

第 26/2015 號行政長官公告

中華人民共和國於一九九九年十二月十三日以照會通知聯合國秘書長，經修訂的《1974年國際海上人命安全公約》自一九九九年十二月二十日起適用於澳門特別行政區；

國際海事組織海上安全委員會於二零一零年五月二十一日透過第MSC.292(87)號決議通過了《國際消防安全系統規則》修正案，該修正案自二零一二年一月一日起適用於澳門特別行政區；

基於此，行政長官根據澳門特別行政區第3/1999號法律第六條第一款的規定，命令公佈包含上指修正案的MSC.292(87)號決議的中文及英文文本。

二零一五年四月十四日發佈。

行政長官 崔世安

Aviso do Chefe do Executivo n.º 26/2015

Considerando que a República Popular da China, por nota datada de 13 de Dezembro de 1999, notificou o Secretário-Geral das Nações Unidas sobre a aplicação da Convenção Internacional para a Salvaguarda da Vida Humana no Mar de 1974, tal como emendada, na Região Administrativa Especial de Macau a partir de 20 de Dezembro de 1999;

Considerando igualmente que, em 21 de Maio de 2010, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.292(87), adoptou emendas ao Código Internacional dos Sistemas de Segurança contra Incêndios, e que tais emendas são aplicáveis na Região Administrativa Especial de Macau desde 1 de Janeiro de 2012;

O Chefe do Executivo manda publicar, nos termos do n.º 1 do artigo 6.º da Lei n.º 3/1999 da Região Administrativa Especial de Macau, a resolução MSC.292(87), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 14 de Abril de 2015.

O Chefe do Executivo, *Chui Sai On*.

第 MSC.292 (87) 號決議

2010 年 5 月 21 日通過

通過《國際消防安全系統規則》修正案

海上安全委員會，

憶及《國際海事組織公約》關於本委員會職能的第二十八條第(二)款，

注意到第 MSC.98 (73) 號決議，委員會以該決議通過了《國際消防安全系統規則》(下稱“消防規則”)，該規則已根據《1974 年國際海上人命安全公約》(下稱“公約”)第 II-2 章成為強制性規定，

還注意到有關消防規則修正程序的公約第 VIII (b) 條和第 II-2/3.22 條，

在其第 87 屆會議上審議了根據公約第 VIII (b) (i) 條建議並分發的消防規則修正案，

1. 根據公約第 VIII (b) (iv) 條，通過《國際消防安全系統規則》修正案，其正文載於本決議附件中；
2. 根據公約第 VIII (b) (vi) (2) (bb) 條，決定上述修正案將於 2011 年 7 月 1 日視為已被接受，除非在該日期之前，有超過三分之一的公約締約國政府或其合計商船隊不少於世界商船隊總噸位 50% 的締約國政府表示反對該修正案；

3. 請各《安全公約》締約國政府注意：按照公約第 VIII (b) (vii) (2) 條，該修正案在按上述第 2 段被接受後，將於 2012 年 1 月 1 日生效；
4. 要求秘書長依據公約第 VIII (b) (v) 條，將本決議及載於附件中的修正案文本的核證無誤副本送發所有公約締約國政府；
5. 進一步要求秘書長將本決議及其附件的副本送發非公約締約國政府的本組織會員國。

附件

《國際消防安全系統規則》修正案

第一章

總則

1 適用範圍

- 1 在第 1.2 段的結尾新增加以下一句：

“但是，除非另有明文規定，2002 年 7 月 1 日以後通過的規則修正案須僅適用於該修正案生效之日或之後鋪放龍骨或處於類似建造階段的船舶。”

