Subject: Tech. Inf. 2013-14 Guideline for issuing IOPP-A Cert.

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موضوع: اطلاعیه فنی ۱۵-۲۰۱۳ راهنمای صدور گواهینامه IOPP-A

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كليه بازرسان محترم ICS

با سلام و احترام

باتوجه به لزوم دقت و صحت گواهینامه های صادره از موسسه رده بندی ایرانیان، به پیوست راهنمای صدور گواهینامه IOPP-A (مرتبط با شناورهای باری غیر نفتكش) حضورتان ارسال مي گردد.

بدیهی است نسخه اصلی راهنمای صدور کلیه گواهینامه های قانونی در Instruction For Convention Survey قابل دسترس مي باشد.

این بخشنامه به انضمام پیوستهای تکمیلی آن در بخش CLD از شبكه داخلي موسسه با آدرس ذيل قابل دسترسي ميباشد.

LegislationDepartment\publication/tech/2013/13

With gratitude, respectfully,

All respectful ICS surveyors

According to authenticity & delicacy issuance of ICS's Certificates, attached guideline of issuance of International Oil Pollution Prevention Certificate (IOPP-A Cert.) relevant to cargo ship (other than oil tanker) is being sent hereby.

Obviously, preparation manual for all convention certificates can be found in Instruction for Convention Survey.

The document related to the above mentioned subject and also the supplementary attachments are accessible through the following address on ICS Network (ICS-WAN):

\\server\ICS Organization\Convention and LegislationDepartment\Publication/tech/2013/13

head of Convention & Legislation

Department

Iranian Classification Society - ICS

سرپرست واحد کنوانسیون ها و مقررات دریایی موسسه رده بندی ایرانیان

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ترک دعوی: اگرچه در گردآوری کلیه راهنماهای فنی ارائه شده توسط موسسه رده بندی ایرانیان ،تا حد ممکن تلاش در دقت و صحت محتوا صورت گرفته است،این موسسه متحمل مسئولیتی در قبال هرگونه اشتباهات ،خسارت های احتمالی و جرائمی که ممکن است در ارتباط با بکار گیری مفاهیم و مطالب ارائه شده رخ دهد، نمی باشد.

Page Topic: **Body** Code: Tech 2013-14

Content:

1- General..... 2- History.....

3- Application.....

1. GENERAL:

The Problem – Pollution of the sea by oil is a problem of national, regional and international concern because of the deleterious effects it could have on marine environment unless appropriate and timely steps are taken to prevent, mitigate, control, remove or combat the same. Generally the problem has to be tackled in two stages / parts:

I- Prevention of such oil pollution, and

II- Mitigation, containment / control, removal or combat of oil spillage, whether accidental or otherwise

2. HISTORY:

The MARPOL Convention is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. It is a combination of two treaties adopted in 1973 and 1978 respectively and updated by amendments through the vears. International Convention for the Prevention of Pollution from Ships (MARPOL) was adopted on 2 November 1973 at IMO and covered pollution by oil, chemicals, and harmful substances in packaged form, sewage and garbage. The Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships (1978) MARPOL Protocol) was adopted at a Conference on Tanker Safety and Pollution Prevention in February 1978 held in response to a spate of tanker accidents in 1976-1977. (Measures relating to tanker design and operation were also incorporated into a Protocol of 1978 relating to the 1974 Convention on the Safety of Life at Sea, 1974. Oil pollution of the seas was recognized as a

problem in the first half of the 20th century and countries introduced regulations to control discharges of oil within their territorial waters. In 1954, the United Kingdom organized a conference on oil pollution which resulted in the adoption of the **International Convention for the Prevention** of Pollution of the Sea by Oil (OILPOL), **1954.** Following entry into force of the IMO Convention in 1958, the depository and Secretariat functions in relation to the Convention were transferred from the United Kingdom Government to IMO.

Title: IOPP-A Cert.

