

Ref : DMA/AIFI/97/C 967

Date: 29/11/2018

Dear Captain

Good Day,

Please find the attached informative document titled " No.995_China---Emission-Control-Areas-ECA-No.14 " for your kind attention and needful action.

You are requested to confirm receipt, discuss the contents in the next consolidated meeting on board & keep a copy in the file DA-11 .

Best Regards,

Ali Mohtasham

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(Note: This e-mail has been sent as BCC <blind carbon copy to : All R.O.D.-SMC Vessels, to eliminate the lengthy list that would result if this e-mail is printed)

JAPAN P&I NEWS

No.995

22 November 2018

To the Members

China – Emission Control Areas (ECA) (No.14)

We have obtained a further update of Shanghai ECA from Haiton & Partners, Shanghai, Chinese law firm.

Summary:

Shanghai MSA published the revised Guidelines on Supervision and Administration of ECA during Interim Period (“Guidelines”). The Guidelines consist of eight chapters, namely General rules, Exhaust emissions of navigating ships, Spot inspection, Alternative measures, Exemption and immunity, Management on oil supply operation, Legal liability, Supplementary articles, and six appendixes. We read and translate the Guidelines (see the attachment) and compare it with the previous edition of 2016. We would summarize the main contents as follows: We would summarise the main contents as follows:

I. Scope of Application

1. The Guidelines shall only apply to the jurisdiction water of Shanghai MSA. Ships navigating, mooring, operating in the Shanghai port shall strictly obey the Guidelines, except for military ships, sports ships and fishing boats.
2. The Guidelines will be effective from 1 October 2018 to 31 December 2018. The former edition which was issued by Shanghai MSA in 2016 will be abolished from the effective date of the Guidelines.

II. Inspection on ship’s changing low sulphur fuel oil

Preliminary screening: Exhaust emissions of navigating ships

3. Local MSAs under the Shanghai MSA shall be equipped with exhaust emission monitoring equipment, such as unmanned aerial vehicle with sniffing device, to supervise on the navigating ships. The monitoring equipment together with AIS data and ship report system would help local MSAs to identify those ships that are suspected of using high sulphur oil.
4. Navigating ships that are suspected of using high sulphur oil would be reported to the local MSAs where ships would be berthing at.

Spot inspection

5. Ships who committed illegal emission previously, or having been suspected of using high sulphur fuel by exhaust monitoring would be the key objects of spot inspection. The spot inspection includes,
 - i) Documentation inspection: to check the International Air Pollution Prevention Certificate, formulated plan for changing oil, records in engine book, etc. (article 7);
 - ii) Oil record inspection: engine book, oil record book and supply documents;

- iii) Oil pipe, instrument and apparatus inspection (article 9);
- iv) Inspection on quantity of ship fuel (article 10).
- v) Quick check on fuel: article 11 set forth very clearly that in which part of oil pipe would the sample of fuel be taken by the local MSA;
- vi) Keep oil sample and laboratory inspection: the suspected ships that are found during the exhaust monitoring and quick check procedure would be the key objects of being sampled. Article 12 provides for concrete steps for taking samples on ships.

Alternative measures

- 6. Ships are allowed to use the following alternative measures:
 - i) Shore power (article 14): ships that are capable of using shore power shall use the same when they are berthing at terminals equipped with shore power facilities. And the local MSAs may conduct spot inspection to check whether there is a written procedural manual and safety operation guide provided by the terminal to the ship and whether ships obey these rules strictly;
 - ii) Clean energy (article 15): type of clean energy, records in engine book, etc.;
 - iii) Exhaust after-treatment facility (article 16): related certificate issued by Classification Society, records in engine book, the residuals of exhaust treatment shall not be discharged into water or burned on board, and shall be discharged into a receipt facility on shore.

III. Exemption

- 7. If using low sulphur fuel would pose danger to ships, the Guidelines allows shipowners or ship agencies to submit written application to the Shanghai MSA in advance to exempt from liability. In order to apply for an exemption, ships are required to submit (article. 17):
 - i) Certification issued by Classification Society;
 - ii) Product specification or Operation Manual of the fuel oil equipment;
 - iii) Statement of Shipowner company and transformation plan of fuel oil equipment.

- 8. Under the following five circumstances, ships may apply for an exemption to the local MSA (article 18):
 - a. There is a formulated plan on board the ship to change the fuel, the ship has tried its best but it is unreasonable for it to fulfil the change operation before entering into Shanghai port;
 - b. Ship encountered an accident and, as the result, cannot depart from shanghai port in estimated time;
 - c. The ship was misled by oil suppliers for using non-compliant fuel;
 - d. Ship has tried the best but cannot obtain the low sulphur fuel;
 - e. An emergency occurs and ship cannot obtain standard-compliant fuel.