第十章

取樣探煙系統

- 2 將第十章的現有文字用以下內容替換：

“1 適用範圍

1.1 本章詳細規定了公約第 II-2 章要求的貨物處所內取樣探煙系統規範。除非另有明文規定，本款的要求適用於 2012 年 1 月 1 日或以後建造的船舶。

2 工程規範

2.1 一般要求

2.1.1 本章中凡出現“系統”一詞，係指“取樣探煙系統”。

2.1.1.1 取樣探煙系統包括以下主要組件：

- .1 集煙器：安裝在每個貨艙取樣管開口端的空氣收集裝置，其物理功能為收集空氣樣本以通過取樣管傳送到控制板，並可作為固定式氣體滅火系統（如安裝）的施放噴口；
- .2 取樣管：連接集煙器和控制板的管道網絡，分段佈置以便於及時發現失火位置；
- .3 三通閥：如果系統與固定式氣體滅火系統相互連接，使用三通閥平時將取樣管與控制板連通，如果發現失火，三通閥轉為將取樣管與滅火系統施放總管連通並切斷與控制板的連通；及
- .4 控制板：系統的主要組成部分，對受保護處所進行連續檢測以指示出煙氣情況。典型的控制板會包括一個觀察室或煙氣傳感裝置。通過集煙器和取樣管從受保護處所抽取煙氣樣本，送到觀察室，然後送到使用電子探煙器監測氣流的傳感室。如果感測到煙氣存在，中繼器盤（通常在駕駛室）將自動發出聲音報警（不定位的）。之後船員可在感煙裝置處確定哪一貨艙失火並操作相應三通閥釋放滅火劑。

2.1.2 任何所要求的系統須能在任何時候連續工作，但也可以接受按順序掃描原理工作的系統，條件是兩次掃描同一位置的時間間隔最大允許值按以下要求確定：

間隔 (I) 應取決於掃描點的數量 (N) 和風機反應時間 (T)，並留出 20% 的餘量：

$$I=1.2 \times T \times N$$

但是，最大允許間隔不應超過 120s ($I_{\max}=120s$)。

2.1.3 系統的設計、建造和安裝須防止任何有毒或可燃物質或滅火劑漏進任何起居和服務處所、控制站或機器處所。

2.1.4 對系統和設備須適當設計，以便能夠承受船上通常遇到的電壓變化和瞬間波動、環境溫度變化、振動、潮濕、衝擊、碰撞和腐蝕，並避免點燃可燃氣體與空氣混合物的可能性。

2.1.5 系統須屬於能夠對正確運行進行測試的類型，並在無需更換任何部件的情況下恢復到正常檢測狀態。

2.1.6 須為系統運行中使用的電氣設備提供備用電源。

2.2 組件要求

2.2.1 傳感裝置須經驗證，能在傳感室內煙密度超過每米 6.65% 的減光率之前工作。

2.2.2 須裝有雙套取樣風機。風機須具有足夠的能力可在被保護區內的正常條件或通風情況下工作，所連接的取樣管尺寸須在考慮到風機的吸力和管道佈置後加以確定，以滿足第 2.4.2.2 段的條件。取樣管的內徑至少為 12mm。風機應具有足夠的吸

力以確保對最遠區域的反應時間符合第 2.4.2.2 段要求的時間標準。在每條取樣線路上須安裝空氣流監測設備。

2.2.3 控制板須允許對每一取樣管內的煙霧單獨觀測。

2.2.4 取樣管須設計成確保從每一個相互連接的集煙器中抽取的氣流量儘可能相等。

2.2.5 取樣管須配備一個用壓縮空氣定期除氣的裝置。

2.2.6 探煙系統的控制板須根據 EN 54-2(1997)、EN54-4(1997) 和 IEC 60092-504 (2001) 標準進行測試。經主管機關的決定，可以使用替代標準。

2.3 安裝要求

2.3.1 集煙器

2.3.1.1 在每一個需要探煙的圍蔽處所內須至少設置一個集煙器。但是，如果某一處所設計成交替裝載油類或冷藏貨物與要求裝取樣探煙系統的貨物，則須為該系統提供此類處所內集煙器的隔離設施，這種設施須令主管機關滿意。

