

ANNEX

**AMENDMENTS TO THE INTERNATIONAL CODE FOR THE SAFE CARRIAGE OF
PACKAGED IRRADIATED NUCLEAR FUEL, PLUTONIUM AND HIGH-LEVEL
RADIOACTIVE WASTES ON BOARD SHIPS, AS AMENDED**

Chapter 1 – General

1.1 Definitions

- 1 Existing subparagraph .3 of paragraph 1.1.1 is replaced by the following:
 - "3 *INF cargo* means packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes carried as cargo in accordance with class 7 of the IMDG Code."
- 2 In paragraph 1.1.1.7, the reference "VII/14.6" is replaced by the reference "VII/1.1".

1.2 Application

- 3 In paragraph 1.2.2, the word "should" is replaced by the word "shall".

第 95/2014 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二零零四年十二月九日透過第MSC.169(79)號決議通過了《散貨船艙口蓋的船東檢查和維護標準》，且該標準自二零零六年七月一日起對澳門特別行政區生效；

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，命令公佈包含上指標準的第MSC.169(79)號決議的中文及英文文本。

二零一四年十一月十二日發佈。

行政長官 崔世安

Aviso do Chefe do Executivo n.º 95/2014

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 9 de Dezembro de 2004, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.169(79), adoptou as Normas para a Inspeção e Manutenção das Tampas de Escotilha de Graneleiros por parte dos Proprietários, e que tais normas entraram em vigor, na Região Administrativa Especial de Macau, a partir de 1 de Julho de 2006;

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.169(79), que contém as referidas normas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 12 de Novembro de 2014.

O Chefe do Executivo, *Chui Sai On*.

第MSC.169 (79) 號決議

(2004年12月9日通過)

散貨船艙口蓋的船東檢查和維護標準

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28 (b) 條，

還憶及1997年《SOLAS公約》大會為了加強載運固體散裝貨物船舶的安全而通過的關於散貨船附加安全措施的《SOLAS公約》第XII章，

又憶及，認識到進一步改善散貨船在設計、結構、設備和操作等各方面的安全的必要性，委員會審查了關於散貨船安全的各種綜合安全評估 (FSA) 研究的結果，

認識到，基於上述綜合安全評估研究的結果，替換現有散貨船上的艙口蓋不經濟，並且認識到，應更注意艙口蓋的緊固裝置和水平荷載問題，特別是關於維護和檢查頻率的問題，

憶及委員會在其第77屆會議上批准海安會第MSC/Circ.1071號通函—散貨船艙口蓋檢驗和船東檢查與維護指南時，提請各成員國政府確保讓《國際安全管理規則》所定義的經營懸掛其旗幟的散貨船公司了解到對現有散貨船艙口蓋關閉裝置實施定期維護和檢查程序的必要性，以確保在任何時候都能得到妥善操作和有效，

注意到第MSC.170（79）號決議，海安會以該決議通過了對公約第XII/7條（散貨船的檢驗和維護）的修正案，其中參考了強制性的散貨船艙口蓋的船東檢查和維護標準，

審議了船舶設計與設備分委會第47次會議提出的建議，

1. 為適用公約第XII章第7條，通過了散貨船艙口蓋的船東檢查和維護標準，列於本決議的附件；
2. 提請公約的各締約國政府注意，所附的標準將在經修正的公約第XII章生效後於2006年7月1日實施；
3. 要求秘書長將本決議和所附標準的正文的核正無誤的副本發給公約的所有締約國政府；
4. 還要求秘書長將本決議和所附標準正文的核正無誤副本發給所有非公約締約國的本組織成員。

附件

散貨船艙口蓋的船東檢查和維護標準

1 適用範圍

這些標準對船東檢查和維護散貨船上的貨艙艙口蓋做出了要求。

2 艙口蓋以及艙口開啟、關閉、緊固和密封系統的維護

2.1 防風雨不足可能起因於：

- .1 艙口蓋系統的正常磨損：艙口圍板或艙口蓋由於碰撞而變形；摩擦墊片的（如果安裝）磨損；繫繩耳的磨損；或
- .2 維護不足：由於塗層破損而導致板材和加固構件的鏽蝕；運動部件潤滑不夠；繫繩耳、接頭墊片和橡膠墊需要更換或更換的部件規格不當。

2.2 艙口蓋不穩固尤其可能是因為緊固裝置的破損或磨損，或歸因於繫繩耳系統調整不當、預張力和負荷分配不正確。

2.3 因此，船東和船舶經營者應制定出一項維護計劃。這些維護的目標是：

- .1 保護艙口蓋和艙口圍板板材和加固部件的外露表面，以保持結構的整體強度；
- .2 保護滾動艙蓋的軌道表面以及壓力杆和其他對密封墊或摩擦墊施壓的鋼構件表面，注意到表面光滑和造型適當對減少這些部件的磨損的重要性；

