



USCG Office of Commercial Vessel Compliance (CG-CVC)
Mission Management System (MMS) Work Instruction (WI)



Category	International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI				
Title	Implementation of Compliance/Enforcement Policy for MARPOL Annex VI Regulation 14, including IMO 2020 Sulfur Cap				
Serial	CVC-WI-022(1)	Orig. Date	13JAN20	Rev. Date	N/A
Disclaimer:	<p>This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to nor does it impose legally binding requirements on any party. It represents the Coast Guard’s current thinking on this topic and may assist industry, mariners, the public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. You can use an alternative approach for complying with these requirements if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach (you are not required to do so), you may contact the Coast Guard Office of Commercial Vessel Compliance (CG-CVC) at CG-CVC@uscg.mil, which is responsible for implementing this guidance.</p>				
References:	<ul style="list-style-type: none"> (a) CG-543 Policy Letter 09-01 dated February 4, 2009 (b) Resolution MEPC.305(73) – Revised MARPOL Annex VI (c) Resolution MEPC.177(58) – NOx Technical Code 2008 (d) Resolution MEPC.190(60) – North American ECA (e) Resolution MEPC.202(62) – United States Caribbean Sea ECA (f) Coast Guard and EPA Memorandum of Understanding (MOU) signed June 27, 2011 (g) Coast Guard and EPA Revised Protocol on Referrals Under MARPOL Annex VI, as implemented under Act to Prevent Pollution From Ships (APPS) signed June 20, 2019 (h) MEPC.320(74), 2019 Guidelines For Consistent Implementation Of The 0.50% Sulphur Limit Under MARPOL Annex VI (i) MEPC.321(74), 2019 Guidelines for Port State Control under MARPOL Annex VI Chapter 3 (j) MEPC.1/Circ.881, Guidance for Port State Control on Contingency Measures for Addressing Non-Compliant Fuel Oil 				

(k) [MSIB 005-19](#), New Procedure For Shipping Industry To Notify The US Government Of Non Availability Of Compliant Fuel Oil

(l) MEPC.1/Circ.883, Guidance on Indication of Ongoing Compliance in the Case of the Failure of a Single Monitoring Instrument, and Recommended Actions To Take If the Exhaust Gas Cleaning System (EGCS) Fails to Meet the Provisions of the 2015 EGCS Guidelines

A. Purpose. This WI outlines how the U.S. Coast Guard will enforce the MARPOL Annex VI, from here on referred to as Annex VI, fuel oil sulfur content used or carried for use for all vessels within either U.S. Emission Control Area (ECA) when the fuel oil sulfur cap is reduced from 3.50% m/m to 0.50% m/m effective January 1, 2020. This WI also outlines initial guidance to Coast Guard units not within either ECA. Additionally, this WI updates and consolidates the guidance contained within CG-CVC Policy Letter 12-04 Change 1.

B. Directives Affected. CG-CVC Policy Letter 12-04 Change 1 is hereby cancelled. Reference (a) remains in effect when verifying compliance with the regulations in Annex VI other than regulation 14. If conflicts between reference (a) and this WI are identified with respect to requirements of Annex VI Regulation 14, this WI shall take precedence.

C. Action. Captains of the Port (COTPs), Officers in Charge, Marine Inspection (OCMIs), Marine Inspectors (MIs) and Port State Control Officers (PSCOs) should apply this WI during inspections and examinations. Affected companies are encouraged to review this WI and comply with the sulfur cap.

D. Background.

1. The Coast Guard, pursuant to the Act to Prevent Pollution from Ships (APPS), has the authority and responsibility to conduct ship inspections, examinations, investigations, and to undertake enforcement action. See 33 U.S.C. §§ 1904(d) and 1907(b) and (f). The EPA has the authorities provided in 33 U.S.C. § 1907(b), as specified in 33 U.S.C. § 1907(f), to enforce the requirements of Annex VI Regulations 17 (Reception facilities), and 18 (Fuel oil availability and quality), to the extent shoreside violations are the subject of the action, and in any other matter referred to EPA by the Coast Guard. In general, the Coast Guard is responsible for administering and enforcing Annex VI, 33 U.S.C. § 1903(a), except that only EPA can issue Engine International Air Pollution Prevention certificates, 33 U.S.C. § 1903(b)(1). Both EPA and Coast Guard are authorized to issue regulations to carry out Annex VI regulations 12, 13, 14, 15, 16, 17, 18, and 19, 33 U.S.C. § 1903(b)(2) and (c)(2). A detailed chart entitled “Division of Authorities between USCG and EPA to carryout Annex VI Under APPS” is attached to the USCG and EPA Revised Referral Protocol from reference (g).