2.3.1.2 集煙器須安裝在受保護處所的頂部或儘可能高的位置，並且其間距須使頂甲板區域的任何部分至集煙器的水平距離不大於 12m。如果在可以機械通風的處所內採用這種系統，則集煙器的定位須考慮到通風的影響。在每個廢氣通風管的上半部分須至少加裝一個集煙器。在該加裝集煙器上須裝有適當過濾系統以避免灰塵沾染。

2.3.1.3 集煙器須置於不會受到碰撞或物理損壞的位置。

2.3.1.4 取樣管網絡須平衡佈置，確保符合第 2.2.4 段的要求。

每一取樣管上連接的集煙器數目須符合第 2.4.2.2 段的規定。

2.3.1.5 不同圍蔽處所的集煙器不應連接到同一個取樣管上。

2.3.1.6 在設有甲板間板（可移動裝載平台）的貨艙內，貨艙的上半部分和下半部分須各設集煙器。

2.3.2 取樣管

2.3.2.1 取樣管的佈置須易於確定失火位置。

2.3.2.2 取樣管須是自排空式，並得到適當保護，防止裝卸貨物時受到碰撞和損壞。

2.4 系統控制要求

2.4.1 聲光報警信號

2.4.1.1 探測到煙或其他燃燒生成物時，須在控制板和指示裝置上發出聲光信號。

2.4.1.2 控制板須位於駕駛室或防火控制站。如果控制板位於防火控制站，指示裝置須位於駕駛室。

2.4.1.3 在控制板和指示裝置上或其附近須清楚地顯示所保護處所的信息。

2.4.1.4 對該系統工作所需電源的失電情況須予以監測。任何失電情況均須在控制板處和駕駛室發出與煙火探測信號不同的聲光信號。

2.4.1.5 在控制板上須設有手動確認收到所有報警和故障信號的裝置。控制板和指示裝置上的聲音信號鳴響器可以手動靜音。控制板須明確區分正常、報警、確認收到報警、故障信號和靜音狀況。

2.4.1.6 系統的設置須能夠在清除報警和故障信號以後，自動復位至正常工作狀態。

2.4.2 測試

2.4.2.1 須為系統的試驗與維修提供適當的說明書和備件。

2.4.2.2 系統安裝後，須使用造煙機或等效裝置作為煙源進行功能測試。在為最遠的集煙器供煙後，控制裝置須在不超過 180s 收到車輛甲板報警，不超過 300s 收到集裝箱和雜貨艙報警。”

3 在現有第十五章後新增第十六章如下：

“第十六章

固定式碳氫化合物氣體探測系統

1 適用範圍

1.1 本章詳細規定了公約第 II-2 章所要求的固定式碳氫化合物氣體探測系統的規範。

1.2 第 II-2/4.5.7.3 條和第 II-2/4.5.10 條所要求的組合氣體探測系統若完全符合公約第 II-2/2 條的要求，可予以接受。

2 工程規範

2.1 總則

2.1.1 公約第 II-2 章所指固定式碳氫化合物氣體探測系統須基於本組織制訂的性能標準進行設計、建造和測試，並令主管機關滿意。

2.1.2 該系統由用於氣體測量和分析的中心裝置和位於所有與貨艙相鄰的壓載艙和雙層殼和雙層底內的留空處所，包括首尖艙和

艙壁甲板下任何與貨艙相鄰的其他艙和處所內的氣體取樣管組成。

2.1.3 該系統可以與貨泵艙氣體探測系統整合在一起，但第 2.1.2 段中所指處所須按第 2.2.3.1 段中要求的速率取樣。只要符合取樣率，也可以考慮從其他位置連續取樣。

