

標題

MARPOL ANNEX VI (船舶からの大気汚染防止のための規則)に関する北アメリカ沿岸の排出規制海域(ECA)における Coast Guard/環境保護局及びカナダ政府によるポートステートコントロール(PSC)について

# ClassNK

## テクニカル インフォメーション

No. TEC-0928

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各位

ClassNK テクニカル・インフォメーション No.TEC-0916(2012 年 7 月 24 日発行)にてお知らせした MARPOL ANNEX VI の北アメリカ沿岸の規制海域での適用が 2012 年 8 月 1 日に開始されました。

U.S. Coast Guard は"ECA JOB AID"により PSC で実施する検査内容/処置を紹介しており、カナダ政府も PSC における検査項目を"Emission Control Area - North America"にて公表しています。また、この規制に関与する米国環境保護局(EPA)は、燃料油が規制に適合しない場合の手続き等、燃料油に関する事項を"Interim Guidance on the Non-Availability of Compliant Fuel Oil for the North American Emission Control Area"において公表しています。

添付をご参照いただき、当該 ECA を航行する船舶が ANNEX VI を遵守していることの再確認及び ISM Code 1.4、5、7、9、10 との関連において安全管理システムの手順の見直しを推奨いたします。

なお、本件に関してご不明な点は、以下の部署にお問い合わせください。

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添付:

1. ECA JOB AID - Domestic & Foreign Vessels, dated 24 July 2012
2. Interim Guidance on the Non-Availability of Compliant Fuel Oil for the North American Emission Control Area, dated 26 July 2012
3. Emission Control Area - North America

NOTES:

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## UNITED STATES COAST GUARD

# ECA JOB AID

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## Domestic & Foreign Vessels

Office of Commercial Vessel Compliance (CG-CVC)

07/24/2012

### Section 1: Information

**Section 2: Annex VI Check-off (all inclusive):** A complete check list encompassing all of Annex VI is provided for use by the MI/PSCO until the CG-840 Job Aids are updated. This section of the Job Aid is intended to serve as a memory jogger during inspection/examinations and to assist the MI/PSCO when MARPOL Annex VI deficiencies are identified, especially regarding Regulation 14 & 18. Realizing the difference between a domestic vessel inspections and a foreign vessel exam, this list is not required to be completed in its entirety and the referenced items may be spot checked unless a more thorough review is required: 1) based on the scope of the inspection (domestic); or 2) an expanded exam is required based on the PSCOs impressions and/or observations.

**Section 3: ECA Deficiency Matrix** – This Matrix is only intended to provide a few deficiency examples for non-compliance with the North American & U.S. Caribbean Sea ECA (this list is not all inclusive).

### Section 4: Compliance Flow Chart

## ECA JOB AID

### Section 1 Information Aug 2012

#### MARPOL Annex VI (08 Amendments), Regulation 14 (Revised) and Regulation 18 [U.S. Domestic Regulations for same - 40 CFR § 1043]

This Job Aid is intended to be used by the Coast Guard Marine Inspectors (MI) and Port State Control Officers (PSCO) to assist in identifying and documenting deficiencies discovered during inspection/examinations of U.S. and foreign flagged ships that are in violation of MARPOL Annex VI, Regulation 14 for compliance with the North American & U.S. Caribbean Sea<sup>1</sup> Emission Control Area (ECA). Compliance with Annex VI Reg. 14 pertaining to the ECA can be achieved by several means: Utilization of Low Sulfur Fuel Oil (Reg. 14); by Equivalence (Reg. 4); or by receiving Exceptions/Exemptions (Reg. 3). In order to determine the approved method of compliance, MI/PSCO's must review the Supplement to the IAPP sections 2.3.1 (fuel oil with low sulfur or equivalent arrangements approved as listed in 2.6). For vessels that are issued Exceptions/Exemptions under Annex VI Regulation 3, separate documentation will be issued by an Administration permitting the exception/exemption and will not be captured on the Supplement to the IAPP Certificate (see section 5.b & 5.c of CG-CVC Policy Letter 12-02).

A vessel which is not currently documented by a special note in MISLE (as referenced in CVC Policy Letter 12-02 section 5.b & 5.c) and is utilizing an Equivalence or Exemption/Exception approved by an Administration; are not considered in violation of Annex VI. MI/PSCO's identifying a vessel utilizing one of these methods that does not currently have a special note in MISLE, are requested to: make a copy of the relevant document (Supplement to the IAPP Certificate / Administration's approval document) for scanning and attaching to the MISLE activity's document tab. In addition, MI/PSCO's are requested to notify CG-CVC-2 via e-mail ([cgCVC@uscg.mil](mailto:cgCVC@uscg.mil)) of the equivalence/exemption/exception. The e-mail subject line should include the following text: ECA – VESSEL UTILIZING REG 3 OR 4 FOR COMPLIANCE W/REG 14. Include in the e-mail a unit POC and the MISLE Activity number. This will allow CG-CVC to make an appropriate special note entry in MISLE.

For vessels that utilize a scrubber in lieu of Low Sulfur Fuel Oil (Equivalence (Reg. 4): MIs/PSCOs should be aware that guidelines for exhaust cleaning systems are available, see Resolution MEPC.184(59), Adopted on 17 July 2009: 2009 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS – The purpose of these Guidelines is to specify the requirements for the testing, survey certification and verification of exhaust gas cleaning (EGC) systems under regulation 4 to ensure that they provide effective equivalence to requirements of regulations 14.1 and 14.4 of Annex VI of MARPOL 73/78.

The Coast Guard will continue to utilize CG-543 Policy Letter 09-01 when performing Domestic inspections and Port State Control examinations which outlines the minimum items that an MI and PSCO's should review or examine. CG-CVC Policy Letter 12-02 outlines the compliance and enforcement procedures specific to MARPOL Annex VI, Regulation 14 & 18 for the ECA(s). Additional PSC guidance is provided in the *2009 Guidelines for Port State Control under the Revised MARPOL Annex VI* (MEPC.181(59)). The depth and scope of the examination must be determined by the MIs and PSCOs based on the condition of the vessel, compliance with the ECA through the use of low sulfur fuel oil (or other methods of compliance), the operation of its systems utilized for compliance, and the competency of the vessel's crew.

**U.S. Flag vessels operating domestically:** In 40 C.F.R. 1043.60(d), U.S. ships that “operate only domestically” (i.e., do not enter waters subject to the jurisdiction or control of any foreign country, except for Canadian portions of the Great Lakes) and use only fuels meeting the specification of 40 C.F.R. 80 for distillate fuel, are deemed to be in full compliance with the fuel use requirements and prohibitions of Regulation 14 and 18 of Annex VI (See §§1043.60 and 1043.70 for provisions related to fuel use by such ships). In 40 C.F.R. 1043.60(f), historic steamships may be exempted by EPA from the fuel requirements of 40 C.F.R. Part 1043. In 40 C.F.R. 1043.95, certain ships propelled by steam turbine engines or reciprocating steam engines and that are operating on the Great Lakes are not subject to the requirements of

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<sup>1</sup> The U.S. Caribbean Sea will not come into force until 1 January 2014.

40 C.F.R. Part 1043. Certain other ships operating on the Great Lakes may also be exempted by EPA from the requirements of 40 C.F.R. Part 1043. Refer to 40 C.F.R. 1043.95 for further details.

**Safety Management System:** A well-structured and documented Safety Management System (SMS) is an appropriate management tool enabling a Company and ship operators in meeting the requirements for compliance with the ECA. Logical processes for inclusion in a shipboard SMS may include shipboard and/or corporate quality standards, procedures, and responsibilities for personnel regarding Annex VI provisions discussed in CG-543 09-01 Policy Letter, such as [ISM Code 1.4, 5, 7, 9, 10]:

- Tracking of and preparation for Annex VI exams and IAPP Surveys.
- Management and/or tracking of onboard Ozone Depleting Substances
- Compliance with fuel oil quality (SOx) Requirements (VI/Reg 14) worldwide/ECA
- Ensuring adequate training for crew regarding procedures/documentation required to comply with the ECA (Reg.14.6)
- Notification procedures when fuel oil compliant with Reg 14 is not available for purchase (VI/Reg 18.2.4)
- Notification procedures when an accident occurs to a ship or a defect is discovered substantially affecting the efficiency or completeness of its equipment covered by Annex VI (VI/Reg 5.5)
- Incineration Requirements (including training and prohibitions)

**\*Deficiencies discovered regarding the SMS as they pertain to the ECA:** MIs/PSCOs should document these related deficiencies and assigned a Code 50 (30 days) for rectification. The MI/PSCO should include at the following text at the end of the deficiency description: “An internal audit by the company is requested”. CG-CVC-1 & 2 will continue to monitor and evaluate SMS discrepancies and will amend this section as appropriate.

**ECA Deficiencies.** MIs/PSCOs should take the following action regarding MARPOL Annex VI, Regulation 14 (SOx) and Regulation 18 (Fuel oil availability and quality) deficiencies:

- i. Inform the vessel’s master/person-in-charge that any deficiency issued by the Coast Guard regarding the ECA will be forwarded to the Environmental Protection Agency (EPA) for evaluation and determination of an ECA violation. The EPA may take enforcement action to include administrative penalties, and judicial action.
- ii. Have the master make copies of documents (bunker delivery note(s)/voyage plan<sup>2</sup>/log book page(s)/other relevant evidence presented), stamp (vessel seal if available), and sign for including in the MISLE activity.