- 9. The exemption shall only be effective for a single voyage (article 19).

IV. Punishment

- 10. If the alternative measures and exemption causes are not accepted by the local MSA, the ships would be required to rectify immediately, failing which, the ship may be ordered to stop the operation, forbidden from entering, departing, or berthing at Shanghai port (article 23).

11. The punishment on non-compliance will be educating and warning during 1 October 2018 to 31 December 2018. However, for those serious breach or repeat offender, the MSA may decide to levy a fine in accordance with the law and regulation (article 24):
 - i) Art. 106 of the Air Prevention and Control Law of PRC: where the ship or the supplier does not keep supply documents or oil sample, a fine of RMB 10,000 – RMB 100,000 will be levied;
 - ii) Art. 85 (2) of Regulations of Shanghai Municipality on the Prevention and Control of Atmospheric Pollution (2014 Revision): where a ship navigating in the jurisdiction area of Shanghai discharge pollutants in excess of the emission standard or visible black smoke can be seen, the MSA shall order the ship to rectify, and may levy a fine of RMB 1,000 to 10,000 on those ships, and if such breach is serious, a fine of RMB 10,000 to RMB 50,000 may be levied on those ships

12. To avoid delay of a ship because of waiting for the result of the sample test, article 25 provides that the local MSA may require the ship to issue an Entrustment Letter authorising her local agent to settle down the administrative punishment in case of non-compliance.

V. Management on oil supply operation

13. The Guidelines request the local MSAs under the Shanghai MSA to check and record the oil quality inspection report of each oil suppliers, conduct quick check on the quality of oil, and keep oil samples (article 20).

Yours faithfully,

The Japan Ship Owners' Mutual Protection & Indemnity Association

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Attachment: Shanghai MSA - Guidelines on Supervision and Administration of ECA during Interim Period

Supervision and Administration Guideline of Shanghai MSA on Ship ECA during Transitional Period

Chapter I General Provisions

Article 1 This Supervision and Administration Guideline of Shanghai MSA on Ship ECA during Transitional Period (hereinafter referred to as “Guideline”) is formulated in accordance with laws and regulations such as the Law of PRC on the Prevention and Control of Atmospheric Pollution, the Regulations on Administration of the Prevention and Control of Marine Environment Pollution Caused by Vessels and Regulations of Shanghai on Prevention and Control of Atmospheric Pollution and in combination with actual situations of jurisdiction of this MSA, to implement and fulfill the implementation plan for ship ECA during transitional period, and carry out emission control supervision and administration effectively for ships entering into Shanghai port.

Article 2 This Guideline is applicable in waters of Shanghai port that is under the jurisdiction of Shanghai MSA. Ship navigating, berthing or operating in waters of Shanghai port shall strictly abide by ship emission control measures, excluding military ships, sport ships and fishing boats.

Chapter II Monitor and Surveillance on Exhaust Gas from Sailing Ships

Article 3 All sub-offices of Shanghai MSA and East China Sea Marine Patrol Law Enforcement Corp (hereinafter collectively referred to as “respective sub-institutions”) may, in combination with characteristics in their respective jurisdictions, carry out researches and deploy ship exhaust gas monitor and surveillance equipment.

Article 4 A sub-institution equipped with ship exhaust gas monitor and surveillance equipment shall keep the same in normal working status, screen out preliminarily ships suspected of using fuel oil of exceeding sulfur content through such equipment in combination with ship AIS information and ship reporting information system.

Article 5 For ships screened out preliminarily by respective sub-institutions as suspected of using fuel oil of exceeding sulfur content, where such a ship intends to berth alongside docks of other sub-institutions under Shanghai MSA, the sub-institution of the place where such ship was found using fuel oil of exceeding sulfur content shall, within one working day and as soon as possible, circulate relevant information in accordance with the format in Annex 1 to the sub-institution of the place where such ship intends to berth; where such a ship intends to berth in jurisdiction of other MSAs directly under China MSA or local MSAs, the sub-institution of the place where such ship was found using fuel oil of exceeding sulfur content shall, within one working day, report and submit relevant information to Danger Management and Pollution Prevention Division of Shanghai MSA in accordance with the format in Annex 1, and the Danger Management and Pollution Prevention Division of Shanghai MSA will notify relevant MSAs in a timely manner.