2.2 組件要求

2.2.1 氣體取樣管路

2.2.1.1 探測設備上不得安裝共用取樣管路，但第 2.2.1.3 段要求的服務於每對取樣點的管路除外。

2.2.1.2 氣體取樣管路的建造材料和尺寸須能夠防止限流。如果使用非金屬材料，它們須具導電性。氣體取樣管路不得為鋁製。

2.2.1.3 氣體取樣管路的佈局須與每個處所的設計和尺寸相適應。除第 2.2.1.4 和 2.2.1.5 段規定者外，取樣系統在要求取樣處須允許最少兩個碳氫化合物氣體取樣點，一個位於該處下部，一個位於該處的上部。在要求時，上部氣體取樣點須不低於艙頂下 1m。下部氣體取樣點的位置須高於船底桁殼板但距艙底至少 0.5m，並須設有在堵塞時關閉的裝置。在確定固定取樣點的位置時，還須充分考慮到擬運油品的蒸氣密度和因處所驅氣或通風造成的稀釋。

2.2.1.4 對於小於 50,000 載重噸的船舶，主管機關可出於可行性和（或）操作性原因允許每個液艙設一個取樣位置。

2.2.1.5 對於雙層底內的壓載艙、不擬部分裝載的壓載艙和留空處所，不要求上部氣體取樣點。

2.2.1.6 須設有從壓載模式轉到裝貨模式後利用壓縮氣體沖刷清潔管路的裝置以防止氣體取樣管路在貨艙壓載時被堵塞。系統須設有氣體取樣管路被堵塞時報警的裝置。

2.2.2 氣體分析裝置

2.2.2.1 氣體分析裝置須位於一個安全處所，並可位於船舶裝貨區域以外的區域；例如，在液壓室內前艙壁上，及位於貨物控制室和（或）駕駛室內，但要滿足下列要求：

- .1 除第.5 段允許的情況外，取樣管路不應穿過氣體安全處所；
- .2 碳氫化合物氣體取樣管須裝有阻焰器。碳氫化合物樣本通向大氣，其出口位於安全位置，遠離點火源並遠離起居區域空氣進氣口；
- .3 在每條取樣管路上須在艙壁的氣體安全一側安裝一個易於靠近操作和維修的手動隔離閥；
- .4 碳氫化合物探測設備，包括取樣管、取樣泵、螺線管、分析裝置等，須位於合理氣密的設備櫃（例如門上設有密封墊圈的全封閉鋼體櫃）中，該設備櫃通過其自身取樣點監控。當全封閉鋼體櫃內的氣體密度超過可燃下限 30%時，整個氣體分析裝置將自動關閉；及
- .5 如果該圍閉不能直接佈置在艙壁上，取樣管須由鋼或其他等效材料製成，並且除艙壁和分析裝置處的隔離閥的連接點外，沒有可拆卸的連接，取樣管的走向須取其最短路徑。

2.2.3 氣體探測設備

2.2.3.1 氣體探測設備須設計成按不超過 30min 的間隔，按順序從每個受保護處所的每一取樣管進行取樣和分析。

2.2.3.2 在系統失靈的情況下或為了系統校準，須提供能使用便攜式儀器測量的方法。如果出現系統故障，須有使用便攜式儀器繼續監測空氣和記錄測量結果的程序。

2.2.3.3 當某一處所的蒸氣濃度達到不超過相等於可燃下限 30% 的預設值時，須在貨物控制室、駕駛室和在分析裝置處發出聲光報警。

2.2.3.4 氣體探測設備須設計為易於進行測試和校準。

RESOLUTION MSC.292(87)
(adopted on 21 May 2010)

**ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CODE
FOR FIRE SAFETY SYSTEMS**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

NOTING resolution MSC.98(73) by which it adopted the International Code for Fire Safety Systems (hereinafter referred to as "the FSS Code"), which has become mandatory under chapter II-2 of the International Convention for the Safety of Life at Sea, 1974 (hereinafter referred to as "the Convention"),

NOTING ALSO article VIII(b) and regulation II-2/3.22 of the Convention concerning the procedure for amending the FSS Code,

HAVING CONSIDERED, at its eighty- seventh session, amendments to the FSS Code, proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1. ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the International Code for Fire Safety Systems, the text of which is set out in the Annex to the present resolution;
2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the amendments shall be deemed to have been accepted on 1 July 2011, unless, prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;
3. INVITES Contracting Governments to the Convention to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2012 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the Annex to all Contracting Governments to the Convention;
5. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and its Annex to Members of the Organization, which are not Contracting Governments to the Convention.