#### **Fuel Oil Non-Availability:**

The expectation is that vessels arriving without compliant fuel oil (non-availability) will be purchasing compliant fuel oil at the first U.S. port of call where compliant fuel oil is available. The EPA’s Interim Guidance on the Non-Availability of Complaint F/O addresses this issue and is available at: <http://www.epa.gov/otaq/oceanvessels.htm> (Under Guidance and Publications). Page 8 of the EPA’s guidance states; “Once you have entered the North American ECA, in order to avoid further violations of Annex VI fuel oil requirements...” Vessels will not be compelled to purchase compliant fuel oil, however the responsible party is subject to penalties under APPS [33 U.S.C. 1908] for each violation. Each day of a continuing violation shall constitute a separate violation.

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<sup>2</sup> SOLAS Ch. V, Reg. 34.2.4 – voyage plan shall identify a route which: takes into account the marine environmental protection measures that apply, and avoids, as far as possible, actions and activities which could cause damage to the environment.

## **Deficiency codes associated with the PSC Form B:**

The following codes shall be used for documenting Annex VI deficiencies (CG-CVC-2 is currently working on updating the Form B deficiency codes):

### **PSC Form B - Deficiency Codes: MARPOL Annex VI**

**0160 – IAPP Certificate**  
**0161 – EIAPP Certificate**  
**0162 – Technical File**  
**0163 – Bunker Delivery Note**  
**2410 - Logbook**  
**2420 – Change-over Procedures**

**2430 - >1% m/m Sulfur Content**  
**2440 - >3.5% m/m Sulfur Content**  
**2450 – Equivalents Equipment**  
**2460 – Exemption Permit**  
**2470 – Notification**  
**2490 – Other**

**ECA Job Aid**  
**Section 2**  
**MARPOL ANNEX VI COMPLIANCE CHECK SHEET**  
(This check sheet is not required to be completed in its entirety)  
July 2012

**MARPOL Annex VI – General (All vessels)**

**☐ REVIEW INTERNATIONAL AIR POLLUTION PREVENTION (IAPP) CERTIFICATE**

- ONBOARD (VALID)
- SUPPLEMENT INCLUDES (SPOT CHECK):
  - DESCRIPTION OF OZONE DEPLETING SUBSTANCES CONTAINED IN SYSTEMS AND EQUIPMENT
  - DESCRIPTION OF DIESEL ENGINES > 130 KW (175 HP) AND INSTALLED OR CONVERTED AFTER 1/1/2000 THAT COMPLY WITH NO<sub>x</sub> EMISSION STANDARDS OR ARE FITTED WITH EXHAUST GAS CLEANING SYSTEM.
  - DESCRIPTION OF METHOD TO OPERATE IN AN EMISSION CONTROL AREAS (ECA) (SECTION 2.3/2.6)
    - VESSELS OPERATING UNDER AN EXCEPTION/EXEMPTION (REG. 3): ISSUED SEPARATE DOCUMENTATION BY THE ADMINISTRATION - PERMIT
  - DESCRIPTION OF INCINERATOR (COMPLIES WITH MEPC.76(40) AS AMENDED) Y / N
- VERIFY SHIP EQUIPMENT CORRESPONDS SUBSTANTIALLY WITH PARTICULARS LISTED ON IAPP (SPOT CHECK)

**☐ REVIEW ENGINE INT'L AIR POLLUTION PREVENTION (EIAPP) CERTIFICATE**

- ONE ONBOARD FOR EACH DIESEL ENGINE > 130 KW (175 HP) AND INSTALLED OR CONVERTED AFTER 1/1/2000
- SPOT CHECK SUPPLEMENT -
  - DATA ON DIESEL ENGINE COMPLIANCE

**☐ REVIEW EXHAUST CLEANING SYSTEMS DOCUMENTATION (IF FITTED)**

Resolution MEPC.184(59), Adopted on 17 July 2009: 2009 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS

- ONBOARD FOR EACH ENGINE

**☐ REVIEW TYPE APPROVAL CERTIFICATE FOR INCINERATOR**

- REQUIRED FOR INCINERATORS INSTALLED ON OR AFTER 1 JANUARY 2000
- COMPLIANT WITH MEPC.76(40) AND MEPC.93(45)

**☐ EXAMINE INCINERATOR (IF PRESENT)**

- SHIPBOARD GARBAGE PROPERLY DISPOSED
- EVIDENCE OF USE (CLINKERS)
- SAFETY OF BURNER ASSEMBLY
- ELECTRICAL CONTROLS
- MARPOL V PLACARD POSTED
- LITERS/HOUR
- VERIFY APPROVED BY USCG OR ADMINISTRATION
- NOTE THE USE AND QUANTITIES OF SLUDGE INCINERATION IN THE ORB
- QUESTION CREW ON HOW MUCH WASTE OIL/SLUDGE THE INCINERATOR BURNS. IF ALL WASTE OIL IS BURNED, VERIFY/ COMPARE THE CAPACITY OF INCINERATOR AGAINST SHIP'S DAILY PRODUCTION OF SLUDGE
- SPOT CHECK CONDITION & WITNESS OPERATION (IF OPERATING).

**☐ REVIEW BUNKER DELIVERY NOTES (SPOT CHECK)**

- PROVIDED FOR EACH FUEL DELIVERY
- MAINTAINED ONBOARD FOR AT LEAST THREE YEARS
- PROVIDE INFORMATION ON:
  - NAME AND IMO NUMBER OF SHIP
  - DATE OF COMMENCEMENT OF DELIVERY
  - NAME, ADDRESS, AND TELEPHONE NUMBER OF MARINE FUEL SUPPLIER
  - PRODUCT NAME(S)
  - QUANTITY (METRIC TONS)
  - DENSITY
  - SULFUR CONTENT (NOT TO EXCEED 3.5 M/M AND NOT TO EXCEED 1.0 M/M FOR ECA – NOTE EXHAUST CLEANING SYSTEMS MAY SUBSTITUTE FOR LOWER SULFUR CONTENT FUEL IN ECAs.
    - ECA - SULFUR CONTENT 1% M/M: Y / N (IF NO, OBTAIN A COPY OF THE BDN /HAVE MASTER CERTIFY THAT EACH COPY IS A TRUE COPY OF THE BDN – SEE REG. 18.7.1)

**☐ VERIFY FUEL SAMPLES ONBOARD (SPOT CHECK)**

- PROVIDED FOR EACH FUEL DELIVERY
- ASSOCIATED WITH A BUNKER DELIVERY NOTE
- KEPT ON BOARD FOR AT LEAST 12 MONTHS

**☐ VESSELS UTILIZING LOW SULFUR F/O FOR COMPLIANCE WITH THE ECA (REG. 14)**

- REVIEW LOGBOOK (AS PRESCRIBED BY THE ADMINISTRATION) FOR ENTRIES
  - VOLUME OF LOW SULFUR FUEL OIL IN EACH TANK RECORDED
  - DATE, TIME AND POSITION OF SHIP WHEN FUEL OIL CHANGEOVER OPERATION WAS COMPLETED
  - DID THE CHANGEOVER OCCUR PRIOR TO ENTRY (OR AFTER EXIT FROM) THE ECA
- SPOT CHECK WRITTEN PROCEDURES
  - DOES IT DESCRIBE HOW THE FUEL OIL CHANGE-OVER IS TO BE DONE
  - DOES IT DESCRIBE HOW MUCH TIME IS REQUIRED OR HOW LONG TO OPERATE THE EQUIPMENT TO ENSURE THE SYSTEM IS FULLY FLUSHED OF FUEL OILS EXCEEDING APPLICABLE SULFUR LIMITS
- DO THE CREWMEMBERS RESPONSIBLE FOR CONDUCTING THE CHANGE-OVER UNDERSTAND THE PROCESS AS WRITTEN

**☐ VESSELS UTILIZING EQUIVILANCE (REG. 4) FOR COMPLIANCE WITH THE ECA (REG.**

**14 - Resolution MEPC.184(59), Adopted on 17 July 2009: 2009 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS)**

- APPROVED METHOD (Supplement to the IAPP Certificate section 2.6) \
  - IF USING EQUIPMENT - OPERATIONAL Y / N
    - TYPE (e.g., scrubber): \_\_\_\_\_
  - COMPLIANCE METHOD APPROVED \_\_\_\_\_
  - OTHER PROCEDURES APPROVED FOR COMPLIANCE: \_\_\_\_\_
  - ALTERNATIVE FUEL OILS – Y / N
    - TYPE OF ALTERNATIVE FUEL OIL \_\_\_\_\_
    - IS THIS ACCOMPLISHED BY BLENDING ONBOARD Y / N
      - IS THERE EQUIPMENT INSTALLED TO PERFORM THE BLENDING
      - ARE THERE PROCEDURES FOR BLENDING
      - IS TESTING REQUIRED (SULFUR) BY THE CREW TO ENSURE COMPLIANCE Y / N

**☐ VESSELS ISSUED AN EXEMPTION/EXCEPTION (REG. 3) FROM COMPLYING WITH REG. 14 (ECA): TO CONDUCT TRIALS FOR SHIP EMISSION REDUCTION AND CONTROL TECHNOLOGY RESEARCH**

- HAS FLAG ADMINISTRATION ISSUED DOCUMENTATION APPROVING THE EXEMPTION/EXCEPTION Y / N
- ISSUED DATE: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_
- OBTAIN A COPY OF THE ISSUED DOCUMENT (See Section (1) of the ECA Job Aid for further details)

