">https://www.tuv.com</a>

#### **Notes**

- (1) For the purpose of registration under the "Boilers and Pressure Vessels Ordinance (Cap. 56)" every new boiler and pressure vessel is to be inspected and issued with a "Certificate of Inspection during construction" by a Recognized Inspection Body during construction. 為符合"鍋爐及壓力容器條例(第 56 章)"有關登記的要求,新鍋爐或壓力容器在建造期間均須經過"認可檢驗機構"檢驗及發出「建造期檢驗證書」。
- (2) The Boilers and Pressure Vessels Authority may recognize or accept any other engineering inspection body when deem necessary.

  鍋爐及壓力容器監督會按需要認可或接受其他工程檢驗機構。

Boilers and Pressure Vessels Division

Labour Department - The Government of the HKSAR

6 September 2018

香港特區政府勞工處 鍋爐及壓力容器科 二零一八年九月六日

# Recognized Engineering Standards and Codes (under Boilers and Pressure Vessels Ordinance, Cap 56)

1.	The design, construction, inspection, testing and operation requirements of
	boilers and pressure vessels must meet one of the following recognized
	engineering standards and codes:

- (a) British Standards (BS);
- (b) Chinese National Standards (GB, GB/T, JB/T);
- (c) American Standards (ASME Boiler and Pressure Vessel Codes);
- (d) Japanese Industrial Standards (JIS);
- (e) German AD Codes (DIN, AD);
- (f) European Standards (EN).
- Other international or national standards or codes may be recognized by the Boilers and Pressure Vessels Authority as when necessary.

Boilers and Pressure Vessels Division Labour Department (issue of 8/2019)



Labour Department

Your reference 來函編號:

Our reference 本處檔案編號:(8)5 in LD BPV /400 /20 /1

Tel. number 電話號碼:(852)31073440 Fax number 傳真號碼:(852)25170875 勞工處

Boilers and Pressure Vessels Division 鍋爐及壓力容器科

12 October, 2018

# Circular No. 3/2018 Instructions to Appointed Examiners Exemption of PVHO from fusible plug when safety valve not fitted directly on the chamber

Pressure Vessels for Human Occupancy are generally catalogued under air receivers, a Pressure Vessel for Human Occupancy (PVHO) may need to fit a quick-operating manual shutoff valve between the PVHO and the safety valve. The manual shutoff valve shall be sealed open with frangible seal and is a requirement of the Safety Standard for PVHO issued by ASME (1-8 of ASME PVHO-1-2012 refers).

In accordance with Regulation 5(3) of the Boilers and Pressure Vessels Regulations, Cap. 56A (regulation), in case the safety valve is not fitted directly to the PVHO, e.g. fitted with a quick-operating manual shutoff valve in-between, a suitable fusible plug shall also be fitted to the PVHO. However, PVHOs are not fitted with the fusible plug in general.

Your attention is drawn to confirm the compliance of the regulation by the PVHO constructed particularly in accordance with ASME. In case a suitable fusible plug is not fitted as required, Appointed Examiner (AE) is advised to assist owner to apply for an exemption of the regulation.

Approval of exemption cases are based on the satisfactory survey report and recommendation submitted by AE. Exemption certificate will be issued to the owner if the Authority considers it is applicable with conditions specified.

Conditions for granting an exemption of the *regulation* for PVHO will be subject to individual circumstances. However, general conditions for the exemption are specified as follows:

- The manual shutoff valve between the PVHO and the safety valve shall be sealed open with frangible seal by the appointed examiner. The frangible seal shall be checked and confirmed in proper condition by the appointed examiner and endorsed on the new certificate of fitness upon renewal of the certificate of fitness.
- 2) The owner of the PVHO shall ensure that the frangible seal of the manual shutoff valve is in proper sealed condition. If the frangible seal is broken or tampered with, the manual shut off valve shall be re-sealed by the/an appointed examiner immediately before the PVHO is pressurized or after release of the pressure inside the PVHO, whichever is applicable.

3) A copy of the operating procedures in operating the PVHO and a safety caution sign of appropriate wordings, in a language suitable to the operators, shall be displayed conspicuously on or next to the equipment. Safety caution sign means, for example, the manual shutoff valve should be kept in sealed open position except in emergency situation, such as leakage of the safety valve etc.

When applying for the exemption of the PVHO, the AE should tick the box "FP" in the "Check Code" section of the "Supplementary Action Sheet" which would be appended to the "Application for Registration".

In order to standardise the procedure for such application, a Form 5A is devised and attached in "Enclosure 1" for your easy reference. You are advised to render assistance to owner in completing the Form 5A.

For any queries, please feel free to contact the undersigned at telephone number: 3107 3440.