ANNEX

**AMENDMENTS TO THE INTERNATIONAL CODE
FOR FIRE SAFETY SYSTEMS**

**CHAPTER 1
GENERAL**

Section 1 – Application

- 1 The following new sentence is added to the end of paragraph 1.2:

"However, amendments to the Code adopted after 1 July 2002 shall apply only to ships the keels of which are laid or which are at a similar stage of construction, on or after the date on which the amendments enter into force, unless expressly provided otherwise."

**CHAPTER 10
SAMPLE EXTRACTION SMOKE DETECTION SYSTEMS**

- 2 The existing text of chapter 10 is replaced by the following:

"1 APPLICATION

This chapter details the specification of sample extraction smoke detection systems in cargo spaces as required by chapter II-2 of the Convention. Unless expressly provided otherwise, the requirements of this chapter shall apply to ships constructed on or after 1 January 2012.

2 ENGINEERING SPECIFICATIONS

2.1 General requirements

2.1.1 Wherever in the text of this chapter the word "system" appears, it shall mean "sample extraction smoke detection system".

2.1.1.1 A sample extraction smoke detection system consists of the following main components:

- .1 smoke accumulators: air collection devices installed at the open ends of the sampling pipes in each cargo hold that perform the physical function of collecting air samples for transmission to the control panel through the sampling pipes, and may also act as discharge nozzles for the fixed-gas fire-extinguishing system, if installed;
- .2 sampling pipes: a piping network that connects the smoke accumulators to the control panel, arranged in sections to allow the location of the fire to be readily identified;

- .3 three-way valves: if the system is interconnected to a fixed-gas fire-extinguishing system, three-way valves are used to normally align the sampling pipes to the control panel and, if a fire is detected, the three-way valves are re-aligned to connect the sampling pipes to the fire-extinguishing system discharge manifold and isolate the control panel; and
- .4 control panel: the main element of the system which provides continuous monitoring of the protected spaces for indication of smoke. It typically may include a viewing chamber or smoke sensing units. Extracted air from the protected spaces is drawn through the smoke accumulators and sampling pipes to the viewing chamber, and then to the smoke sensing chamber where the airstream is monitored by electrical smoke detectors. If smoke is sensed, the repeater panel (normally on the bridge) automatically sounds an alarm (not localized). The crew can then determine at the smoke sensing unit which cargo hold is on fire and operate the pertinent three-way valve for discharge of the extinguishing agent.

2.1.2 Any required system shall be capable of continuous operation at all times except that systems operating on a sequential scanning principle may be accepted, provided that the interval between scanning the same position twice gives a maximum allowable interval determined as follows:

The interval (I) should depend on the number of scanning points (N) and the response time of the fans (T), with a 20% allowance:

$$I = 1.2 \times T \times N$$

However, the maximum allowable interval should not exceed 120 s ($I_{\max} = 120$ s).

2.1.3 The system shall be designed, constructed and installed so as to prevent the leakage of any toxic or flammable substances or fire-extinguishing media into any accommodation space, service space, control station or machinery space.

2.1.4 The system and equipment shall be suitably designed to withstand supply voltage variations and transients, ambient temperature changes, vibration, humidity, shock, impact and corrosion normally encountered in ships and to avoid the possibility of ignition of a flammable gas-air mixture.

2.1.5 The system shall be of a type that can be tested for correct operation and restored to normal surveillance without the renewal of any component.

2.1.6 An alternative power supply for the electrical equipment used in the operation of the system shall be provided.

2.2 Component requirements

2.2.1 The sensing unit shall be certified to operate before the smoke density within the sensing chamber exceeds 6.65% obscuration per metre.