Shanghai MSA will, under the general deployment of China MSA for the ship pollutants monitor and surveillance work, promote the popular use of ship exhaust gas monitor and surveillance software.

Chapter III Onboard Inspection

Article 6 All sub-institutions shall treat ships with records of illegal emission and ships that are suspected of using fuel oil of exceeding sulfur content upon exhaust gas monitor and surveillance as key targets for inspection.

Article 7 When carrying out ECA onboard inspection, a sub-institution shall first check out the following certificates.

Verify on whether or not the ship holds valid certificates such as the (International) Air Pollution Prevention Certificate, and verify on whether or not there is corresponding

endorsement with alternative measure.

Verify on whether or not the ship holds written fuel oil switch procedure, whether or not all sections of fuel oil switch operation are made clear in such procedure, whether or not such procedure is adopted in the safety and pollution prevention management system, where the ship is a ship not required by laws or regulations to adopt such procedure in her safety and pollution prevention management system, verify on whether or not the ship adopts fuel oil switch procedure in relevant systems.

Verify on whether or not relevant information in the engine log, such as the start and end dates and time of fuel oil switch, longitude and latitude of ship's position, sulfur content of fuel oil and remaining quantity of fuel oil in fuel tank before and after the switch, quantity of low-sulfur content fuel oil used, operational persons, is complete and normative, confirm on whether or not the ship carried out fuel oil switch operation as per fuel oil switch procedure, whether or not the fuel oil under use satisfies requirements in ship ECA.

Article 8 Verify the type of fuel oil refueled onboard and the sulfur content of such fuel oil by checking the engine log, oil record book and documents for supplying and receiving of fuel oil.

Article 9 Check on fuel oil pipelines, apparatus and instruments. Pay priority to verify on whether or not ship's fuel oil pipeline layout and fuel oil piping plan meet requirements of corresponding norms, whether or not the fuel oil pipelines correspond to fuel oil piping plan, on what position does the valve for fuel oil pipeline stop, low-sulfur position or high-sulfur position, whether or not the ship has actually carried out fuel oil switch operation.

Verify on the ship's fuel oil switch situation by checking the fuel oil viscosity, temperature figure and history curve for equipment such as main engine, auxiliary

engine and boiler as well as fuel oil temperature and viscosity alarm record from the control panel in the central control room. A ship shall finish the work of switching to fuel oil of low-sulfur content before entering into waters of Shanghai port, and machines and equipment onboard shall be using fuel oil of low-sulfur content when the ship is entering into waters of Shanghai port; where the ship switch to use of fuel oil of ordinary sulfur content, she shall start the fuel oil switch work after leaving waters of Shanghai port.

Article 10 Verify the quantity of fuel oil used by ship. After a ship enters in ECA, theoretically, the quantity of low-sulfur fuel oil consumed may be calculated out through the following formula: ship's main engine consumes A ton per nautical mile, auxiliary engine consumes B ton per hour, boiler consumes C ton per hour, after entry into ECA, the main engine runs for X nautical miles, auxiliary engine runs for Y hours and boiler runs for Z hours, then, theoretical quantity of low-sulfur fuel oil consumed would be: $AX+BY+CZ$ (ton). Information such as the mileages and time the ship sails, in-port time and the time for use of boiler may be found in records such as logbook and engine log.

Verify the quantity of low-sulfur fuel oil refueled by the ship as well as quantity of low-sulfur fuel oil actually remained onboard.

Compare the above theoretically calculated figure with the quantity of low-sulfur fuel oil actually remained onboard, and make a preliminary judgment on whether or not the ship has, as required, switch to low-sulfur fuel oil.

Article 11 Carry out fuel oil quick test. Take samples from downstream pipeline in-use fuel oil service tank, as close to the combustion system as safely feasible, where practicable, take samples from the last filter on the fuel oil intake pipeline, it is not recommended to take sample from the residual-discharge mouth of the service tank. Put the sampled fuel oil in standard sampling container, carry out quick test after the

temperature of such sampled fuel oil decreases to room temperature level, attention shall be paid to keep clean of the Mylar Film and prevent spill of sampled fuel oil. It is suggested to carry out test for three times and take the average value.

If the quick test result meets relevant standard, samples may be avoided to be sent to lab for analysis; if the quick test result does not meet relevant standard, samples shall be sent to lab for analysis in accordance with relevant procedures.

Article 12 Carry out fuel oil sampling and lab analysis. Priority shall be paid to take samples for fuel oil of suspected ships that are found during exhaust gas monitor and surveillance as well as fuel oil quick test, and send such samples to lab for analysis.