2. Since January 8, 2009, U.S. and foreign-flagged ships operating in the waters of the United States have been subject to Annex VI. The Marine Environmental Protection Committee (MEPC) of the IMO adopted amendments to Annex VI to prohibit, effective March 1, 2020, the carriage of fuel for use which is inconsistent with requirements of the 2020 sulfur cap which will take effect January 1, 2020 referred to as Annex VI (Amended) (See reference (b)).

3. On March 26, 2010, MEPC adopted amendments to Annex VI, by resolution MEPC.190(60) to designate the new North American ECA and at its 62nd session (July 2011) by resolution MEPC.202(62) to designate the U.S. Caribbean Sea ECA. The North American ECA entered into force on August 1, 2011 and took full effect on August 1, 2012 and the U.S. Caribbean Sea ECA entered into force on January 1, 2013 and took full effect on January 1, 2014 as specified in MEPC.1/Circ.756. The boundaries of the North American and the U.S. Caribbean Sea ECA are defined in references (d) & (e), respectively.
 4. The Coast Guard has entered into a Memorandum of Understanding (MOU) with the EPA (reference (f)), to set forth the terms by which the USCG and EPA will mutually cooperate in the administration and enforcement of Annex VI to MARPOL, as implemented by APPS. On June 20, 2019, the USCG and EPA signed revised referral protocols (reference (g)). On June 28, 2019, the USCG and EPA simultaneously announced revised Fuel Oil Non-Availability Report (FONAR) reporting procedures within the [Marine Safety and Information Bulletin \(MSIB\) 005-19 Rev 1](#).
 5. The majority of the United States is encompassed by either the North American ECA or the U.S. Caribbean Sea ECA. Since January 1, 2015, both ECAs have a fuel oil sulfur cap of 0.10% m/m. On January 1, 2020, the fuel oil sulfur cap of 0.10% m/m will remain in effect for the majority of U.S. ports although a few U.S. ports outside of ECA will need to ensure compliance with the 0.50% m/m sulfur content requirement of marine fuel oil globally. Additionally, with the March 1, 2020 implementation of a carriage ban on high sulfur fuel, the Coast Guard may expand the examination to verification of the fuel within bunker tanks.
 6. Heavy fuel oil (HFO) with a maximum sulfur content of 0.50% m/m may not be available in sufficient quantities to meet the industry's need. As such, the 2020 sulfur caps may result in an unfamiliar grade of fuel that may consist of a mixture of heavy fuel oil (HFO) and distillate fuel oil. Further, there is currently no accepted technical specification for such a fuel oil. This has raised concerns in the shipping industry that fuel quality and availability will vary considerably, and, as a result, ships may have problems obtaining and/or burning certain fuel oil.
- E. Instruction. In the two ECAs encompassing the U.S., the Coast Guard will continue to enforce ECA requirements by reviewing bunker delivery notes (BDNs), checking vessel logs for information regarding where the vessel changed over to ECA compliant fuel, and confirming the vessel has written change over procedures. Additionally, since the United States is a Party to Annex VI and bound to enforce Annex VI, the Coast Guard will review BDNs and check logs to determine whether the vessel is complying with the applicable fuel sulfur limit when operating beyond U.S. waters.
1. Coast Guard units outside either U.S. ECA (e.g. Sector Guam) should incorporate the Annex VI screening process into their existing procedures to ensure all vessels calling there are complying with the 0.50% sulfur limit.
 2. Compliance with Annex VI Reg. 14 pertaining to the ECA can be achieved by several means: **Use of Low Sulfur Fuel Oil (Reg. 14); by receiving Equivalence (Reg. 4); or by receiving a (temporary) Exemption (Reg. 3).**