## **MARPOL Annex VI – DOMESTIC / EXPANDED EXAM:**

Items reviewed during the scope of a Domestic Inspection or when conducting a PSC Expanded Exam

### **☐ REVIEW TECHNICAL FILE FOR EACH DIESEL ENGINE**

- ONBOARD FOR EACH ENGINE
- COMPLIES WITH PARA 2.3.6 OF NO<sub>x</sub> TECHNICAL CODE (SPOT CHECK)

### **☐ REVIEW RECORD BOOK OF DIESEL ENGINE PARAMETERS (SPOT CHECK)**

- ONBOARD FOR EACH ENGINE COMPLIES WITH PARA 6.2.3.3 OF NO<sub>x</sub> TECHNICAL CODE

### **☐ REVIEW REPORTS OF NON-COMPLIANCE FOR MARPOL ANNEX VI FUEL DELIVERY**

- PROVIDED FOR EACH FUEL DELIVERY TO ADMINISTRATION IF FUEL DOES NOT COMPLY WITH ANNEX VI REQUIREMENTS
- REVIEW RECORDS REGARDING SUCH REPORTS (IF ON HAND)

### **☐ REVIEW EVIDENCE/RECORDS:**

- IF DEFICIENCIES PERTAINING TO MARPOL ANNEX VI ECA ARE IDENTIFIED
  - OBTAIN COPIES OF THE RELEVANT DOCUMENTS (IAPP, BUNKER DELIVERY NOTES, VOYAGE PLAN, CHANGE-OVER PROCEDURES, LOGS, ETC...)
  - REQUEST THE MASTER TO STAMPED/SIGN AS APPROPRIATE (Inform the Master they are only certifying that each copy is a true copy)
- OTHER ANNEX VI DEFICIENCIES IDENTIFIED
  - OBTAIN COPIES OF RELEVANT DOCUMENTS/EVIDENCE PRESENTED BY THE MASTER/CREW
  - REQUEST THE MASTER TO STAMPED/SIGN AS APPROPRIATE (Inform the Master they are only certifying that each copy is a true copy)

## **DOCUMENTATION:**

### **☐ ECA RELATED DEFICIENCIES IDENTIFIED:**

- MASTER INFORMED THAT DEFICIENCIES IDENTIFIED WILL BE REFERRED TO THE EPA FOR POSSIBLE ENFORCEMENT ACTION
- MISLE ACTIVITY CASE WORK COMPLETED IN ACCORDANCE WITH POLICY LTR CG-CVC 12-02
  - DEFICIENCY DOCUMENTED I.A.W. TIME FRAME
  - SCANNED INTO MISLE UNDER THE ACTIVITY'S DOCUMENT TAB
    - (1) DOCUMENTS OBTAINED FROM THE INSPECTION/EXAMINATION ARE LOADED AS ONE FILE AND NAMED ACCORDINGLY: E.G., AnnexVI-ECA-DDMMYY.PDF (e.g., AnnexVI-ECA-01AUG12.pdf)
- FOR VESSELS OPERATING WITH AN EXCEPTION/EXEMPTION – E-MAIL SENT TO [cgCVC@uscg.mil](mailto:cgCVC@uscg.mil) (see Section (1) of the ECA Job Aid for details) Y / N / N/A

ECA Deficiency Matrix  
Section 3  
Aug 2012

Observation	Code	Description	Cite	Code/Action Taken
<p><b>VESSELS UTILIZING LOW SULFUR F/O TO COMPLY WITH REG. 14</b></p> <p><b>Vessel did not have compliant fuel oil onboard for operating in the ECA; the F/O utilized was &gt;1% sulfur.</b> The master provided the proper documentation that efforts <b>were</b> made to procure compliant fuel oil and that the appropriate notifications to the United States (EPA non-availability report) and the vessel's flag administration <b>were</b> made prior to entering the North American ECA IAW Annex VI Regulation 18;</p>		<p><b>Foreign Vessel:</b></p> <p>While ships are operating within an emission control area (ECA), the sulfur content used on board ships shall not exceed 1%. The PSCO discovered that the vessel has been operating within the (Designate ECA – North American ECA) from DD/MM/YY to DD/MM/YY<sup>1</sup> utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p> <p><b>U.S. Domestic Vessel:</b></p> <p>The MI discovered that the vessel has been operating within the (Designate ECA – North American ECA) from DD/MM/YY to DD/MM/Y utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p>	<p>MARPOL Annex VI, Reg 14.4</p> <p>40 CFR 1043.60</p>	<p><b>Foreign vessel - Issue a Code 17. U.S. Vessel – Prior to departure</b></p> <p><b>Clear the Deficiency:</b></p> <ul style="list-style-type: none"> <li>Review records of actions taken and evidence submitted to Admin/EPA</li> <li>If the vessel has received compliant fuel oil prior to or during USCG exam, obtain a copy of the BDN – amend with Code 10/U.S. Vsl Clear; or</li> <li>Request a corrective action plan signed by the master stating that compliant fuel oil is: <ul style="list-style-type: none"> <li>scheduled to be received prior to departure - Upon receipt of a corrective action plan and copy of receipt &amp; BDN clear the deficiency – code 10/U.S. Vsl Clear;</li> <li>At the next U.S. port (request a copy of the receipt &amp; BDN be sent to the issuing unit); amend with a Code 15; clear the Code 15 when receipt/BDN received – Code 10/ U.S. Vsl Clear;</li> <li>Not scheduled for purchase, nor does the owner/operator intend to purchase compliant fuel oil – Code 50/ U.S. Vsl 30 days <ul style="list-style-type: none"> <li>If the latter two are chosen, inform the master that the Owner/operator is subject to a separate MARPOL Annex VI violation for each day of operation not in compliance with Annex VI. All ECA related deficiencies are referred to the EPA. The EPA may take enforcement action to include administrative penalties, and judicial action.</li> </ul> </li> </ul> </li> </ul>

<sup>1</sup> MI/PSCO's may need to review the bridge log or other relevant documents for determining entry and time in the ECA.

### ECA Deficiency Matrix Continued:

Observation	Code	Description	Cite	Code/Action Taken
<p><b>VESSELS UTILIZING LOW SULFUR F/O TO COMPLY WITH REG. 14 (Continued):</b></p> <p><b>Vessel did not have compliant fuel oil onboard for operating in the ECA; the F/O utilized was &gt;1% sulfur:</b> The master <b>could</b> provide the proper documentation that efforts were made to procure compliant fuel oil but that notifications to the United States and the vessel's flag administration were <b>not</b> made prior to entering the North American ECA IAW Annex VI Regulation 18.</p>		<p><b>Foreign Vessel:</b></p> <p>While ships are operating within an emission control area (ECA), the sulfur content used on board ships shall not exceed 1%. The PSCO discovered that the vessel has been operating within the (Designate ECA – North American ECA) from DD/MM/YY to DD/MM/YY<sup>2</sup> utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p> <p><b>U.S. Domestic Vessel:</b></p> <p>The MI discovered that the vessel has been operating within the (Designate ECA – North American ECA) from DD/MM/YY to DD/MM/Y utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p>	<p>MARPOL Annex VI, Reg 14.4</p> <p>40 CFR 1043.60</p>	<p><b>Foreign vessel - Issue a Code 17. U.S. Vessel – Prior to departure Clear the Deficiency:</b></p> <ul style="list-style-type: none"> <li>Request the master/operator provide notification to the Administration;</li> <li>Request the master/operator of the vessel to submit a Non-Availability Report to the EPA;</li> <li>Review records of actions taken and evidence for submittal to Admin/EPA</li> <li>If the vessel has received compliant fuel oil prior to or during USCG exam, obtain a copy of the BDN – amend with Code 10/U.S. Vsl Clear; or</li> <li>Request a corrective action plan signed by the master stating that compliant fuel oil is: <ul style="list-style-type: none"> <li>scheduled to be received prior to departure - Upon receipt of a corrective action plan and copy of receipt &amp; BDN clear the deficiency – code 10/ U.S. Vsl Clear;</li> <li>At the next U.S. port (request a copy of the receipt &amp; BDN be sent to the issuing unit); amend with a Code 15; clear the Code 15 when receipt/BDN received – Code 10/ U.S. Vsl Clear;</li> <li>Not scheduled for purchase, nor does the owner/operator intend to purchase compliant fuel oil – Code 50/ U.S. Vsl 30 days <ul style="list-style-type: none"> <li>If the latter two are chosen, inform the master that the Owner/operator is subject to a separate MARPOL Annex VI violation for each day of operation not in compliance with Annex VI. All ECA related deficiencies are referred to the EPA. The EPA may take enforcement action to include administrative penalties, and judicial action.</li> </ul> </li> </ul> </li> </ul>

<sup>2</sup> MI/PSCO's may need to review the bridge log or other relevant documents for determining entry and time in the ECA.