Maritime law enforcement officer shall take samples jointly with crews, and take samples from sampling points as provided for in Article 11 of this Guideline. Sampling work may be conducted with reference to IMO's Guidelines for Onboard Sampling for the Verification of the Sulfur Content of the Fuel Oil Used on Board Ships (See Annex 2)

At least 3 oil samples shall be taken for a same sampling point, each sample shall at least contains 400ml fuel oil, one to be handed over to the ship, one to be sent to lab for analysis and one to be kept by sub-institution.

After sampling, law enforcement officer shall fill up fuel oil sample sealing strip and label, ask the ship to sign and stamp on the same, paste the sealing strip on the cap and body of the bottle, and paste the label on the body of bottle of samples. Unified Format shall be used for sealing strip and label for fuel oil samples (see Annex 3).

All sub-institutions shall timely send fuel oil samples for lab analysis by fuel oil testing institution having corresponding qualifications as required by the State, and obtain test report. Where the ship raises obvious objection to the fuel oil sample test result, she and

the sub-institution may consult with each other and agree to send fuel oil samples for lab analysis again by fuel oil testing institution having corresponding qualifications as required by the State.

Chapter IV Supervision and Administration on Alternative Measures

Article 13 All sub-institutions shall improve law enforcement procedure, timely receive reports that ships use clean energy or treatment of exhaust gas as alternative measure, carry out on-site verification for its equivalent effect.

Article 14 A ship having equipment of receiving shore power shall use shore power during the period when she berths at a terminal equipping with shore power facilities.

Where a ship uses shore power, the sub-institution shall conduct on-site random inspection, with the priority paid to verify on whether or not the ship side and the shore side have operated in accordance with corresponding procedures manual and safety operation guideline, whether or not such information as the start and end time for use of shore power recorded in the ship's engine log as well as operational persons is complete and normative, where necessary, verify the same with the shore side's record for use of shore power.

Confirm on whether or not there are documents such as written application procedures manual and safe operation guideline provided by the shore power supply party on board.

Article 15 For a ship that uses clean energy, during on-site inspection, the sub-institution shall verify whether or not the type of clean energy used is remarked in the note of (International) Air Pollution Prevention Certificate, whether or not there is sufficient qualified clean energy onboard, whether or not the machines and equipment that use clean energy are running in good condition, whether or not the situation of filling and use of clean energy recorded in engine log or other corresponding record

books is complete and normative.

For a double-fuel ship, the sub-institution shall also verify on whether or not information such as date and time of fuel switch, longitude and latitude of ship's position as well as operational person recorded in ship's engine log is complete and normative. Confirm on whether or not the actual remaining quantity of clean energy and fuel oil is consistent with record, whether or not the ship's position met ECA requirement when she conducted fuel switch.

Article 16 For a ship uses treatment of exhaust gas, during on-site inspection, the sub-institution shall verify on whether or not the ship holds exhaust gas treatment device certificate issued by ship inspection institution, whether or not there is corresponding endorsement in ship's (International) Air Pollution Prevention Certificate, whether or not the exhaust gas treatment device is running in good condition, verify on whether or not information such as the start and end time of use of exhaust gas treatment device, longitude and latitude of ship's position as well as operational person recorded in ship's engine log is complete and normative, whether or not the ship's position met ECA requirement when she started and ended the use of exhaust gas treatment device.

The sub-institution shall supervise and urge ship to discharge residues generated from exhaust gas treatment device to on-shore receiving facilities and shall not discharge the same into water or incinerate the same onboard. For a ship engaged in international voyages, law enforcement officer may, through on-site checkout on data recorder and processing equipment, verify the compliance of exhaust gas after treated by the exhaust gas treatment device and the discharge of washing water, may also take samples of washing water and send samples of the same for lab analysis so as to confirming on whether or not ship's emission is consistent with emission requirements in the 2015 Guidelines for Exhaust Gas Cleaning Systems (Resolution MEPC.259(68)).

Chapter V Immunity and Exemption

Article 17 Where use of low-sulfur fuel oil would cause danger to the safety of the ship, the ship may apply for immunity in advance. Where a ship applies for immunity in advance, such application shall be submitted by her company or agent to Shanghai MSA in a written form (the application form is attached as Annex 1) and shall at least provide the following evidential materials, immunity may be granted after verification of such application:

1. Certification issue by classification society;
2. Product description and operational manual of ship's oil burning equipment;
3. Shipping company's statement and transformation plan for corresponding oil burning equipment.