Page 2 of 8

3. APPLICATION:

- Every ship of 400 gross tonnage and above other than an oil tanker engaged in international vovage.
- This application of "FORM A" is relevant to cargo ships other than tankers.
- With regard to Annex I, Reg 14-5 MARPOL 73178, All Iranian flagged ships solely navigating on Persian gulf & Oman sea were exempted to fit with O.W.S provided to have suitable bilge holding tank with sufficient capacity. (According to PMO circular of: 1525 dated on 22/AUG/2009)
- To protect marine life and environment of Caspian sea and prevent pollution from discharged oily mixtures to this very unique and special sea, please be informed that from date of issuance of this letter any use of oily water separator and discharge of oily water in Caspian sea is prohibited and all vessels trading in the area must be provided by a holding tank with adequate capacity to retain onboard all sludge and other oil residues including oily mixtures and disposed to a proper reception facility. The receipt or certificate should be kept to the oil record book part I.

(According to PMO circular with number of: 6643 dated 06/MAY/2010)

• [Para. 1.1粒1.4 of the supplement A]

For any changes, amendment should be made a ships' particular.

Code: Tech 2013-14

• [Para. 1.5 of the supplement A] Date of build:

- Para. 1.5.1 Date of building contract

- Para. 1.5.2 Date on which keel was laid or ship was at a similar stage of construction
- Para. 1.5.3 Date of delivery

• [Para. 1.6 of the supplement A] Major conversion:

Refer to Unified Interpretations to Reg.1.9 "Major conversion":

- The change of ship type
- The substantial alteration of dimensions or carrying capacity of the ship.
- The intent of which in the opinion of the administration is substantially to prolong its life
- The conversion of an existing oil tanker to a combination carrier.
- The shortening of a tanker by removing a transverse section of cargo tanks.
- The conversion of an existing oil tanker to a segregated ballast tanker by the addition of a transverse section of tanks. (When the cargo carrying capacity of the tanker is increased)
- The conversion of an existing oil tanker that meets Reg.19 is not a major conversion.
- If an existing crude oil tanker of 40,000 tons deadweight and above satisfy the requirements of COW changes, its trade for the carriage of product oil, conversion to CBT or SBT and reissuing of the IOPP Certificate will be necessary. Such conversion should not be considered as a major conversion.
- If the load lines are reassigned for the purpose of altering the deadweight, without alteration of the ship's structure, such reassignment is not considered as a major conversion. However, in this case, **IOPP certificate should be reissued**.

• [Para. 1.7 of the supplement A]:

In case where a ship's delivery date is delayed due to unforeseen circumstances beyond the control of the builder, the owner shall submit a written report for the delay. The unforeseen delay date shall be approved by the Administration and then the date is entered on the Certificate.

• [Para. 2.1.1 of the supplement A] The ship may under normal conditions carry ballast water in oil fuel tanks:

fuel oil tanks, such water ballast should be discharged into reception facility and the following remark shall be entered under paragraph 2.1.1 of the Supplement and "Attachment 1" shall be prepared and attached.

Title: IOPP-A Cert.

Page Topic: Body

Page 3 of 8

"NOTE"

- In case of IOPP survey of fishing vessel, it shall be confirmed whether the ship may carry ballast water in fuel oil tanks or not. The relevant paragraph of the Supplement shall be properly recorded as above.
- In a ship of 400 tons gross tonnage and above, for which the building contact is placed after 1 January 1982 or, in the absence of a building contact, the keel of which is laid or which is at a similar stage of construction after a July 1982, oil shall not be carried in a fore peak tank or a tank forward of the collision bulkhead.
- Any ship other than oil tanker which is not less than G/T 400 and any oil tanker which is more than G/T 150 as defined in Reg.1.28.2 shall not carry ballast water in fuel oil tanks.

• [Para. 2.2.1 of the supplement A] (Oil filtering equipment):

Any ship of 400 gross tonnage and above but less than 10,000 gross tonnages shall be fitted with oil filtering equipment.

• [Para. 2.2.2 of the supplement A] (Oil filtering equipment with an alarm and automatic stopping device):

Any ship of 10,000 gross tonnages and above shall be fitted with oil filtering equipment with an alarm and automatic stopping device.

1. In case where a preprocessing unit is installed in the piping system of the oil filtering equipment to improve its performance, an occasional survey for this unit is to be carried out.

The supplement of certificate shall be endorsed as follows:

- **2.2.1** Oil filtering (15 ppm) equipment (Regulation 14.6)
- **2.2.2** Oil filtering (15 ppm) equipment with alarm and automatic stopping device(Regulation 14.7)

Code: Tech 2013-14

Page 4 of 8

• [Para. 2.3.1 of the supplement A] (Oil filtering equipment):

Oil filtering equipment shall be complied with the following requirement in accordance with ship's keel laying date.