### ECA Deficiency Matrix Continued:

Observation	Code	Description	Cite	Code/Action Taken
<p><b>VESSELS UTILIZING LOW SULFUR F/O TO COMPLY WITH REG. 14 (Continued):</b></p> <p><b>Vessel did not have compliant fuel oil onboard for operating in the ECA; the F/O utilized was &gt;1% sulfur:</b> The master could <b>not</b> provide the proper documentation that efforts were made to procure compliant fuel oil and that notifications to the United States and the vessel's flag administration were <b>not</b> made prior to entering the North American ECA IAW Annex VI Regulation 18.</p>		<p><b>Foreign Vessel:</b></p> <p>While ships are operating within an emission control area (ECA), the sulfur content used on board ships shall not exceed 1%. The PSCO discovered that the vessel has been operating within the (Designate ECA – North American ECA) from DD/MM/YY to DD/MM/YY<sup>3</sup> utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p> <p><b>U.S. Domestic Vessel:</b></p> <p>The MI discovered that the vessel has been operating within the (Designate ECA – North American ECA) from DD/MM/YY to DD/MM/Y utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p>	<p>MARPOL Annex VI, Reg 14.4</p> <p>40 CFR 1043.60</p>	<p><b>Foreign vessel - <span style="color: red;">Detain</span><sup>4</sup> Code 30. U.S. Vessel – Prior to Departure Clear the Deficiency:</b></p> <ul style="list-style-type: none"> <li>Request the master/operator provide notification to the Administration;</li> <li>Request the master/operator of the vessel to submit a Non-Availability Report to the EPA;</li> <li>Review records of actions taken and evidence for submittal to Admin/EPA</li> <li>If the vessel has received compliant fuel oil prior to or during USCG exam, obtain a copy of the BDN – amend with Code 10/ U.S. Vsl Clear; or</li> <li>Request a corrective action plan signed by the master stating that compliant fuel oil is: <ul style="list-style-type: none"> <li>scheduled to be received prior to departure - Upon receipt of a corrective action plan and copy of receipt &amp; BDN clear the deficiency – code 10/U.S. Vsl Clear;</li> <li>At the next U.S. port (request a copy of the receipt &amp; BDN be sent to the issuing unit); amend with a Code 15; clear the Code 15 when receipt/BDN received – Code 10/ U.S. Vsl Clear;</li> <li>Not scheduled for purchase, nor does the owner/operator intend to purchase compliant fuel oil – Code 50/ U.S. Vsl 30 days <ul style="list-style-type: none"> <li>If the latter two are chosen, inform the master that the Owner/operator is subject to a separate MARPOL Annex VI violation for each day of operation not in compliance with Annex VI. All ECA related deficiencies are referred to the EPA. The EPA may take enforcement action to include administrative penalties, and judicial action.</li> </ul> </li> </ul> </li> </ul>

<sup>3</sup> MI/PSCO's may need to review the bridge log or other relevant documents for determining entry and time in the ECA.

<sup>4</sup> To be effective, it is important that the Coast Guard's application of the targeting regime remains consistent. In addition to focusing USCG resources, the *PSC Safety and Environmental Protection Compliance Targeting Matrix* serves to place the onus for maintaining vessels to accepted standards on those entities most responsible, including ship management, Recognized Organizations, and flag States. Linking targeting decisions to the performance records of the ship, the ship's management, Recognized Organizations and flag State helps ensure accountability.

**ECA Deficiency Matrix (continued)**

Observation	Code	Description	Cite	Corrective Action
<p><b>LOGBOOK (minor discrepancies):</b></p> <p>Crew did not properly document in the logbook (as prescribed by the Administration for recording ECA items); the volume of low sulfur fuel oils in each tank; or date &amp; time; or the position of ship when fuel oil changeover operation was completed (prior to entry or after exit from the ECA).</p>		<p><b>Foreign Vessel:</b></p> <p>Ships utilizing separate fuel oils to comply with the (Designate ECA – North American ECA) sulfur content shall record the required change-over operations in the logbook as prescribed by the Administration. While operating in the North American ECA, the vessel’s master/crew did not properly document (the volume of low sulfur fuel oils in each tank and/or date, time and position of ship when fuel oil changeover operation is completed prior to entry or after exit from the ECA) in the XXXX (e.g., oil record book, bridge log, engine room log, Annex VI logbook, etc...) which is the required logbook designated by the Administration.</p> <p><b>U.S. Domestic Vessel:</b></p> <p>While operating in the North American ECA, the vessel’s master/crew did not properly document (the volume of low sulfur fuel oils in each tank and/or date, time and position of ship when fuel oil changeover operation is completed prior to entry or after exit from the ECA) in the XXXX (e.g., oil record book, bridge log, engine room log, Annex VI logbook, etc...) which is the required logbook designated by the Coast Guard.</p>	<p>MARPOL Annex VI, Reg 14.6</p>	<p><b>Foreign vessel - Issue a Code 17. U.S. Vessel – Prior to departure Clear the Deficiency:</b></p> <p>Advise the Master that the discrepancy regarding the logbook entry must be corrected prior to the departure and that the entries entered must reflect the events as they actually occurred.</p>

### ECA Deficiency Matrix (continued)

Observation	Code	Description	Cite	Corrective Action
<p><b>LOGBOOK (major discrepancies):</b></p> <p>Entries in the logbook as recorded by the crew indicate that the change-over procedures for switching from 3.5% to 1.00% sulfur content occurred prior the ECA; Or, after exiting the ECA. However, the MI/PSCO has discovered/determined that the change-over occurred after entering or before exiting the ECA (how determined - reviewing of multiple logs showing inconsistencies or due to a report received) which conflict with the change-over operations as recorded in the (what is the title of the logbook) as prescribed by the Administration</p>		<p><b>Foreign Vessel:</b></p> <p>Ships utilizing separate fuel oils to comply with the (Designate ECA – North American ECA) sulfur content shall record the change-over operations in the logbook prescribed by the Administration. During review of the xxxx (e.g., oil record book, bridge log, engine room log, Annex VI logbook, etc...) designated by the Administration for recording fuel oil change-over operations, the PSCO noted inconsistencies regarding the XXXX (volume of low sulfur fuel oils in each tank; date; time; position of ship) recorded when the fuel oil changeover operation was completed. This/these inconsistencies as recorded conflict with the (bridge log, crew statements, etc..) which indicate the completion of the fuel oil change-over occurred after entering (or before departing) the (Designate ECA – North American ECA). The PSCO questions the authenticity of the (name the log book) as presented and the crew's compliance with MARPOL Annex VI regarding the prevention of pollution by emissions.</p>	<p>MARPOL Annex VI, Reg 14.6</p> <p>33 U.S.C. 1907</p>	<p><b>Foreign vessel - <span style="color: red;">Detain<sup>5</sup></span> Code 30.</b></p> <p><b>Units shall refer to CG-CVC Policy Letter 12-02 section 9.c regarding the detection of violations; evidence of Criminal Liability onboard a vessel. Early engagement with HQ via the chain of command will help facilitate the inspection/exam and investigation process.</b></p>

<sup>5</sup> To be effective, it is important that the Coast Guard's application of the targeting regime remains consistent. In addition to focusing USCG resources, the *PSC Safety and Environmental Protection Compliance Targeting Matrix* serves to place the onus for maintaining vessels to accepted standards on those entities most responsible, including ship management, Recognized Organizations, and flag States. Linking targeting decisions to the performance records of the ship, the ship's management, Recognized Organizations and flag State helps ensure accountability.

### ECA Deficiency Matrix (continued)

Observation	Code	Description	Cite	Corrective Action
<p><b>LOGBOOK (major discrepancies continued):</b></p> <p>Entries in the logbook as recorded by the crew indicate that the change-over procedures for switching from 3.5% to 1.00% sulfur content occurred prior the ECA; Or, after exiting the ECA. However, the MI/PSCO has discovered/determined that the change-over occurred after entering or before exiting the ECA (how determined - reviewing of multiple logs showing inconsistencies or due to a report received) which conflict with the change-over operations as recorded in the (what is the title of the logbook) as prescribed by the Administration</p>		<p><b>U.S. Domestic Vessel:</b></p> <p>During review of the xxxx (e.g., oil record book, bridge log, engine room log, Annex VI logbook, etc...) recording the fuel oil change-over operations, the Inspector noted inconsistencies regarding the XXXX (volume of low sulfur fuel oils in each tank; date; time; position of ship) recorded when the fuel oil changeover operation was completed. This/these inconsistencies as recorded conflict with the (bridge log, crew statements, etc..) which indicate the completion of the fuel oil change-over occurred after entering (or before departing) the (Designate ECA – North American ECA). The Coast Guard questions the authenticity of the (name the log book) as presented and the crew's compliance with MARPOL Annex VI regarding the prevention of pollution by emissions.</p>	<p>MARPOL Annex VI, Reg 14.6</p> <p>33 U.S.C. 1907</p>	<p style="text-align: center;"><b>U.S. Vessel – No Sail 835</b></p> <p><b>Units shall refer to CG-CVC Policy Letter 12-02 section 9.c regarding the detection of violations; evidence of Criminal Liability onboard a vessel. Early engagement with HQ via the chain of command will help facilitate the inspection/exam and investigation process.</b></p>

\*This matrix is not an all inclusive list of deficiencies regarding Annex VI. Other related deficiencies may include: Equivalence, Exceptions, Failure to Complete Fuel Oil Change-Over Procedures, Written Procedures for fuel oil change-over missing/incomplete to affectively perform task, etc...