Article 18 Where a ship used fuel oil that is inconsistent with corresponding standard and requirements in any of the following situations, she may apply with respective sub-institutions for exemption:

- (1) There is fuel oil switch procedure that meets corresponding requirement in place onboard, fuel oil switch operation has been conducted, and all practical and feasible measures have been taken, however, it is not reasonably practicable to finish switch to low-sulfur fuel oil before entering into Shanghai port.
- (2) There is logbook in place onboard recording in detail the ship's expected sailing plan and relevant accident information, proving occurrence of unexpected accident out of ship's control before leaving Shanghai port which led to the result that she could not sail away within scheduled time and that she used fuel oil inconsistent with corresponding standard and requirements during such time.
- (3) The ship has made all possible efforts but was misled by the oil supply unit, which led to the result that she used fuel oil inconsistent with corresponding standard and requirements.
- (4) The ship has made all possible efforts but still failed to obtain fuel oil consistent with corresponding standard and requirements.
- (5) Occurrence of emergency, which prevented the ship from using fuel oil consistent

with corresponding standard and requirements within prescribed period.

The ship shall provide evidential material for corresponding exemption situations. Where the ship cannot obtain fuel oil consistent with corresponding standard and requirements, she shall provide certification issued by local competent authority, and will be exempted after such certification is verified. Exemption is valid for a single voyage only.

Article 19 All sub-institutions shall carry out supervision inspection for ships that are immunized or exempted, upon finding that the basis for immunity or exemption is violated or is not met, or upon finding of providing false materials, the exemption shall be cancelled immediately, or report to Shanghai MSA immediately for to cancel the immunity.

Chapter VI Administration on Oil Supply Operation

Article 20 All sub-institutions shall strictly implement administration rules of Shanghai MSA regarding oil supplying and receiving operation, verify on whether or not oil supplying units holds oil product quality certificate for each batch of fuel oil purchased, truthfully fill out documents for supplying and receiving of fuel oil, provide ships with such documents and sample of fuel oil supplied; whether the document for supplying and receiving of fuel oil contains name of ship receiving fuel oil, identification number or IMO serial number, time and place of operation, name, address and contact details of the oil supplying unit as well as type, quantity and sulfur content of fuel oil, etc..

Verify on whether or not oil supplying unit supplied residual oil or heavy oil to ships of inland navigation or river-sea ships.

Article 21 All sub-institutions shall strictly implement administration rules of Shanghai MSA regarding oil supplying and receiving operation, conduct quick test for the quality of fuel oil supplied by oil supplying ship. It is suggested to carry out test for three times

for each type of oil and take the average value. If the quick test result meets relevant standard, samples may be avoided to be sent to lab for analysis; if the quick test result does not meet relevant standard, samples shall be sent to lab for analysis in accordance with relevant procedures.

Article 22 All sub-institutions shall, pursuant to administration rules of Shanghai MSA regarding oil supplying and receiving operation, conduct sampling and lab analysis work for fuel oil in oil supplying and receiving operation, and use sealing strip and label in the format shown in Annex 3.

Fuel oil sampling work for the oil supplying and receiving operation may be done with reference to the IMO's Guidelines for the Sampling of Fuel oil for Determination of Compliance with the Revised MARPOL Annex VI (Resolution MEPC.182(59)), attached herein as Annex 4.

Chapter VII Legal Responsibility

Article 23 Where a ship use alternative measure without reporting, effect of alternative measure is not equivalent to that of use of low-sulfur fuel oil, practices fraud in immunity or exemption, or other violations of this Guideline, the sub-institution shall, in addition to immediately stopping or cancelling her alternative measure or immunity or exemption, order it to make corrections and may, if it refuses to make corrections, order stop of operation, prohibit the ship from sailing in or out of the port or mooring in the port.

Article 24 Where a ship fails to, as required, record relevant documents, fails to, as required, keep onboard fuel oil sample and documents for supplying and receiving of fuel oil, uses fuel oil inconsistent with corresponding standard and requirements, discharges black smoke easily visible or discharges into the air pollutants in excess of the prescribed emission standards while sailing underway, the sub-institution impose punishment in accordance with laws and regulations such as the

Law of PRC on the Prevention and Control of Atmospheric Pollution, the Regulations on Administration of the Prevention and Control of Marine Environment Pollution Caused by Vessels and the Regulations of Shanghai on Prevention and Control of Atmospheric Pollution, and adopt credit management for relevant ships and companies.