- .3 應根據生產商的建議維修保養液壓或機械驅動的開啟、關閉、緊固繫索系統；
 - .4 保持調整人工繫索裝置，當發現調節能力有較大損耗、磨損或損失時，應予更換；
 - .5 根據生產商的建議更換密封和其他磨損部件，注意到船上攜帶或獲取正確規格配件的必要性，並應注意密封件是按特殊的壓力、硬度、抗化學和耐磨度來設計的；以及
 - .6 保持所有艙口蓋排水及其止回閥門（如果安裝）處於正常的運轉狀態，注意到在甲板上浪的情況下，安裝在防水線舷內側的某些排水應設有止回閥防止貨艙進水。
- 2.4 在諸如密封墊、橡膠墊、環形和十字接頭的羊耳等部件更換之後應保持對安全負荷的均衡。
- 2.5 船東和船舶經營人應保留一份維修保養計劃和關於維修保養及進行部件更換的記錄，以便於主管機關做維修保養計劃和法定檢驗。艙口蓋維修保養計劃應為《國際安全管理規則》所規定的船舶安全管理系統的一部分。
- 2.6 如果所載運的貨物類別需要不同的密封墊材料，除其他備件外，應在船上帶有可選擇的正確規格的密封墊材料。
- 2.7 在艙口蓋的每次操作中，艙口蓋，特別是承壓面和排水溝，應無碎物並應儘可能保持清潔。
- 2.8 要特別注意出海前沒有完全緊固艙口蓋的危險。在開始海上航行之前必須完成所有艙口蓋的緊固。在航行中，特別是在裝載的航行

中，應對艙口蓋緊固裝置、羊角繫固裝置和安全佈置設施等進行檢查，特別在預期有惡劣氣候時以及在惡劣氣候之後要進行檢查。如有必要打開艙口蓋，只能在有利的海況和氣候條件時進行，還要注意最新的天氣預報。

2.9 經營人在計劃將集裝箱或其他貨物裝載在艙口蓋上時應參閱《貨物緊固手冊》，確認其設計是可以承載的，並經過批准。綁索不應綁在艙口蓋或艙口圍板上，除非艙口蓋或艙口圍板適合於承受這樣的捆綁力。

3 艙口蓋以及艙口蓋開啟、關閉、緊固和密封系統的檢查

3.1 主管機關應根據經1988年議定書修正的《1966年國際載重線公約》第14條的要求並按照經修正的第A.744（18）號大會決議中所載的加強檢驗的要求，作為年度檢驗的一部分，對艙口蓋及其圍板實施法定檢驗。但是，持續的安全操作取決於船東或船舶經營人制定的定期檢查計劃，確保兩次檢驗之間艙口蓋的安全狀態。

3.2 應建立航行中的常規檢查制度，並且在艙口蓋被打開時進行常規檢查。

3.3 在預期有惡劣氣候時和在惡劣氣候之後，航行檢查應包括對關閉的艙口蓋和安全佈置的外部檢查，但無論在何種情況下，只要氣候條件允許一周至少檢查一次。特別要注意船長前端25%的艙口蓋狀態，這裏通常是海浪負荷最大的地方。

3.4 在艙口蓋被打開時或每一航程周期可以進入時，對每組艙口蓋應檢查下列項目（如果有），但每月檢查不必超過一次：

- .1 艙口蓋面板，包括側板，以及打開的艙口蓋的加強件附屬設備，檢查其外觀腐蝕、裂紋或變形情況；
- .2 環形和十字接頭的密封佈置（墊片、兼用船上的彈性密封墊、墊緣、壓力杆、排水溝和止回閥），檢查其狀態和永久變形情況；
- .3 卡緊裝置、定位杆和羊角，檢查其磨耗、調節和橡膠部件的狀態；
- .4 關閉艙口蓋的定位裝置，檢查其扭曲和附屬部件的情況；
- .5 鐵鏈或鋼絲繩滑輪；
- .6 導軌；
- .7 導軌和軌道滑輪；
- .8 止動軋頭；
- .9 鋼纜、鐵鏈、張力器和絞纜筒；
- .10 液壓系統、電器安全裝置和連鎖裝置；和
- .11 端板和面板間鉸鏈、銷釘和平墊（如果安裝）。