2.2.2 Duplicate sample extraction fans shall be provided. The fans shall be of sufficient capacity to operate with the normal conditions or ventilation in the protected area and the connected pipe size shall be determined with consideration

of fan suction capacity and piping arrangement to satisfy the conditions of paragraph 2.4.2.2. Sampling pipes shall be a minimum of 12 mm internal diameter. The fan suction capacity should be adequate to ensure the response of the most remote area within the required time criteria in paragraph 2.4.2.2. Means to monitor airflow shall be provided in each sampling line.

2.2.3 The control panel shall permit observation of smoke in the individual sampling pipes.

2.2.4 The sampling pipes shall be so designed as to ensure that, as far as practicable, equal quantities of airflow are extracted from each interconnected accumulator.

2.2.5 Sampling pipes shall be provided with an arrangement for periodically purging with compressed air.

2.2.6 The control panel for the smoke detection system shall be tested according to standards EN 54-2 (1997), EN 54-4 (1997) and IEC 60092-504 (2001). Alternative standards may be used as determined by the Administration.

2.3 Installation requirements

2.3.1 Smoke accumulators

2.3.1.1 At least one smoke accumulator shall be located in every enclosed space for which smoke detection is required. However, where a space is designed to carry oil or refrigerated cargo alternatively with cargoes for which a smoke sampling system is required, means may be provided to isolate the smoke accumulators in such compartments for the system. Such means shall be to the satisfaction of the Administration.

2.3.1.2 Smoke accumulators shall be located on the overhead or as high as possible in the protected space, and shall be spaced so that no part of the overhead deck area is more than 12 m measured horizontally from an accumulator. Where systems are used in spaces which may be mechanically ventilated, the position of the smoke accumulators shall be considered having regard to the effects of ventilation. At least one additional smoke accumulator is to be provided in the upper part of each exhaust ventilation duct. An adequate filtering system shall be fitted at the additional accumulator to avoid dust contamination.

2.3.1.3 Smoke accumulators shall be positioned where impact or physical damage is unlikely to occur.

2.3.1.4 Sampling pipe networks shall be balanced to ensure compliance with paragraph 2.2.4. The number of accumulators connected to each sampling pipe shall ensure compliance with paragraph 2.4.2.2.

2.3.1.5 Smoke accumulators from more than one enclosed space shall not be connected to the same sampling pipe.

2.3.1.6 In cargo holds where non-gastight "tween deck panels" (movable stowage platforms) are provided, smoke accumulators shall be located in both the upper and lower parts of the holds.

2.3.2 Sampling pipes

2.3.2.1 The sampling pipe arrangements shall be such that the location of the fire can be readily identified.

2.3.2.2 Sampling pipes shall be self-draining and suitably protected from impact or damage from cargo working.

2.4 System control requirements

2.4.1 Visual and audible fire signals

2.4.1.1 The detection of smoke or other products of combustion shall initiate a visual and audible signal at the control panel and indicating units.

2.4.1.2 The control panel shall be located on the navigation bridge or in the fire control station. An indicating unit shall be located on the navigation bridge if the control panel is located in the fire control station.

2.4.1.3 Clear information shall be displayed on or adjacent to the control panel and indicating units designating the spaces covered.

2.4.1.4 Power supplies necessary for the operation of the system shall be monitored for loss of power. Any loss of power shall initiate a visual and audible signal at the control panel and the navigating bridge which shall be distinct from a signal indicating smoke detection.

2.4.1.5 Means to manually acknowledge all alarm and fault signals shall be provided at the control panel. The audible alarm sounders on the control panel and indicating units may be manually silenced. The control panel shall clearly distinguish between normal, alarm, acknowledged alarm, fault and silenced conditions.

2.4.1.6 The system shall be arranged to automatically reset to the normal operating condition after alarm and fault conditions are cleared.