**SPECIAL NOTE EXAMPLE:**

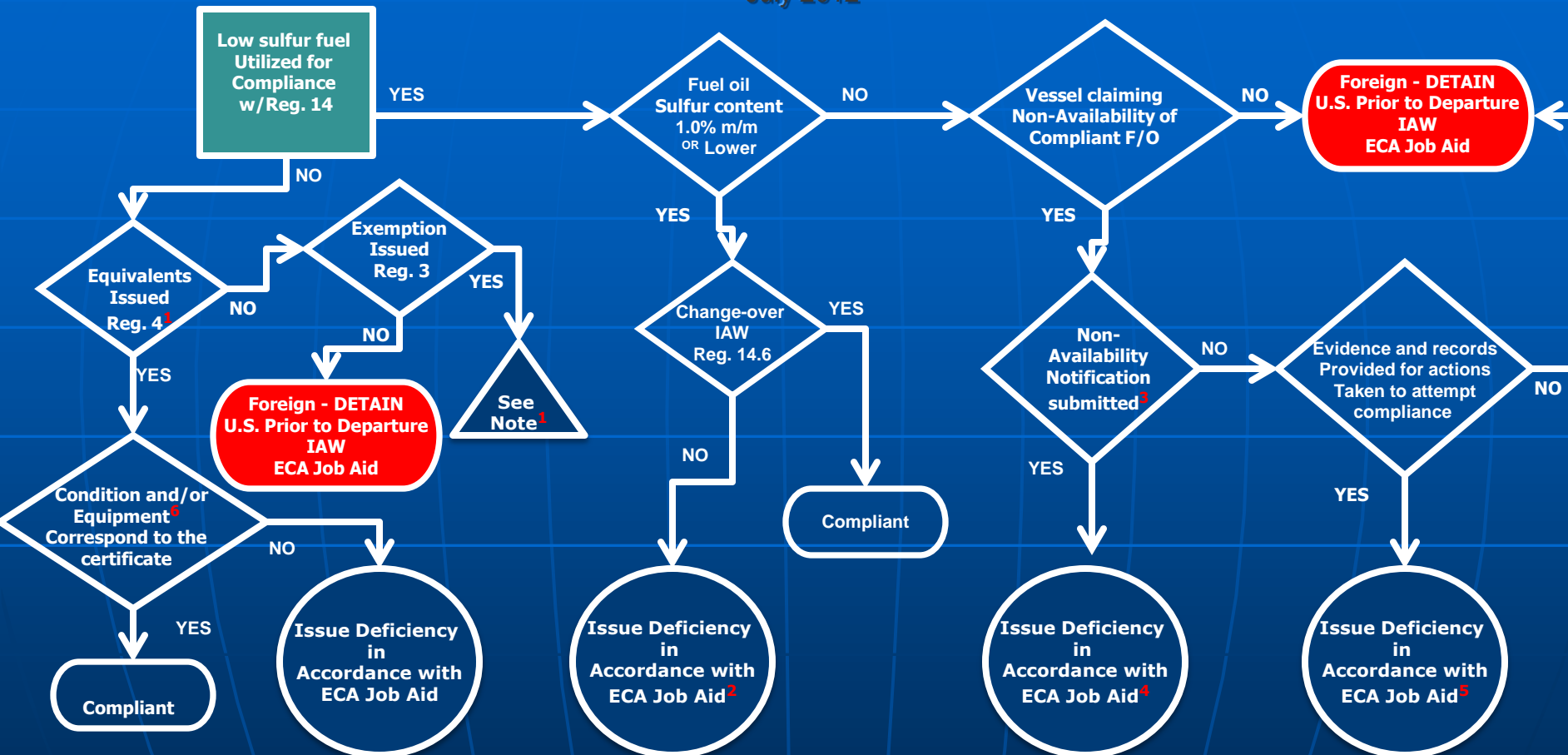
SPECIAL NOTE FOR non-availability report received (5.a.i.(2))				DDMMYY (e.g., 01Aug12) (Unit name – Sector New Orleans) received a report from the (master, agent, etc) notifying the US that the vessel was not able to receive 1.00% ECA compliant fuel oil. The reporting source was provided with EPA’s web link and advised to submit a fuel oil non-availability report to the EPA and that submittal and or receipt of this notification does not serve as a waiver or exemption from the requirements of Annex VI Regulation 14.

# ECA Job Aid

## Section 4

### ECA Compliance Flow Chart

July 2012



<sup>1</sup> Exemptions permitted by the Flag State may not be reflected on the IAPP Cert (separate Permit). Equivalents allowed by Flag States will be reflected in section 2.6 of the IAPP Certificate (Supplement); See CG-CVC Policy Letter paragraph 5.b. & 5.c. regarding Exemptions & Equivalents.

<sup>2</sup> If the vessel utilized a higher sulfur content fuel oil inside the ECA a MARPOL and APPS violation has occurred – Refer to the ECA Job Aid for deficiency.

<sup>3</sup> See CVC Policy section 5.a.iii. referencing EPA's Interim Guidance on the Non-Availability of Compliant Fuel Oil for the North American ECA dated June 26, 2012

<sup>4</sup> Vessels providing notification to the flag State and Competent Authority (EPA) do not receive a waiver from being in violation of the ECA. A Party shall take into account all relevant circumstances and the evidence presented to determine the appropriate action to take, including not taking control measures – Refer to the ECA Job Aid for deficiency.

<sup>5</sup> MARPOL Annex VI, Reg 18.2.1: A vessel may present a record of actions taken & provide evidence to attempt to achieve compliance. Such records/evidence/actions do not exempt a vessel from the requirements or grant a waiver for the violation. Refer to the ECA Job Aid for deficiency.

<sup>6</sup> See CVC Policy Letter paragraph 5.d. regarding equipment covered by Annex VI which has experienced a casualty or failure.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUN 26 2012

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

**MEMORANDUM**

**SUBJECT:** Interim Guidance on the Non-Availability of Compliant Fuel Oil for the North American Emission Control Area

**FROM:** Phillip A. Brooks, Director *PAB*  
Air Enforcement Division

**TO:** OECA Mobile Source Enforcement Personnel, U.S. EPA  
Captain Paul Thomas, Director, Inspections & Compliance (COMDT CG-5PC) U.S. Coast Guard  
Captain Kyle McAvoy, Chief, Commercial Vessel Compliance (COMDT CG-CVC) U.S. Coast Guard

Attached is interim guidance addressing how the U.S. government will implement fuel oil availability provisions for ship owners and operators unable to obtain fuel oil that meets the fuel oil sulfur standards applicable to ships operating in waters off of the coast of North America.

The guidance provides background information on the North American Emission Control Area fuel oil sulfur standards, explains how owners and operators of vessels can establish compliance with these requirements, and describes how an owner or operator of a vessel who cannot obtain compliant fuel oil can make a fuel oil non-availability claim.

The guidance will be posted on the Office of Enforcement and Compliance Assurance website at:  
<http://www.epa.gov/compliance/civil/caa/caaenfprog.html>.

If you have any questions about this guidance, please contact Meetu Kaul (202-564-5472) in the Air Enforcement Division.

cc: Margo Oge, Director, Office of Transportation and Air Quality, U.S. EPA



## **Interim Guidance on the Non-Availability of Compliant Fuel Oil for the North American Emission Control Area**

**June 26, 2012**

*Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL) has been in effect in the United States since January 8, 2009. MARPOL Annex VI is implemented in the United States through the Act to Prevent Pollution from Ships (APPS). Under the authority of APPS, the U.S. Environmental Protection Agency (the EPA), in consultation with the United States Coast Guard, has promulgated regulations which incorporate by reference the full text of MARPOL Annex VI. See 40 C.F.R. § 1043.100(a)(1).*

*Compliance with the MARPOL Annex VI air emission standards, including the fuel oil sulfur standards, will significantly reduce emissions from foreign and domestic vessels that affect U.S. air quality and impact human health. The Annex VI standards, in conjunction with the U.S. Clean Air Act standards applicable to U.S. ships, are expected to reduce the annual emissions of nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and particulate matter (PM) by 1.2 million, 1.3 million, and 143,000 tons, respectively, by 2030. Annually, these reductions are estimated to prevent between 12,000 and 30,000 PM-related premature deaths, between 210 and 920 ozone-related premature deaths, 1,400,000 work days lost, and 9,600,000 minor restricted-activity days.*

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### **Why is the United States government issuing this guidance?**

Under Annex VI, the North American Emission Control Area (North American ECA) will become enforceable on August 1, 2012. Beginning on that day, the sulfur content of the fuel oil used onboard ships operating in this area may not exceed 1.00% m/m (10,000 ppm). Compliant fuel oil is expected to be available from fuel oil suppliers that serve vessels that will operate in the North American ECA. However, if a ship owner or operator is unable to obtain compliant fuel oil, this document clarifies how the United States government will implement the fuel oil availability provisions contained in Regulation 18 to Annex VI, as incorporated by reference in 40 C.F.R. § 1043.100(a)(1). *This guidance is based on information available to the United States government as of June, 2012. This guidance may be superseded at any time.*

### **What are the geographic boundaries of the North American ECA?**

The specific geographic coordinates that comprise the North American ECA are listed in the Marine Environment Protection Committee Resolution MEPC.190(60). *Available at*

### **What are the MARPOL Annex VI fuel oil sulfur standards?**

The MARPOL Annex VI fuel oil sulfur standards are set out in Annex VI Regulation 14 and 40 C.F.R. § 1043.60(b). The maximum sulfur content of fuel oil used in the North American ECA, which becomes enforceable on August 1, 2012, will be limited as follows:

1.00% m/m (10,000 ppm ) from August 1, 2012 to December 31, 2014  
0.10% m/m (1,000 ppm) on and after January 1, 2015.