- 1) Res.A.393(X) was adopted in 1977 and describes requirements of 100ppm separating equipment and 15ppm filtering equipment, content meter and 15ppm alarms.
- 2) Res. MEPC.60(33) was adopted on 30 Oct. 1992 and supersedes the requirements of Res.A.393(X) from 30 April 1994.
- To installations fitted to ships, the keel was laid or ship was at a similar stage of construction on or after 30 April 1994
- To new installations fitted on or after 30 April 1994 to ships, the keel was laid or ship was at a similar stage of construction before 30 April 1994 in so far as is reasonable and practicable
- 3) Standards for Bilge Separator in accordance with Res.MEPC.107(49) should be applied as follows.
- This equipment is applicable to new building ships only if the keel is laid on or after 1 Jan. 2005.
- This equipment is applicable to replacement of equipment ordered on or after 1 Jan. 2005 to ships, the keel of which are laid before 1 Jan. 2005.
- 4) Res.A.233 was adopted in 1971 and contains provisions for an automatic level control system and a 100ppm oily water separator..
- 5) If the installed equipment is not approved based on resolution A.393(X) or A.233 (VII), but on the national standards, (X) should be marked in the para. 2.3.1.4.
- 6) Has not been approved.

• [Para. 2.3.2 of the supplement A]:

Res.A.444(XI) in para. 2.3.2 was adopted in 1979 and describes the requirements— of 100 ppm and 15 ppm process units. Para. 2.3.2 shall be marked only if these equipments were type approved.

• [Para. 2.3.2 of the supplement A]:

In principle, any ship of 10,000 gross tonnage and above shall be fitted. The oil content meter shall be marked for the case where one of three approval standard above Para. 2.3.1

Title: IOPP-A Cert.

Page Topic: Body

• [Para. 2.4 of the supplement A] (Maximum throughput of the oil filtering equipment):

The capacity of the oil filtering equipment shall be entered after confirmed certificate of inspection on article used for prevention of pollution of the sea. The name of the manufacturer and type shall be recorded under line on Para. 2.4.

• [Para. 2.5.1.1 of the supplement A]:

The Administration may waive the requirement of oil filtering equipment for any ship engaged exclusively on voyages within special areas. The ship shall be fitted with a bilge holding tank to the satisfaction of the Administration. The volume of the holding tank shall be entered in para. 2.5.2. of Form A attachment and then, the "attachment 2" shall be prepared and attached to the supplement.

• [Para. 2.5.1.2 of the supplement A]:

Any ship certified under the HSC Code engaged on a scheduled service with a turn-around time not exceeding 24 hours and then, the "attachment 2" shall be prepared and attached to the supplement.

• [Para. 2.5.2 of the supplement A] (Bilge Holding Tank fitted under the exemption of oil filtering equipment):

- If a Bilge Holding Tank is equipped under the exemption of oil filtering equipment in accordance with the above mentioned para. 2.5.1.1 & 2.5.1.2 the capacity of the tank shall be inserted on this paragraph of Form A attachment.
- If a Bilge Holding Tank is equipped in the ships of less than 400 gross tonnage in accordance with Reg. 14.4, the capacity of the tank shall be inserted on this paragraph of Form A attachment.
- The Bilge Holding Tank for ships which are exempted from oil filtering equipment shall be

Page Topic: Body Page 5 of 8 Code: Tech 2013-14

sufficient to receive all oily water during the voyage. The recommended capacity of the bilge holding tanks according to MEPC/Circ. 642 is as follows:

Main Engine Rating (KW)	Capacity(m ³)
P ≤ 1,000	4
$1,000 < P \le 20,000$	P/250
P > 20,000	40 + P/250

■ The installation of separator or oil filtering equipment on board to the Iranian flag oil tankers of 50 GT and above but less than 400 GT, and Iranian flag other than oil tankers of 100 GT and above but less than 400 GT may be exempted in accordance with Iranian National Law. In this case, the volume of the bilge holding tanks shall comply with the requirement of the Iranian Marine Pollution Prevention Act.

• [Para. 2A.1 of the supplement A] Oil fuel tank protection(Reg.12A):

1) All ships with an aggregate oil fuel capacity of 600 m3 and above which are delivered on or after 1 August 2010 should be complied with the requirements of Oil fuel tank protection".