2.4.2 Testing

2.4.2.1 Suitable instructions and component spares shall be provided for the testing and maintenance of the system.

2.4.2.2 After installation, the system shall be functionally tested using smoke generating machines or equivalent as a smoke source. An alarm shall be received at the control unit in not more than 180 s for vehicle decks, and not more than 300 s for container and general cargo holds, after smoke is introduced at the most remote accumulator."

- 3 The following new chapter 16 is added after the existing chapter 15:

**"CHAPTER 16
FIXED HYDROCARBON GAS DETECTION SYSTEMS**

1 APPLICATION

1.1 This chapter details the specifications for fixed hydrocarbon gas detection systems as required by chapter II-2 of the Convention.

1.2 A combined gas detection system required by regulations II-2/4.5.7.3 and II-2/4.5.10 may be accepted in cases where the system fully complies with the requirement of regulation II-2/2 of the Convention.

2 ENGINEERING SPECIFICATIONS

2.1 General

2.1.1 The fixed hydrocarbon gas detection system referred to in chapter II-2 of the Convention shall be designed, constructed and tested to the satisfaction of the Administration based on performance standards developed by the Organization.

2.1.2 The system shall be comprised of a central unit for gas measurement and analysis and gas sampling pipes in all ballast tanks and void spaces of double-hull and double-bottom spaces adjacent to the cargo tanks, including the forepeak tank and any other tanks and spaces under the bulkhead deck adjacent to cargo tanks.

2.1.3 The system may be integrated with the cargo pump-room gas detection system, provided that the spaces referred to in paragraph 2.1.2 are sampled at the rate required in paragraph 2.2.3.1. Continuous sampling from other locations may also be considered provided the sampling rate is complied with.

2.2 Component requirements

2.2.1 Gas sampling lines

2.2.1.1 Common sampling lines to the detection equipment shall not be fitted, except the lines serving each pair of sampling points as required in paragraph 2.2.1.3.

2.2.1.2 The materials of construction and the dimensions of gas sampling lines shall be such as to prevent restriction. Where non-metallic materials are used, they shall be electrically conductive. The gas sampling lines shall not be made of aluminium.

2.2.1.3 The configuration of gas sampling lines shall be adapted to the design and size of each space. Except as provided in paragraphs 2.2.1.4 and 2.2.1.5, the sampling system shall allow for a minimum of two hydrocarbon gas sampling points, one located on the lower and one on the upper part where sampling is required. When required, the upper gas sampling point shall not be located lower than 1 m from the tank top. The position of the lower located gas sampling point shall be above the height of the girder of bottom shell plating but at least 0.5 m from the bottom of the tank and it shall be provided with means to be closed when clogged. In positioning the fixed sampling points, due regard should also be given to the density of vapours of the oil products intended to be transported and the dilution from space purging or ventilation.

2.2.1.4 For ships with deadweight of less than 50,000 tonnes, the Administration may allow the installation of one sampling location for each tank for practical and/or operational reasons.

2.2.1.5 For ballast tanks in the double-bottom, ballast tanks not intended to be partially filled and void spaces, the upper gas sampling point is not required.

2.2.1.6 Means shall be provided to prevent gas sampling lines from clogging when tanks are ballasted by using compressed air flushing to clean the line after switching from ballast to cargo loaded mode. The system shall have an alarm to indicate if the gas sampling lines are clogged.