作為這項檢查的一部分，應在每個艙口檢查圍板的面板、加強材和支架，檢查其外觀腐蝕、裂紋和變形情況，特別是圍板的頂部和四角，以及鄰近的甲板板材和支架。

RESOLUTION MSC.169(79)
(adopted on 9 December 2004)

**STANDARDS FOR OWNERS' INSPECTION AND MAINTENANCE OF
BULK CARRIER HATCH COVERS**

THE MARITIME SAFETY COMMITTEE,

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

RECALLING ALSO SOLAS chapter XII on Additional safety measures for bulk carriers, which the 1997 SOLAS Conference adopted with the aim of enhancing the safety of ships carrying solid bulk cargoes,

RECALLING FURTHER that, having recognized the need to further improve the safety of bulk carriers in all aspects of their design, construction, equipment and operation, it examined the results of various formal safety assessment (FSA) studies on bulk carrier safety,

RECOGNIZING that, on the basis of the outcome of the aforementioned FSA studies, replacing hatch covers in existing bulk carriers would not be cost-effective and that, instead, more attention should be paid to hatch cover securing mechanisms and the issue of horizontal loads, especially with regard to maintenance and frequency of inspection,

RECALLING that, at its seventy-seventh session, in approving MSC/Circ.1071 – Guidelines for bulk carrier hatch cover surveys and owners' inspections and maintenance, it invited Member Governments to ensure that companies, as defined in the ISM Code, that operate bulk carriers flying their flag are made aware of the need to implement regular maintenance and inspection procedures for hatch cover closing mechanisms in existing bulk carriers in order to ensure proper operation and efficiency at all times,

NOTING resolution MSC.170(79) by which it adopted, *inter alia*, amendments to regulation XII/7 (Survey and maintenance of bulk carriers) of the 1974 SOLAS Convention, where reference is made to mandatory Standards for owners' inspection and maintenance of bulk carrier hatch covers,

HAVING CONSIDERED the recommendation made by the Sub-Committee on Ship Design and Equipment at its forty-seventh session,

1. ADOPTS, for the purposes of the application of regulation XII/7 of the 1974 SOLAS Convention, the Standards for owners' inspection and maintenance of bulk carrier hatch covers, set out in the Annex to the present resolution;
2. INVITES Contracting Governments to the 1974 SOLAS Convention to note that the annexed Standards will take effect on 1 July 2006 upon the entry into force of the revised chapter XII of the 1974 SOLAS Convention;
3. REQUESTS the Secretary-General to transmit certified copies of this resolution and the text of the annexed Standards to all Contracting Governments to the 1974 SOLAS Convention;
4. FURTHER REQUESTS the Secretary-General to transmit certified copies of this resolution and the text of the annexed Standards to all Members of the Organization which are not Contracting Governments to the 1974 SOLAS Convention.

ANNEX**STANDARDS FOR OWNERS' INSPECTION AND MAINTENANCE OF
BULK CARRIER HATCH COVERS****1 Application**

These Standards define requirements for the owners' inspection and maintenance of cargo hatch covers on board bulk carriers.

2 Maintenance of hatch covers and hatch opening, closing, securing and sealing systems**2.1 Lack of weathertightness may be attributed to:**

- .1 normal wear and tear of the hatch cover system: deformation of the hatch coaming or cover due to impact; wear of the friction pads where fitted; wear and tear of the cleating arrangement; or
- .2 lack of maintenance: corrosion of plating and stiffeners due to breakdown of coatings; lack of lubrication of moving parts; cleats, joint gaskets and rubber pads in need of replacement, or replaced with incorrect specification parts.

2.2 Insecure hatch covers may be particularly attributed to damage or wear of securing devices, or incorrect adjustment, and incorrect pre-tension and load sharing, of cleating systems.

2.3 Ship owners and operators shall therefore institute a programme of maintenance. This maintenance shall be directed to:

- .1 protecting exposed surfaces of plating and stiffeners of hatch covers and coamings in order to preserve overall structural strength;
- .2 preserving the surface of trackways of rolling covers, and of compression bars and other steel work bearing on seals or friction pads, noting that surface smoothness and correct profile are important for reducing wear rates on these components;
- .3 maintaining hydraulic or mechanically powered opening, closing, securing or cleating systems in accordance with manufacturer's recommendations;
- .4 maintaining manual cleats in adjustment, with replacement when significant wastage, wear or loss of adjustment capability is identified;
- .5 replacing seals and other wear components in accordance with manufacturers' recommendations, noting the need to carry on board or obtain such spares of correct specification, and that seals are designed for a particular degree of compression, hardness, chemical and wear resistance; and
- .6 keeping all hatch cover drains and their non-return valves, where fitted, in working order, noting that any drains fitted to the inboard side of seal lines will have non-return valves for prevention of water ingress to holds in the event of boarding seas.