Article 25 Since the lab test for ship fuel oil is relatively slow, in order not to affect ship's normal departure of from the port, the sub-institution may require the ship from which fuel oil samples were taken issue the Maritime Administrative Investigation Entrusting Letter (see Annex 5), and impose administrative punishment in accordance with fuel oil lab test result.

Article 26 For an oil supplying unit that supplies fuel oil inconsistent with corresponding standard and requirements, or supply residual oil or heavy oil to ships of inland navigation or river-sea ships, the sub-institution shall, in addition to handling the same in accordance with credit management rules, report such situation and relevant evidential materials to Shanghai MSA within 3 days from finding of the same, and Shanghai MSA will circulate the same to relevant departments such as quality supervision department and traffic department.

Chapter VIII Supplementary Provisions

Article 27 This Guideline is valid from October 1, 2018 till December 31, 2018. As of the day when this Guideline comes into implementation, the Notice of Shanghai MSA on Strengthening the Administration for Ship Emission Control Area (HHWF[2016] No.64).

Annexes:

1. Information Circulation Form for Ship Suspected of Using Fuel Oil with Sulfur Content Exceeds Prescribed Standard

2. Guidelines for Onboard Sampling for the Verification of the Sulfur Content of the Fuel Oil Used on Board Ships
3. Fuel Oil Sealing Strip and Label
4. Guidelines for the Sampling of Fuel oil for Determination of Compliance with the Revised MARPOL Annex VI
5. Maritime Administrative Investigation Entrusting Letter
6. Application Form for Immunity or Exemption

Annex 1

**Information Circulation Form for Ship Suspected of Using Fuel Oil with Sulfur
Content Exceeds Prescribed Standard**

Serial Number: 20XX (XXX)

Date:

Finding unit		Contact	
Receiving unit		Contact	
Name of ship		MMSI/IMO	

Port of destination		ETA	
Position of finding		Time of finding	
Screening method	Sniffing <input type="checkbox"/>	optical <input type="checkbox"/>	
Screening type	fixed <input type="checkbox"/>	portable <input type="checkbox"/>	
Description of situation (attached with photos, if any):			
Is it necessary for Danger Management and Pollution Prevention Division of Shanghai MSA to circulate the same?		Yes <input type="checkbox"/>	No <input type="checkbox"/>

Annex 2:

ANNEX**GUIDELINES FOR ONBOARD SAMPLING FOR THE VERIFICATION OF THE
SULPHUR CONTENT OF THE FUEL OIL USED ON BOARD SHIPS****1 Preface**

The objective of these Guidelines is to establish an agreed method for sampling to enable effective control and enforcement of liquid fuel oil being used on board ships under the provisions of MARPOL Annex VI

2 Sampling location

2.1 The on-board representative sample or samples should be obtained from a designated sampling point or points as agreed by the Administration taking into account the criteria given in paragraphs 2.2.1 to 2.2.5 of these Guidelines

2.2 In the absence of the sampling point or points referred to in paragraph 2.1, the fuel sampling point to be used should fulfil all of the following conditions

- 1 be easily and safely accessible,
- 2 take into account different fuel oil grades being used for the fuel oil combustion machinery item,
- 3 be downstream of the in-use fuel oil service tank,
- 4 be as close to the fuel oil combustion machinery as safely feasible taking into account the type of fuel oil, flow-rate, temperature, and pressure behind the selected sampling point,
- 5 the sampling point should be located in a position shielded from any heated surface or electrical equipment and the shielding device or construction should be sturdy enough to endure leaks, splashes or spray under design pressure of the fuel oil supply line so as to preclude impingement of fuel oil onto such surface or equipment,
- 6 be proposed by the ship's representative and accepted by the inspector, and
- 7 the sampling arrangement should be provided with suitable drainage to the drain tank or other safe location

2.3 Fuel oil samples may be taken at more than one location in the fuel oil service system to determine whether there is a possible fuel cross-contamination in the absence of fully segregated fuel service systems, or in case of multiple service tank arrangements

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3 Sample handling

The fuel oil sample should be taken when a steady flow is established in the fuel oil circulating system. The sampling connection* should be thoroughly flushed through with the fuel oil in use prior to drawing the sample. The sample or samples should be collected in a sampling container or containers and should be representative of the fuel oil being used. The sample bottles should be sealed by the inspector with a unique means of identification installed in the presence of the ship's representative. The ship should be given the option of retaining a sample. The label should include the following information:

- 1 sampling point location where the sample was drawn
- 2 date and port of sampling;
- 3 name and IMO number of the ship;
- 4 details of seal identification, and
- 5 signatures and names of the inspector and the ship's representative

* The sampling connection is the valve and associated pipework designated for sample collection which is connected to the fuel oil service system.