(KWAN KAN FAT)

for Boilers and Pressure Vessels Authority

Enclosure 1: Sample Form 5A for exemption of fusible plug.

Distribution: All Appointed Examiners

c.c. AC(OS)



Labour Department

Your reference 來函編號:

Our reference 本處檔案編號:(2) in LD BPV /400 /20 /1

Tel. number 電話號碼:(852)31073440 Fax number 傳真號碼:(852)25170875 勞工處

Boilers and Pressure Vessels Division 鍋爐及壓力容器科

29 April 2019

# Circular No. 1/2018 (Revised) Instructions to Appointed Examiners Pressure unit on the pressure gauge (Revised) – Boilers and Pressure Vessels Regulations (Cap.56A)

#### Summary

The revised Circular No.1/2018 sets out the updated arrangement of pressure gauge with Bar as pressure unit highlighted in Paragraph 5 with effective from 29 April 2019. Previous Circular No. 1/2018 issued on 10 August 2018 is hereby superseded.

#### Revised Circular No. 1/2018

Regulations 3(1)(a)(iii), 4(1)(c) and 5(1)(c) of the Boilers and Pressure Vessels Regulations, Cap. 56A require every boiler, steam receiver and air receiver respectively shall have attached to them a correct pressure gauge indicates the pressure in the boilers or pressure vessels in pascals or multiples of pascals. These regulations came into force by the Boilers and Pressure Receivers (Amendment) Bill 1988. Prior to the amendment of the regulations, both the Imperial units and their equivalent in metric units were accepted, i.e. pressure unit in pound per square inch (PSI) or pascals (Pa).

- 2. After 30 years, we still found some pressure gauges of the pressure equipment not showing pascals or multiples of pascals as required. Although all pressure units can be converted to pascal by multiplying with specific factors, it is not accepted as "multiples of pascals" according to recent legal and expert advices unless the factors are integer powers of 10, i.e. 10, 100 or 1,000...
- 3. Pressure units, such as PSI, atm. and kgf/cm<sup>2</sup> (kg/cm<sup>2</sup>) can be converted from pascal by multiplying it with 6,894.76, 101,325 or 98,066.5 respectively. As the factors are not integer powers of 10, they are not accepted as "multiples of pascals".
- 4. The hectopascal, kilopascal and megapascal are certainly "multiples of pascals".
- 5. Another common pressure unit Bar which can be converted to pascal by multiplying it with a factor of 100,000. As the factor is an integer powers of 10, it can be accepted as "multiples of pascals", i.e. pressure gauge with Bar as pressure unit is considered acceptable to the regulations.
- 6. According to Regulation 17(1), contravention of the provisions, the owner shall be guilty of an offence and shall be liable to a fine of \$10,000 on conviction.

- 7. From 1st October, 2018, all Appointed Examiners (AEs) are reminded to look into pressure gauge unit ensuring the compliance with the requirement when the Certificate of Fitness (CoF) is issued for existing or new pressure equipment. If the AE finds the pressure unit not in compliance with the requirement, he shall render his assistance the owner to comply with the requirement. CoF shall only be issued when the AE is satisfied as what he signed on the CoF of either Form 1 "Boiler mountings examined and found satisfactory" or Form 2 "Fittings examined and found satisfactory". In case the AE decided that this requirement cannot reasonably be applied, he shall assist the owner to apply for exemption by filling in the Form 5A (sample attached as Enclosure 1) with the AE's recommendation letter and survey report to state the reason for the Authority's consideration at least 2 weeks before the AE intends to issue the CoF.
- 8. For any new pressure equipment applying for registration, please note that ticking the box R3, R4 or R5 in the section of Safety Fitting on the Supplementary Action Sheet for Pressure Equipment Registration means the AE confirms all requirements in Regulation 3, Regulation 4 or Regulation 5 are fully complied including the requirement for the pressure gauge unit. If exemption for the pressure gauge unit not being pascals or multiples of pascals is applied for the new pressure equipment, please also tick the box "PG" in the section of Check Code in the new Supplementary Action Sheet (refer to Instructions to AE 2/2018).
- 9. It is the responsibility of AE to ensure that an appropriate conversion chart, which can be used to convert the pressure units from the pressure gauge to pressure in kilopascals, shall be posted nearby the pressure gauge for reference. It shall be maintained in satisfactory condition, before issuing or endorsing the CoF to this exempted equipment.
- 10. For any queries, please feel free to contact the undersigned at telephone number: 3107 3440.

(KWAN KAN FAT)

for Boilers and Pressure Vessels Authority

Enclosure 1: Sample Form 5A for exemption of pressure gauge unit.

Distribution: All Appointed Examiners

c.c. AC(OS)