### **Which vessels are required to comply with the Annex VI ECA fuel oil sulfur standard while operating in the North American ECA?**

With limited exceptions, including for certain “public vessels” (as defined in 40 C.F.R. § 1043.20), all vessels that operate in the North American ECA are required to be in compliance with the Annex VI ECA fuel oil sulfur standard. Note, most vessels under 400 gross tonnage are likely already in compliance with the standard as the majority of these vessels operate using solely distillate fuel oil that meets the Annex VI ECA fuel oil sulfur limit.

### **How do I comply with the Annex VI ECA fuel oil sulfur standards while operating in the North American ECA?**

You are required to either use Annex VI ECA compliant fuel oil when operating within the designated North American ECA, or to install and use an equivalent method as approved and allowed under MARPOL Annex VI Regulation 4, and 40 C.F.R. § 1043.55 (e.g., exhaust gas cleaning device).

### **How do I demonstrate that the fuel oil used on my ship complies with the Annex VI ECA fuel oil sulfur standard while operating in the North American ECA?**

You are required to maintain and, if requested, make available to the United States government, the following:

- Bunker delivery notes, for vessels 400 gross tonnage and above. *See* Annex VI Regulation 18.5 and 40 C.F.R. §§ 1043.70, 1043.100. While bunker delivery notes are not required for ships less than 400 gross tonnage, owners and operators of such ships may maintain appropriate fuel oil records that document the sulfur content of fuel oil used onboard to demonstrate compliance with the requirements;
- Representative fuel oil samples, taken at the time of fuel oil delivery. *See* Annex VI Regulation 18.8.1 and 40 C.F.R. §§ 1043.70, 1043.100;
- Written fuel oil changeover procedures, which show how and when the fuel oil changeover is to be done to ensure that only compliant fuel oil is burned within a designated ECA. *See* Annex VI Regulation 14.6 and 40 C.F.R. §§ 1043.70, 1043.100); and

- The fuel oil changeover logbook that contains the volume of compliant fuel oil in each tank as well as the date, time, and position of the ship when any fuel oil changeover operation is completed prior to entry into or commenced after exit of a designated ECA. *See* Annex VI Regulation 14.6 and 40 C.F.R. §§ 1043.70, 1043.100.

These records may be inspected to determine if the fuel oil used onboard the ship while operating in the North American ECA meets the MARPOL Annex VI sulfur standard. In addition, the United States government may also verify compliance by any methods available to it including, but not limited to, sampling and analyzing fuel oil from a ship's fuel oil tanks and lines, and sampling and analyzing air emissions from a ship's plume.

The United States government may also require additional information on a case by case basis.

The United States government may also use any credible evidence to determine compliance.

**If compliant fuel oil meeting the 1.00% m/m (10,000 ppm) sulfur standard is not available when I purchase fuel oil, what should I do?**

First, and most importantly, fuel oil that complies with the 1.00% m/m (10,000 ppm) sulfur standard is expected to be available for ships that plan to operate in the North American ECA just as it has been available for ships operating in the North Sea and Baltic Sulfur Emission Control Areas since July 2010. The law requires that you use compliant fuel oil or equivalent methods when operating within the North American ECA. MARPOL Annex VI Regulation 18, as incorporated by reference in 40 C.F.R. § 1043.100, anticipates the possibility that despite your best efforts to obtain compliant fuel oil, you may be unable to do so, and the United States has the authority to take into account all relevant circumstances to determine the appropriate action to take, including not taking control measures. *Id.*

Best efforts to procure compliant fuel oil include, but are not limited to, investigating alternate sources of fuel oil prior to commencing your voyage or in route prior to entering the North American ECA. If, despite your best efforts, you are unable to procure compliant fuel oil prior to entering the North American ECA, you must notify the United States and your flag Administration. *See* Annex VI Regulation 18.2.4, as incorporated by reference in 40 C.F.R. 1043.100(a)(1).

In addition, if you want the United States government to consider your efforts in determining what action the government may take, you should provide the following information in the form of a Fuel Oil Non-Availability Report, as described below, that details your efforts to obtain compliant fuel oil. *In order to minimize disruptions to commerce and avoid delays, you should submit this Fuel Oil Non-Availability Report as soon as you determine, or become aware, that you will be unable to procure and use compliant fuel oil in the North American ECA, but no later than 96 hours prior to entering the North American ECA.*

The United States government will consider this information when it determines what action, if any, it will take when the ship enters the North American ECA using noncompliant fuel oil.

**Does making a best effort mean that I am required to deviate from my intended voyage to purchase compliant fuel oil for use in the North American ECA?**

You must consider the availability of compliant fuel oil when planning your voyage and, if compliant fuel oil is not available where planned, you must attempt to locate alternative sources for such fuel oil. *See* Regulation 18.2.1.2 as incorporated by reference in 40 C.F.R. § 1043.100. Furthermore, you must attempt to obtain ECA-compliant fuel oil at each port on your intended voyage. The United States government expects a vessel operator to make any adjustments that can be made to fuel oil purchase protocols that would allow the purchase of compliant fuel oil prior to entering the North American ECA. However, you are not required to deviate from your intended voyage in order to purchase compliant fuel oil. *See* Regulation 18.2.2 as incorporated by reference in 40 C.F.R. § 1043.100.

Furthermore, the United States government does not consider having to change berth or anchor within a port in order to receive compliant fuel oil to be a deviation. The United States government expects a vessel operator to account for these logistical conditions and/or terminal/port policies when planning bunker delivery during a port call.

Additionally, once you have entered the North American ECA, the United States government expects that you will take on compliant fuel oil, if available, from a U.S. port-of-call prior to further transit in the North American ECA.

**If marine distillate fuel is available where I bunker, does making a best effort mean I am required to use this fuel?**

The EPA has clarified that while we expect distillate fuels of various grades to be used as blending agents to produce 1.00% m/m (10,000 ppm) sulfur fuel oil, we do not expect vessels to use a fuel oil with viscosity less than 11 centistokes in order to meet the 1.00% m/m (10,000 ppm) fuel sulfur standard. *See* <http://www.epa.gov/otaq/oceanvessels.htm> then select *Guidance and Publications*. Therefore, consistent with this clarification, prior to January 1, 2015, when the 0.10% m/m (1,000 ppm) sulfur standard begins, we will not give consideration to the availability of distillate fuel oil, other than as a blending agent, when we evaluate the circumstances described in a submitted Fuel Oil Non-Availability Report. Rather, we will only consider the availability of residual and residual fuel oil blends in determining what action, if any, to take.

**If I am unable to purchase 1.00% m/m (10,000 ppm) compliant fuel oil, but through my best efforts I purchase the cleanest fuel oil possible, will any consideration be given to my efforts?**

In evaluating the circumstances described in a submitted Fuel Oil Non-Availability Report, the United States government will give consideration to actions taken to minimize the amount of excess emissions such as purchase of the next cleanest fuel oil possible.

The United States government does not consider the cost of compliant fuel oil to be a valid basis for claiming you were unable to purchase 1.00% m/m (10,000 ppm) fuel oil. Nor is the cost of compliant fuel oil a valid basis for claiming that such fuel oil was not available.

**In evaluating my efforts to purchase residual fuel oil blends meeting the 1.00% m/m (10,000 ppm) fuel oil sulfur standard, will consideration be given to the unique operating requirements of my vessel?**

Yes. However, the United States government expects that you have taken, and will continue to take, actions necessary to enable your ship to burn most commercially available residual fuel oil blends. If you have taken such actions, then, if you limit your search for the lowest sulfur marine residual fuel oil (HFO or IFO) to those fuel oils that meet the operating requirements of your engines, for example with respect to viscosity or other fuel oil parameters, we will consider an explanation of these operating requirements as detailed in the Fuel Oil Non-Availability Report described below. If you have submitted a Fuel Oil Non-Availability Report for a ship that identifies such operational constraints, you must also specify steps you have taken, or are taking, to resolve these operational constraints that will allow you to use all commercially available residual fuel oil blends. The United States government will take into account progress made toward resolving these technical difficulties when determining the action it will take.

The United States government also expects that vessel operators are vigorously preparing for the 0.10% m/m (1,000 ppm) MARPOL Annex VI ECA fuel oil sulfur standard that will become effective January 1, 2015, and that will likely necessitate the use of distillate fuel oil. We expect that vessel operators will be prepared to operate their vessels using fuel oil that meets the 0.10% m/m (1,000 ppm) sulfur standard as soon as that standard takes effect.

**What should my Fuel Oil Non-Availability Report contain?**

MARPOL Annex VI Regulation 18.2, as incorporated by reference in 40 C.F.R. § 1043.100, provides that a vessel not in compliance with the fuel oil sulfur standards will “(1) present a record of the actions taken to attempt to achieve compliance; and (2) provide evidence that it attempted to purchase compliant fuel oil in accordance with its voyage plan and, if it was not made available where planned, that attempts were made to locate alternative sources for such fuel oil and that despite best efforts to obtain compliant fuel oil, no such fuel oil was made available for purchase.”