2.4 The equalization of securing loads shall be maintained following the renewal of components such as seals, rubber washers, peripheral and cross joint cleats.

2.5 Ship owners and operators shall keep a Maintenance Plan and a record of maintenance and component replacement carried out, in order to facilitate maintenance planning and statutory surveys by the Administration. Hatch cover maintenance plans shall form part of a ship's safety management system as referred to in the ISM Code.

2.6 Where the range of cargoes carried requires different gasket materials, a selection of gasket materials of the correct specifications shall be carried on board, in addition to other spares.

2.7 At each operation of a hatch cover, the cover and, in particular, bearing surfaces and drainage channels shall be free of debris and as clean as practicable.

2.8 Attention is drawn to the dangers of proceeding to sea without fully secured hatch covers. Securing of all covers shall always be completed before the commencement of a sea passage. During voyages, especially on loaded passages, cover securing devices and tightness of cleating and securing arrangements shall be checked, especially in anticipation of, and following periods of, severe weather. Hatch covers may only be opened on passage, when necessary, during favourable sea and weather conditions; imminent weather forecasts shall also be considered.

2.9 Operators shall consult the Cargo Securing Manual when planning the loading of containers or other cargo on hatch covers and confirm that they are designed and approved for such loads. Lashings shall not be secured to the covers or coamings unless these are suitable to withstand the lashing forces.

3 Inspection of hatch covers and hatch opening, closing, securing and sealing systems

3.1 Statutory surveys of hatch covers and their coamings are carried out by the Administration as part of the annual survey required by article 14 of the International Convention on Load Lines, 1966, as modified by the 1988 Protocol relating thereto, and in accordance with the requirements for enhanced surveys contained in resolution A.744(18), as amended. However, the continued safe operation is dependent on the shipowner or operator instituting a regular programme of inspections to confirm the state of the hatch covers in between surveys.

3.2 Routines shall be established to perform checks during the voyage and inspections when the hatch covers are opened.

3.3 Voyage checks shall consist of an external examination of the closed hatch covers and securing arrangements in anticipation of, and after, heavy weather but in any event at least once a week, weather permitting. Particular attention shall be paid to the condition of hatch covers in the forward 25% of the ship's length, where sea loads are normally greatest.

3.4 The following items, where provided, shall be inspected for each hatch cover set when the hatch covers are opened or are otherwise accessible on each voyage cycle, but need not be inspected more frequently than once per month:

- .1 hatch cover panels, including side plates, and stiffener attachments of opened covers for visible corrosion, cracks or deformation;
- .2 sealing arrangements of perimeter and cross joints (gaskets, flexible seals on combination carriers, gasket lips, compression bars, drainage channels and non-return valves) for condition and permanent deformation;

- .3 clamping devices, retaining bars and cleating for wastage, adjustment, and condition of rubber components;
- .4 closed cover locating devices for distortion and attachment;
- .5 chain or wire rope pulleys;
- .6 guides;
- .7 guide rails and track wheels;
- .8 stoppers;
- .9 wires, chains, tensioners and gypsies;
- .10 hydraulic system, electrical safety devices and interlocks; and
- .11 end and inter-panel hinges, pins and stools where fitted.

As part of this inspection, the coamings with their plating, stiffeners and brackets shall be checked at each hatchway for visible corrosion, cracks and deformation, especially of the coaming tops and corners, adjacent deck plating and brackets.

第 96/2014 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》（下稱“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二零零四年十二月十日透過第MSC.178(79)號決議通過了《國際安全運輸船載包裝輻照核燃料、鈾和高水平放射性廢物規則》（INF規則）修正案，且有關係修正案自二零零六年七月一日起對澳門特別行政區生效；

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.178(79)號決議的中文及英文文本。

二零一四年十一月十二日發佈。

行政長官 崔世安

Aviso do Chefe do Executivo n.º 96/2014

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, adiante designada por Convenção, tal como emendada, na Região Administrativa Especial de Macau a partir de 20 de Dezembro de 1999;

Considerando igualmente que, em 10 de Dezembro de 2004, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.178(79), adoptou emendas ao Código Internacional para a Segurança do Transporte de Combustível Nuclear Irrradiado, de Plutónio e de Resíduos Altamente Radioactivos em Barris a Bordo de Navios (Código INF), e que tais emendas entraram em vigor, em relação à Região Administrativa Especial de Macau, a partir de 1 de Julho de 2006;

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.178(79), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 12 de Novembro de 2014.

O Chefe do Executivo, *Chui Sai On*.