Annex 3:

燃油样品封条与标签

Sealing strip and label of fuel oil sample

封条 SEAL	
执法人员 (2人) OFFICERS	_____
船员签字 CAPTAIN/PERSON IN CHARGE	_____
日期和时间 DATE & TIME	_____

_____ 海事局燃油样品标签

SHANGHAI _____ MSA FUEL SAMPLE IDENTIFICATION LABEL

取样日期和时间 Date & Time		取样地点 Location	
油品种类 Fuel Type		油品标号 Product Grade	
海事部门样品封号 Sample No.		样品数量 Quantity	
执法人员 (2人) Officers		船章及签名 Stamp/Sign.	
船舶使用燃油取样还需填写 The following shall also be filled out in case of sampling for fuel oil used by ship			
船名 Ship Name		IMO 编号 IMO No.	
船舶代理 Agent		取样舱别 Sampling Tank	
受油港 Recv. Port		供油单位 Supplier	
供受油作业现场检查中取样还需填写 The following shall also be fill out in case of sampling during on-site inspection for oil supplying and receiving operation			
受油船名 Ship Name		IMO 编号 IMO No.	
供油单位 Supplier		供油船名 Barge Name	

Annex 4:

RESOLUTION MEPC.182(59)
Adopted on 17 July 2009

**2009 GUIDELINES FOR THE SAMPLING OF FUEL OIL FOR DETERMINATION
OF COMPLIANCE WITH THE REVISED MARPOL ANNEX VI**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution,

RECALLING ALSO that MARPOL Annex VI entered into force on 19 May 2005,

RECALLING FURTHER resolution MEPC.96(47) by which the Committee adopted the Guidelines for the sampling of fuel oil for determination of compliance with Annex VI of MARPOL 73/78,

NOTING that the revised MARPOL Annex VI was adopted by resolution MEPC.176(58) which is expected to enter into force on 1 July 2010,

NOTING ALSO that regulation 18.8.1 on fuel oil quality within the revised MARPOL Annex VI requires that the bunker delivery note shall be accompanied by a representative sample of the fuel oil delivered taking into account guidelines to be developed by the Organization,

RECOGNIZING the need to amend the Guidelines for the sampling of fuel oil for determination of compliance with Annex VI of MARPOL 73/78, in accordance with provisions of the revised MARPOL Annex VI,

HAVING CONSIDERED the amendments to Guidelines for the sampling of fuel oil for determination of compliance with Annex VI of MARPOL 73/78 prepared by the Sub-Committee on Bulk Liquids and Gases at its thirteenth session,

1. ADOPTS the 2009 Guidelines for the sampling of fuel oil for determination of compliance with the revised MARPOL Annex VI, as set out in the Annex to this resolution;
2. INVITES Governments to apply the Guidelines, as amended, from 1 July 2010; and
3. REVOKES the Guidelines adopted by resolution MEPC.96(47), as from this date.

ANNEX

2009 GUIDELINES FOR THE SAMPLING OF FUEL OIL FOR DETERMINATION OF COMPLIANCE WITH THE REVISED MARPOL ANNEX VI**1 Preface**

The primary objective of these Guidelines is to establish an agreed method to obtain a representative sample of the fuel oil for combustion purposes delivered for use on board ships.

2 Introduction

The basis for these Guidelines is regulation 18.5 of Annex VI to MARPOL 73/78, as amended by resolution MEPC.176(58), which provides that for each ship subject to regulations 5 and 6 of that Annex, details of fuel oil for combustion purposes delivered to, and used on board the ship, shall be recorded by means of a bunker delivery note which shall contain at least the information specified in appendix V to that Annex. In accordance with regulation 18.8.1 of Annex VI, the bunker delivery note shall be accompanied by a representative sample of the fuel oil delivered. This sample is to be used solely for determination of compliance with Annex VI of MARPOL 73/78.

3 Definitions

For the purpose of these Guidelines:

3.1 *Supplier's representative* is the individual from the bunker tanker who is responsible for the delivery and documentation or, in the case of deliveries direct from the shore to the ship, the person who is responsible for the delivery and documentation.

3.2 *Ship's representative* is the ship's master or officer in charge who is responsible for receiving bunkers and documentation.

3.3 *Representative sample* is a product specimen having its physical and chemical characteristics identical to the average characteristics of the total volume being sampled.

3.4 *Primary sample* is the representative sample of the fuel delivered to the ship collected throughout the bunkering period obtained by the sampling equipment positioned at the bunker manifold of the receiving ship.