Consistent with these requirements, the following information should be included in the Fuel Oil Non-Availability Report:

- The vessel’s name, flag, and IMO identification number or other relevant registration number;
- A copy (or description) of the ship’s voyage plan in place at the time of entry into the North American ECA, including the vessel’s port of origin and port of destination, and the name of the first U.S. port of arrival;

- When the vessel first received notice it would be conducting a voyage involving transit in the North American ECA, and the vessel's location when it first received such notice;
- The date and time the ship operator expects to enter and exit the North American ECA, as well as the projected days on which the ship's main propulsion engines will be in operation;
- The sulfur content of the fuel oil that will be used when entering and operating in the North American ECA;
- A description of the actions taken to attempt to achieve compliance prior to entering the North American ECA, including a description of all attempts that were made to locate alternative sources of compliant fuel oil, and a description of the reason why compliant fuel oil was not available (e.g., compliant fuel oil was not available at ports on "intended voyage;" fuel oil supply disruptions at port; etc. As mentioned above, the United States government does not consider the cost of compliant fuel oil to be a valid basis for claiming the non-availability of compliant fuel oil). Include names and addresses of the fuel oil suppliers contacted and the dates on which the contact was made;
- In cases of fuel oil supply disruption, the name of the port at which the vessel was scheduled to receive compliant fuel oil and the name of the fuel oil supplier that is now reporting the non-availability of compliant fuel oil;
- If applicable, identify and describe any operational constraints that prevented you from using available compliant fuel oil, for example with respect to viscosity or other fuel oil parameters. Specify steps you have taken, or are taking, to resolve these operational constraints that will allow you to use all commercially available residual fuel oil blends;
- The availability of compliant fuel oil at the first port-of-call in the United States, and your plans to obtain that fuel oil;
- If compliant fuel oil is not available at the first port-of-call in the United States, the lowest sulfur content of available fuel oil, or the lowest sulfur content of available fuel oil at the next port-of-call in the United States;
- If the vessel has operated in the North American ECA in the prior 12 months, provide the names of all U.S. ports visited, the dates of the port calls, and whether the vessel used compliant fuel oil;
- If the vessel or owner/operator has submitted a Fuel Oil Non-Availability Report to the United States government in the previous 12 months, identify the number of Fuel-Oil Non-Availability Reports previously submitted, and provide details on the dates and ports previously visited while using non-compliant fuel oil; and
- All relevant contact information, including the ship master, ship operator, legal agent in the United States, ship owner, and any related parent companies. Also include a designated corporate official who is authorized to answer additional questions relating to claims of fuel oil unavailability and his or her full contact information.

The United States government will consider the information submitted in a Fuel Oil Non-Availability Report to be reliable only if the report is signed by an authorized representative of your company and contains the following affirmation:

I certify under penalty of law that the statements and information made herein are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines and imprisonment pursuant to 18 U.S.C. § 1001.

### **When should I file my Fuel Oil Non-Availability Report?**

If you are making a claim regarding the non-availability of compliant fuel oil, you should submit your Fuel Oil Non-Availability Report to the United States government prior to entering the North American ECA. The report should be submitted as soon as you determine that you will be unable to procure and use compliant fuel oil upon entry into the North American ECA, but no later than 96 hours prior to entering the North American ECA.

### **Where do I send my Fuel Oil Non-Availability Report?**

The United States government is currently in the process of implementing an electronic system to receive Fuel Oil Non-Availability Reports. Information on the electronic system, including the launch date of the system, will be announced on U.S. EPA's website at <http://www.epa.gov/otaq/oceanvessels.htm>, and on the United States Coast Guard's website at <http://homeport.uscg.mil>, then select *Domestic Vessels* then *Domestic Vessel General*, then select *MARPOL Annex VI*. You may also sign up for an e-mail notification of the launch of the electronic system, as well as future marine alerts, using U.S. EPA's EnviroFlash application at: <https://enviroflash.epa.gov/enviroflashOTAQPublic/Subscriber.do?method=start>.

Prior to the implementation of the electronic system, you may send your Fuel Oil Non-Availability Report to the following e-mail address: [marine-eca@epa.gov](mailto:marine-eca@epa.gov).

You must also notify your flag administration if you cannot purchase compliant fuel oil. *See* Annex VI Regulation 18.2.4, as incorporated by reference in 40 C.F.R. § 1043.100. Additionally, the United States government is obligated to notify the IMO when a ship presents evidence of the non-availability of compliant fuel oil. *See* Annex VI Regulation 18.2.5, as incorporated by reference in 40 C.F.R. § 1043.100.

### **By filing a Fuel Oil Non-Availability Report, will my ship be deemed to be in compliance with the MARPOL Annex VI fuel oil sulfur standard that applies in the North American ECA?**

No. The filing of a Fuel Oil Non-Availability Report does not mean your ship is deemed to be in compliance with MARPOL Annex VI. However, the United States government will take into account the information provided in your Fuel Oil Non-Availability Report, as well as all relevant circumstances, to determine the appropriate action to take, if any, in response to the MARPOL Annex VI fuel oil sulfur standard violation.

In considering what action to take, the United States government will also consider the following:

- The sulfur content of the fuel oil that was used onboard the ship, and whether it was the lowest sulfur fuel oil available at the time of fuel oil purchase and/or available along the ship's intended voyage;
- Whether the ship obtained compliant fuel oil at its first port-of-call in the United States and used that fuel oil for the remainder of the voyage in the North American ECA;
- How many Fuel Oil Non-Availability Reports have been previously filed by the ship, the operating company, and the vessel owner;
- What actions have been taken to address any engine-related constraints with respect to using compliant fuel oil that is available on the specified route;
- Whether other vessels on similar voyages submitted Fuel Oil Non-Availability Reports; and
- any other relevant factors.

### **What other actions may be required?**

Once you have entered the North American ECA, in order to avoid further violations of Annex VI fuel oil requirements, you must purchase compliant fuel oil, if available, from a U.S. port-of-call prior to further transit in the North American ECA. You must purchase a sufficient quantity of such compliant fuel oil that will allow the ship to complete its voyage in the North American ECA.

Furthermore, if the vessel master or owner/operator is on notice that the vessel will be returning to the North American ECA on a future voyage and does not expect to be able to obtain compliant fuel oil outside of the North American ECA prior to the ship's return to the North American ECA, we expect that the vessel will obtain a sufficient quantity of compliant fuel oil from the U.S. port-of-call that will allow the vessel to re-enter the North American ECA on the future voyage in compliance with the Annex VI fuel oil sulfur standards. Failure to do so will be a factor in any enforcement response decision regarding that future entry.

Furthermore, the United States government may require additional documentation and substantiation of fuel oil non-availability claims from owners or operators of ships that have submitted repeated or multiple Fuel Oil Non-Availability Reports. The United States government may also consider conducting more extensive inspections or exams of such ships while in port.

### **Where can I get additional information on the North American ECA and the fuel oil sulfur requirements?**

More detailed information on the MARPOL Annex VI requirements, including the North American ECA and fuel oil sulfur requirements, is available on the U.S. EPA's website at <http://www.epa.gov/otaq/oceanvessels.htm>, or on the United States Coast Guard's website at <http://homeport.uscg.mil>, then select *Domestic Vessels* then *Domestic Vessel General*, then select *MARPOL Annex VI*.