2.2.2 Gas analysis unit

2.2.2.1 The gas analysis unit shall be located in a safe space and may be located in areas outside the ship's cargo area; for example, in the cargo control room and/or navigation bridge in addition to the hydraulic room when mounted on the forward bulkhead, provided the following requirements are observed:

- .1 sampling lines shall not run through gas safe spaces, except where permitted under subparagraph .5;
- .2 the hydrocarbon gas sampling pipes shall be equipped with flame arresters. Sample hydrocarbon gas is to be led to the atmosphere with outlets arranged in a safe location, not close to a source of ignitions and not close to the accommodation area air intakes;
- .3 a manual isolating valve, which shall be easily accessible for operation and maintenance, shall be fitted in each of the sampling lines at the bulkhead on the gas safe side;
- .4 the hydrocarbon gas detection equipment including sample piping, sample pumps, solenoids, analysing units etc., shall be located in a reasonably gas-tight cabinet (e.g., fully enclosed steel cabinet with a door with gaskets) which is to be monitored by its own sampling point. At a gas concentration above 30% of the lower flammable limit inside the steel enclosure the entire gas analysing unit is to be automatically shut down; and

- .5 where the enclosure cannot be arranged directly on the bulkhead, sample pipes shall be of steel or other equivalent material and without detachable connections, except for the connection points for isolating valves at the bulkhead and analysing unit, and are to be routed on their shortest ways.

2.2.3 Gas detection equipment

2.2.3.1 The gas detection equipment shall be designed to sample and analyse from each sampling line of each protected space, sequentially at intervals not exceeding 30 min.

2.2.3.2 Means shall be provided to enable measurements with portable instruments, in case the fixed system is out of order or for system calibration. In case the system is out of order, procedures shall be in place to continue to monitor the atmosphere with portable instruments and to record the measurement results.

2.2.3.3 Audible and visual alarms are to be initiated in the cargo control room, navigation bridge and at the analysing unit when the vapour concentration in a given space reaches a pre-set value, which shall not be higher than the equivalent of 30% of the lower flammable limit.

2.2.3.4 The gas detection equipment shall be so designed that it may readily be tested and calibrated."

第 27/2015 號行政長官公告

中央人民政府命令在澳門特別行政區執行聯合國安全理事會關於阿富汗局勢的第1267 (1999) 號、第1333 (2000) 號及第1390 (2002) 號決議，以及關於恐怖活動對國際和平與安全構成威脅的第1989 (2011) 號及第2083 (2012) 號決議；

聯合國安全理事會關於基地組織及有關個人和實體的第1267 (1999) 號和第1989 (2011) 號決議所設委員會（基地組織制裁委員會）於二零一四年九月二十三日更新了基地組織制裁名單；

基於此，行政長官根據澳門特別行政區第3/1999號法律第六條第一款的規定，命令公佈聯合國安全理事會基地組織制裁委員會於二零一四年九月二十三日更新的基地組織制裁名單的英文原文及其葡文譯本。

二零一五年四月十四日發佈。

行政長官 崔世安

Aviso do Chefe do Executivo n.º 27/2015

Considerando que o Governo Popular Central ordenou a aplicação na Região Administrativa Especial de Macau das Resoluções do Conselho de Segurança das Nações Unidas n.º 1267 (1999), n.º 1333 (2000) e n.º 1390 (2002), relativas à situação no Afeganistão, e das Resoluções n.º 1989 (2011) e n.º 2083 (2012), relativas às ameaças à paz e segurança internacionais causadas por actos terroristas;

Considerando ainda que, em 23 de Setembro de 2014, o Comité do Conselho de Segurança das Nações Unidas estabelecido pelas Resoluções n.º 1267 (1999) e n.º 1989 (2011) relativo à Al-Qaida e a pessoas singulares e entidades a esta associadas (Comité de Sanções contra a Al-Qaida) procedeu à actualização da lista de sanções contra a Al-Qaida;

O Chefe do Executivo manda publicar, nos termos do n.º 1 do artigo 6.º da Lei n.º 3/1999 da Região Administrativa Especial de Macau, a lista de sanções contra a Al-Qaida, tal como actualizada à data de 23 de Setembro de 2014 pelo Comité de Sanções contra a Al-Qaida do Conselho de Segurança das Nações Unidas, na sua versão original em língua inglesa, acompanhada da tradução para a língua portuguesa.

Promulgado em 14 de Abril de 2015.

O Chefe do Executivo, *Chui Sai On*.