3.5 *Retained sample* is the representative sample in accordance with regulation 18.8.1 of Annex VI to MARPOL 73/78, of the fuel delivered to the ship derived from the primary sample.

4 Sampling methods

4.1 The primary sample should be obtained by one of the following methods:

- 1 manual valve-setting continuous-drip sampler; or
- 2 time-proportional automatic sampler; or
- 3 flow-proportional automatic sampler.

4.2 Sampling equipment should be used in accordance with manufacturer's instructions, or guidelines, as appropriate.

5 Sampling and sample integrity

5.1 A means should be provided to seal the sampling equipment throughout the period of supply.

5.2 Attention should be given to:

- .1 the form of set up of the sampler;
- .2 the form of the primary sample container;
- .3 the cleanliness and dryness of the sampler and the primary sample container prior to use;
- .4 the setting of the means used to control the flow to the primary sample container; and
- .5 the method to be used to secure the sample from tampering or contamination during the bunker operation.

5.3 The primary sample receiving container should be attached to the sampling equipment and sealed so as to prevent tampering or contamination of the sample throughout the bunker delivery period.

6 Sampling location

For the purpose of these Guidelines a sample of the fuel delivered to the ship should be obtained at the receiving ship's inlet bunker manifold and should be drawn continuously throughout the bunker delivery period.

7 Retained sample handling

7.1 The retained sample container should be clean and dry.

7.2 Immediately prior to filling the retained sample container, the primary sample quantity should be thoroughly agitated to ensure that it is homogeneous.

7.3 The retained sample should be of sufficient quantity to perform the tests required but should not be less than 400 ml. The container should be filled to $90\% \pm 5\%$ capacity and sealed.

The phrase "be drawn continuously throughout the bunker delivery period" in paragraph 6 of the Guidelines should be taken to mean continuous collection of drip sample throughout the delivery of bunker fuel covering each bunker delivery note. In case of receiving an amount of bunker fuel necessitating two or more delivery notes, the sampling work may be temporarily stopped to change primary sample container and then resumed as necessary.

8 Sealing of the retained sample

8.1 Immediately following collection of the retained sample, a tamper proof security seal with a unique means of identification should be installed by the supplier's representative in the presence of the ship's representative. A label containing the following information should be secured to the retained sample container:

- .1 location at which, and the method by which, the sample was drawn;
- .2 date of commencement of delivery;
- .3 name of bunker tanker/bunker installation;
- .4 name and IMO number of the receiving ship;
- .5 signatures and names of the supplier's representative and the ship's representative;
- .6 details of seal identification; and
- .7 bunker grade.

8.2 To facilitate cross-reference details of the seal, identification may also be recorded on the bunker delivery note.

9 Retained sample storage

9.1 The retained sample should be kept in a safe storage location, outside the ship's accommodation, where personnel would not be exposed to vapours which may be released from the sample. Care should be exercised when entering a sample storage location.

9.2 The retained sample should be stored in a sheltered location where it will not be subject to elevated temperatures, preferably at a cool/ambient temperature, and where it will not be exposed to direct sunlight.

9.3 Pursuant to regulation 18.8.1 of Annex VI of MARPOL 73/78, the retained sample should be retained under the ship's control until the fuel oil is substantially consumed, but in any case for a period of not less than 12 months from the time of delivery.

9.4 The ship's master should develop and maintain a system to keep track of the retained samples.

Annex 5:

海事行政调查委托书

关于 _____

_____ 代理公司:

我司谨在此委托你公司就船舶燃油质量检测达标事宜配合上海海事局调查处理, 若有任何因该问题而引发的罚款, 请代为支付并计入我公司账目。

船名 (船章):

船长签名:

日期:

ENTRUSTING LETTER

Re: _____

TO: _____

I hereby entrust you to settle down the qualification test of fuel oil used on board with Shanghai Maritime Safety Administration on behalf of me, if any penalty, please send it into my ship's company account.

Ship's Name:

Captain Signature:

Date:

Annex 6:

Application Form for Immunity or Exemption

Ship name:	Nationality/ port of registry:
Gross tonnage:	IMO No./ Identification No.:
Type of ship:	Date of construction:
Last port:	Next port:
Owner:	Operator:
Berthing dock:	Date and time of berth:
Agency company	Applying for: <input type="checkbox"/> Immunity <input type="checkbox"/> Exemption
Reasons for application:	
List of evidential materials:	
Date of application: (seal)	
Opinion of competent authority:	
Date: (seal)	