When determining shipö s total volume of oil fuel, that of the small oil fuel tanks (oil fuel tanks with a maximum individual capacity not greater than 30 m3) is included.

- 2) Ship delivered on or after 1 August 2010 means a ship:
- for which the building contract is placed on or after 1 August 2007
- in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 February 2008.
- the delivery of which is on or after 1 August 2010
- which have undergone a major conversion.
- (1) For which the contract is placed after 1 August 2007.
- (2) In the absence of contract, the construction work of which is begun after 1st February 2008.
 - (3) Which is completed after 1 August 2010.

• [Paragraphs 6 and either 7 or 8] Double hull protection of Oil fuel tanks:

Title: IOPP-A Cert.

The requirements for the distance of Double hull protection of Oil fuel tanks (para. 6, 7, 8)

	600 m3 <u>C</u> ∴5,000 m3	5,000 m3 <u>C</u>
The moulded	h = B/20 m or,	h = B/20 m or,
line of the	h = 2.0 m, whichever	h = 2.0 m,
bottom shell	is the lesser.	whichever is
plating	The minimum value of	the lesser
	h = 0.76 m	The minimum
		value of h =
		0.76 m
The moulded	w = 0.4 + 2.4 C/20,000	w = 0.5 +
line of the side	m,the minimum value	C/20,000 m or
shell plating	of $w = 1.0 m$, however	w = 2.0 m,
	for individual tanks	whichever is
	with an oil fuel	the lesser
	capacity of less than	The minimum
	500 m3 the minimum	value of w =
	value is 0.76 m.	1.0 m

• [Paragraphs 11] the accidental oil fuel outflow performance standard specified below:

Alternative requirements(para.11)

	600 m3 LC 髭 5,000 m3	5,000 m3 <u>L</u> C
the mean oil outflow parameter	OM 髭 0.0157 - 1.14 ^节 10-6 ^节 C	OM 髭0.010

• [Para. 2A.2 of the supplement A]:

The ship is not required to comply with the requirements of regulation 12A.

• [Para. 3.1 of the supplement A] Oil residue(sludge) tank:

1- Requirements of sludge tanks:

- Sludge shall not be discharged directly from sludge tanks into the sea. The exception is given to cases where sludge is discharged to reception facilities through standard discharge connections. In case of ships with the piping line from sludge tanks to overboard discharge outlets, the piping line shall have a blank flange.
- The following requirements shall be subject to the sludge tank when the keel was laid or ship

Code: Tech 2013-14

Page 6 of 8

was at a similar stage of construction on or after December 1990:

- Sufficient man-holes shall be provided so that all parts of the tank can be reached to facilitate cleaning.
- Sludge tanks in ships operating with heavy fuel oil shall be fitted with adequate heating arrangements or other suitable means to facilitate the pumping and discharging of sludge.
- There shall be no interconnections between the sludge tank discharge piping and the bilgewater piping other sg`m possible common piping leading to the standard discharge connection. However, arrangements may be made for draining of settled drain water from the sludge tanks by means of manually operated self-closing valves including subsequent visual monitoring of the settled water.
- The sludge tank shall be equipped with a designated pump for discharging of the tank contents to reception facilities.
- 2- All oil residue (sludge) tanks which meet the requirements of the sludge tank as per paragraph 2 above, regardless of their capacity, shall be entered in this column as follows. But, the tank which belongs to the bilge system by nature on account of connection to the bilge separator, i.e., M/E Air Cooler Chemical Cleaning Tank, should not be marked with [X] in the para.3.1 of IOPPC even though the subject tank meets all requirements of the sludge tank.
- **3-** Name and capacity of tanks on the certificate shall be made an entry based on Stability Booklet, in succession Engine Piping Diagram and Manhole cover.

•[Para. 3.2.1 of the supplement A] The maximum capacity of incinerator for oil residues:

1) Incinerator means shipboard facilities for incinerating sludge and waste oil generated from the operation of the ship. The maximum capacity of incinerator shall be indicated by kw or kcal/h (if kg/h is confirmed then it shall be indicated as 45kg/h X 8600 = 387,000 kcal/h) and the type and the manufacturer shall be recorded in as follows:

(IMO Type OSV-50000, Kangrim) X maximum capacity 45 kw or kcal/h

Title: IOPP-A Cert.