# ***Transport Canada Marine Safety***

## ***Emission Control Area – North America***



Transport  
Canada

Transports  
Canada



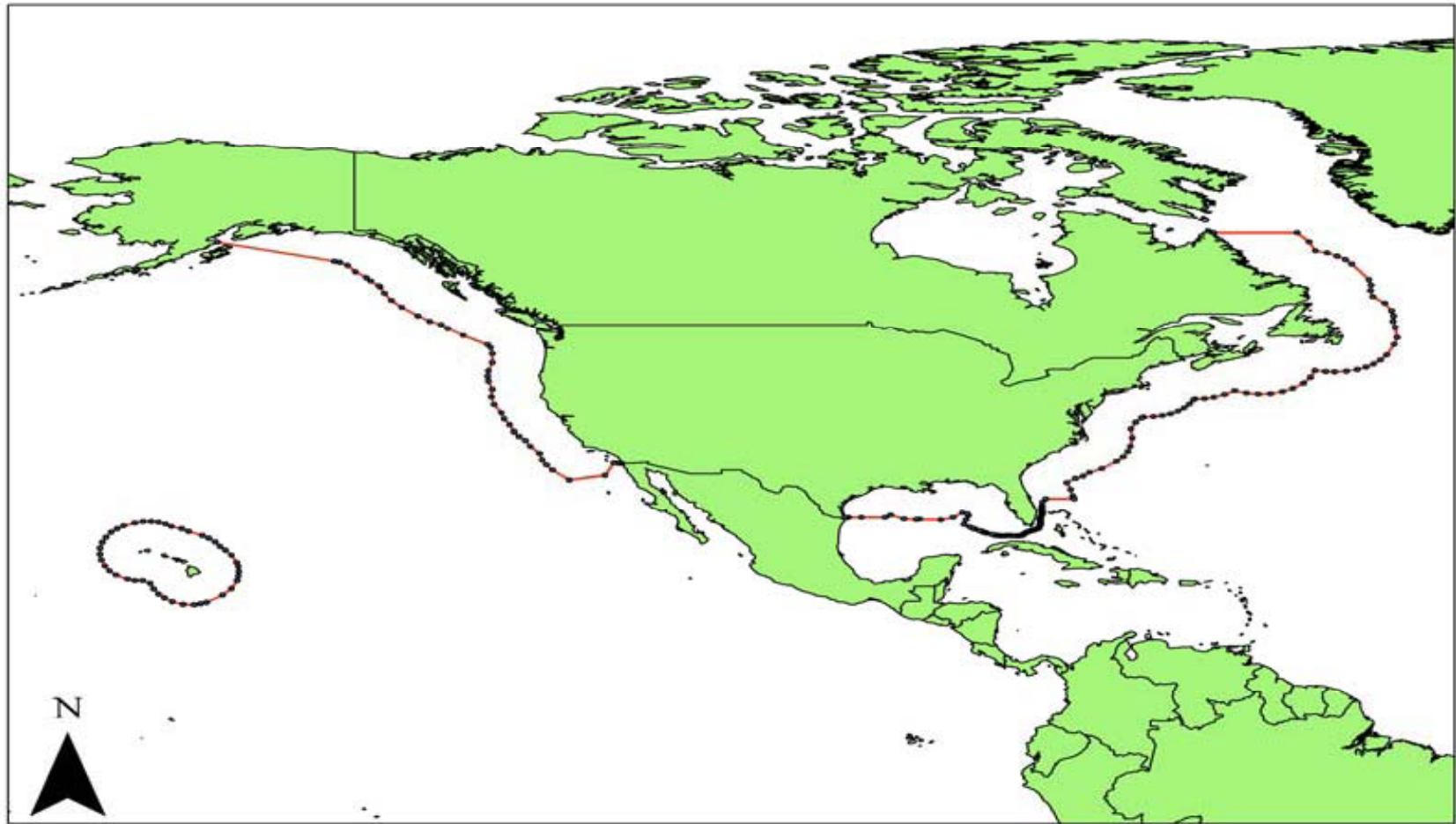
Canada

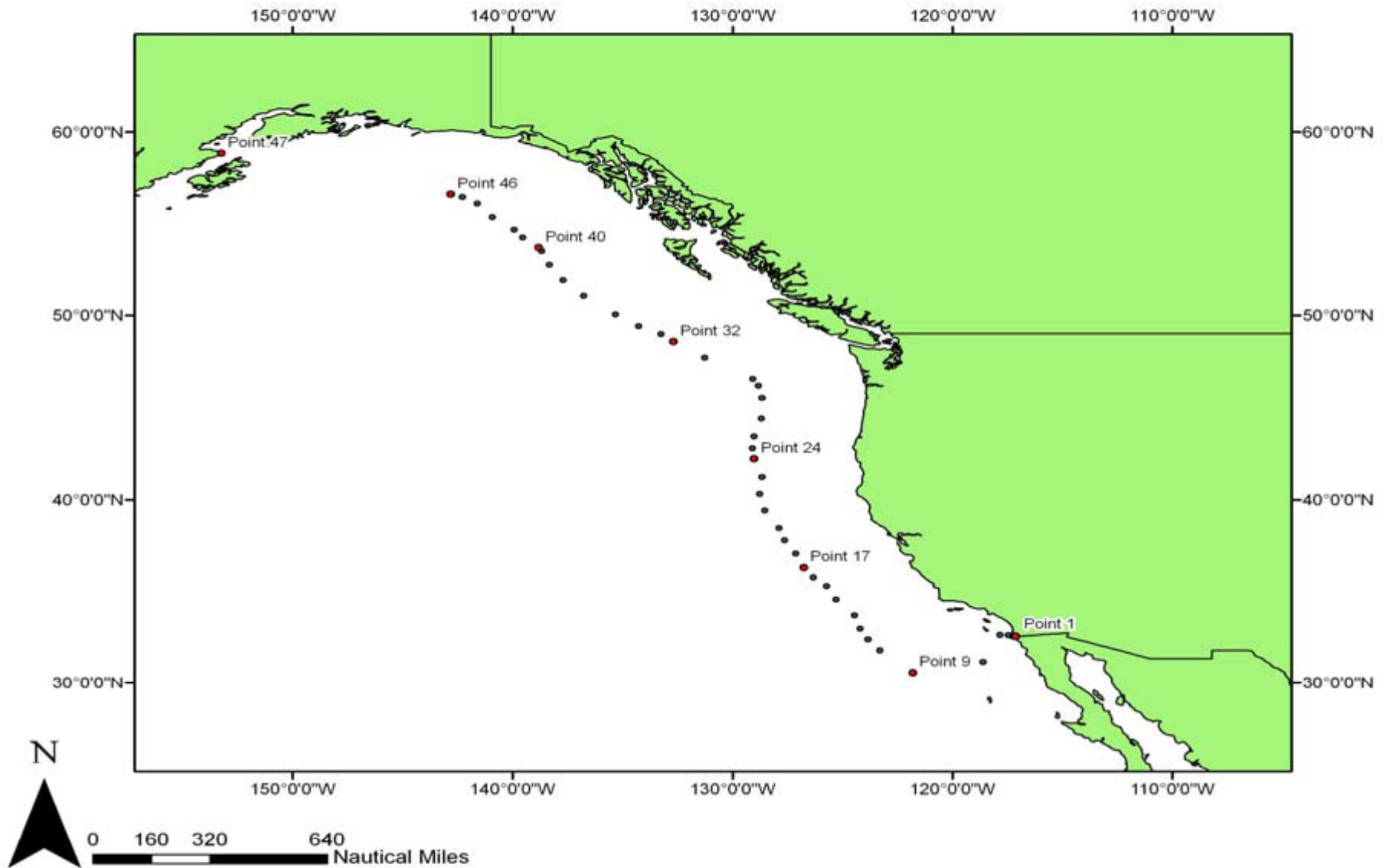


## Background

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- The IMO Marine Environment Protection Committee, at its 60<sup>th</sup> session (March 2010) adopted, by resolution [MEPC.190\(60\)](#), amendments to MARPOL, Annex VI to designate the North American Emission Control Area for NO<sub>x</sub>, SO<sub>x</sub> and particulate matter.
- The new appendix VII to MARPOL Annex VI contains the definition and boundaries with the full coordinates of the North American ECA, which is based on the "North American Datum of 1983/World Geodetic System 1984 (NAD83/WGS84)". (Reference: MEPC.1/Circ.723)
- Enforcement date: **August 1<sup>st</sup>, 2012.**







## Port State Control - Inspection

### **Shipboard Documents and Certificates:**

1. the [International Air Pollution Prevention Certificate](#) (IAPP Certificate), including its Supplement.
2. the [Engine International Air Pollution Prevention Certificate](#) (EIAPP) including its Supplement, for each applicable marine diesel engine.
3. the [Technical File](#) for each applicable marine diesel engine.
4. depending on the method used for demonstrating NOx compliance for each applicable marine diesel engine:
  - (a) the [Record Book of Engine Parameters](#) for each marine diesel engine, demonstrating compliance with regulation VI/13 by means of the marine diesel engine parameter check method; or



## Port State Control - Inspection

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- (b) documentation relating to the simplified measurement method;  
or
- (c) documentation related to the direct measurement and monitoring method.
- 5. the [Approved Method File](#) (regulation VI/13.7).
- 6. written procedures covering [fuel oil change over operations](#) where separate fuel oils are used.
- 7. approved documentation relating to any installed [exhaust gas cleaning systems](#), or equivalent means, to reduce SO<sub>x</sub> emissions.
- 8. the [bunker delivery notes](#) and associated samples or records.
- 9. the copy of the [type approval certificate of any shipboard incinerator](#) installed on or after 1 January 2000 (for the incinerators with capacities up to 1,500 kW).



## Port State Control - Inspection

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10. the [Ozone Depleting Substances](#) Record Book, if required.
11. the [VOC Management Plan](#), if required.
12. any notification to the ship's flag Administration issued by the master or officer in charge of the bunker operation together with any available commercial documentation relevant to non-compliant bunker delivery.



## Emission Control Area North America

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### Fuel Change-over Procedure:

All ships using separate fuel oils when operating within a Emission Control Area are to carry a **written fuel oil changeover procedure**, developed specifically for that ship, detailing:

1. A step-by-step process for carrying out the fuel oil changeover; and
2. Methods for calculating the time necessary to ensure the fuel oil service system is fully flushed of all fuel oils exceeding the applicable sulphur content limit prior to entering into the ECA.



## Emission Control Area North America

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### **Fuel Sulphur limit:**

When vessels are operating within an Emission Control Area established for SO<sub>x</sub> and particulate matter control, the sulphur content of fuel oil used on board ships is required not to exceed the following limits:

- 1.00% m/m and
- 0.10% m/m on and after 1 January 2015;

or,

- equivalent method as approved (regulation VI/4);



## Emission Control Area North America

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### **Health, Safety, Environmental protection:**

Material Safety Data Sheet (MSDS) for MARPOL Annex I type Cargoes and Marine Fuel Oils shall be provided to the ship by the supplier prior to loading or bunkering; this is to assist shipboard personnel in carrying out their duties under safe conditions. MSDSs might include the following warnings and guidance.



## Emission Control Area North America

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### **Sulphur in Diesel Fuel Regulations**

Environment Canada is amending the *Sulphur in Diesel Fuel Regulations* under the *Canadian Environmental Protection Act, 1999*

- Amendments will allow fuel industry to manufacture and supply shipping industry with ECA-compliant diesel fuel
- Will align with U.S. standards
- Will enable Canada to fully implement the Canadian portion of the North American ECA and enable ships' full compliance



## National Aerial Surveillance Program (NASP)

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### NASP Goals

To prevent pollution  
from ships



To protect the marine  
environment from the  
adverse effects of  
shipping





Israr Waheed  
Compliance & Enforcement  
Transport Canada Marine Safety  
Vancouver  
Phone: 604 666 5300

*Thank you*