Page Topic: Body

• [Para. 3.2.2 of the supplement A] Auxiliary boiler suitable for burning oil residues:

A shipboard auxiliary boiler which is able to incinerate oil residues is as follows:

- 1) The auxiliary boiler system for oil sludge processing is to be composed of:
- tank for mixing oil residues with fuel oil (mixing tank)
- oil sludge preheating system
- Filters
- homogenization system
- 3) As an example of homogenization system, when mixed incineration method(ex. sludge nozzle + oil nozzle) is used to assure effective burning of sludge having the character to burn hard, this column can be marked with [X] after incineration efficiency is confirmed.

• [Para. 3.2.3 of the supplement A] Other acceptable means:

Other acceptable means for disposal of oil residues are as follows:

- 1. Main boiler
- **2.** Inert gas system to have an oil sludge processing system.
- **3.** Heater of thermal fluids system to have an oil sludge processing system.
- 4. Where tanks meet the requirements of sludge tanks and at the same time are connected to any transfer pump for regenerating of Fuel oil or Lubricating. oil drainages, those tanks shall be entered in paragraph 3.1 of IOPPC Form A certainly. Furthermore, those tanks can be entered in paragraph 3.2.3 additionally at the request of the subject ship owner. In this case, the "attachment 3" shall be prepared and attached to the Certificate

Page Topic: Body Page 7 of 8 Code: Tech 2013-14

• [Para. 3.3 of the supplement A] Holding tank for the retention on board of oily bilge water:

Except the para. 2.5.1 of IOPP form A, in case where a Bilge Holding tank is fitted on board under the recommended base, the name of the tank shall be recorded in para. 3.3 of IOPP Form A.

It is referenced that clean drains (ex. sea water, fresh water, air cooler drain, etc.) not mixed with oil may be discharged overboard directly through the discharge arrangement, independent from the system for oily bilge water or oil in accordance with Appendix 4.4 of MEPC/ Circ.642.

• [Para. 4.1 of the supplement A] **Standard discharge connection:**

Pipeline for residues from machinery bilges and sludge tanks shall be fitted with a standard discharge connection in accordance with the following table.

Description	Dimension
Outside diameter	215 mm
Inside diameter	According to outside diameter of the pipe
Bolt circle diameter	183 mm
Slots in flange	6 holes 22 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. The slot width is to be 22 mm.
Flange thickness	20 mm
Bolts and nuts: uantity, diameter	6, each of 20 mm in diameter and of suitable length

The flange shall be designed to accept pipes up to a maximum internal diameter of 125 mm and shall be of steel or other equivalent material having a flat face. This flange, together with a gasket of oil-proof material, shall be suitable for a service pressure of 600 kPa-

• [Para. 5.1 of the supplement A] **Pollution** Shipboard Oil **Emergency** Plan(SOPEP):

Title: IOPP-A Cert.

Every ship other than an oil tanker of 400 gross tonnages and above shall carry on board a shipboard oil pollution emergency approved by the Administration.

• [Para. 5.2 of the supplement A] Shipboard oil/marine pollution emergency plan:

Every chemical tanker of 150 gross tonnages and above shall carry on board a shipboard oil/marine pollution emergency plan approved by the RO or the Administration.

• [Para. 6 of the supplement A] **Exemption:**

According to Reg. 3.1 of the Convention, hydrofoil, air cushion or other new ships may be exempted from requirements of Chapter 3 and 4 of MARPOL Annex %, therefore surveyors are advised to inform to the headquarter prior to the inspection.

• [Para. 6 of the supplement A] **Equivalents:**

According to MARPOL Annex I Chapter2 Regulation5(Equivalents):

- 1- The Administration may allow any fitting, material, appliance or apparatus to be fitted onboard a ship as an alternative to that required by this annex if such fitting, material, appliance or apparatus is at least as effective as that required by this annex. this authority of the Administration shall not extend to substitution of operational methods to effect the control of discharge of oil as equivalent to those design & construction features which are prescribed by regulations in annex I of MARPOL.
- 2- The Administration which allows a fitting, material, appliance or apparatus to be fitted onboard a ship as an alternative to that required by Annex I shall communicate particulars thereof to the Organization for circulation to the parties to the convention for their information & appropriate action.

Iranian Classification Society Convention and Legislation Department

Code: Tech 2013-14

Title: IOPP-A Cert.
Page Topic: Body
Page 8 of 8