- a. In order to determine the approved method of compliance, MIs and PSCOs must review the Supplement to the International Air Pollution (IAPP) sections 2.3.1 (fuel oil with low sulfur or equivalent arrangements approved as listed in 2.6). For vessels that are issued an Exception or Exemption under Annex VI Regulation 3, an Administration will issue separate documentation permitting the exception or exemption. Exceptions and Exemptions are not captured on the Supplement to the IAPP Certificate.
- b. **For vessels that use an Exhaust Gas Cleaning System (EGCS)**, under Reg 3 or Reg. 4, commonly referred to as a scrubber, in lieu of low sulfur fuel oil, MIs and PSCOs should be aware that guidelines for EGCSs are available in Resolution MEPC.184(59), adopted on 17 July 2009: 2009 Guidelines for Exhaust Gas Cleaning Systems, or MEPC.259(68), adopted on 15 May 2015, 2015 Guidelines for Exhaust Gas Cleaning Systems, as applicable. The purpose of these Guidelines is to specify the standards for the testing, survey, certification, and verification of EGCSs under Annex VI Reg. 4 to ensure that they provide effective equivalence to requirements of Reg. 14.1 and Reg. 14.4.
- c. **Ships complying with Annex VI, Regulation 14 through equivalent controls, as established in Regulation 4 of Annex VI:** An Administration may approve the use of any fitting, material, appliance or apparatus, alternative fuel oils, or other procedures or compliance methods provided the ship applies a method that is at least as effective in terms of emission reductions. Under APPS, the Coast Guard is responsible for administering Annex VI Regulation 4 (equivalents). However, EPA has technical expertise relevant to the determination of equivalent emissions reduction methods. The below outlines equivalency submittal and processing procedures:
- 1) **U.S. flagged ships.** Equivalency requests shall be submitted to the Coast Guard at the following address: Commandant (CG-CVC-1); Attn: Annex VI; U.S Coast Guard Stop 7501, 2703 Martin Luther King Jr Ave SE, Washington, DC 20593-7501 or via e-mail to CG-CVC@uscg.mil. The e-mail subject line should include the following text: U.S. Flag – ECA/SOx Equivalent Controls – Vessel Name – Official Number.
 - a) The Coast Guard will review the request for compliance with safety regulations, policies and procedures. The EPA will review the request as it relates to its effectiveness to control emissions as regulated by U.S. applicable laws, regulations and Annex VI.
 - b) Following consultation with the EPA, the Coast Guard (CG-CVC) will make the determination of whether the equivalence is accepted, following procedures under the National Environmental Policy Act of 1969 (NEPA). If the equivalence is accepted, in addition to providing written approval to the submitter, CG-CVC will notify the cognizant OCMI and/or Recognized Organization (RO) who will complete a Supplement to the IAPP Certificate reflecting the equivalence under section 2.6 as applicable. If the equivalence is not accepted, a letter will be issued to the submitter outlining the Agency’s (USCG and/or EPA) concerns and the reason for denial.
 - 2) **Foreign flagged ships.** Foreign-flagged ships that receive an Annex VI equivalency must ensure the flag state submits the equivalency to the MARPOL

Annex VI public area of IMO's Global Integrated Shipping Information System (GISIS) prior to the ship entering either U.S. ECA. The Coast Guard may review any submissions it receives, but will use GISIS database to confirm the validity of an Annex VI equivalency.

3. The Coast Guard will use the ECA Job Aid (Enclosure 1) when performing Domestic inspections and Port State Control examinations. The ECA Job Aid outlines the items the MIs and PSCOs may review or examine. Additional PSC guidance is provided in the 2019 Guidelines for Port State Control under Annex VI, MEPC.321(74), adopted on 17 May 2019. The depth and scope of the examination may be determined by 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 used for compliance, and the competency of the vessel's crew. The Coast Guard may take fuel samples from service and bunker tanks to verify compliance.
4. The Coast Guard will use standard evaluation and compliance protocols when it is determined that a vessel is carrying fuel oil that exceeds the 0.50% sulfur limit. Reference (j) provides guidance to Port States on contingency measures that may be applied when a ship is found with fuel oil that exceeds the 0.50% sulfur limit. OCMI's should consider reference (j) when they encounter a vessel with non-compliant fuel oil and decide on the appropriate course of action based on the totality of the situation. Accordingly, OCMI's may apply contingency measures that range from allowing the fuel to be retained onboard until the fuel oil may be discharged ashore at a later date to requiring the vessel to offload the fuel oil at the current port.
5. Annex VI waived the fuel-sulfur requirements for certain steamships until January 1, 2020. In 2015, 40 CFR 1043.97 codified the additional temporary steamship exemption. Covered steamships are required to comply with the relevant sulfur limits as the exemption, which was set out in regulation 14.4.4, expired on January 1, 2020.
6. **Fuel Oil Non-Availability Report (FONAR).** Vessels that are unable to obtain sufficient compliant fuel, of either ECA compliant or 0.50% sulfur limit compliant fuel, as applicable, should notify the cognizant Captain of the Port (COTP) for the port of destination.
 - a. Non-availability of compliant fuel oil for purchase [Annex VI, Reg. 18]: When a ship operator experiences a situation where low sulfur fuel oil is not available for purchase (e.g., fuel suppliers do not carry 0.10% m/m fuel oil, supplier is awaiting delivery, employees on strike – no deliveries are made) Annex VI, Regulation 18.2.4 requires notification be made to the flag Administration and to the competent authority of the relevant port of destination by notifying the cognizant U.S. Coast Guard Captain of the Port (COTP).
 - b. Consistent with Annex VI, Regulation 18.2.1, the ship owner or operator should be prepared to present a record of the actions taken to achieve compliance, including evidence that they attempted to purchase compliant fuel oil in accordance with the vessel's voyage plan.

- c. While there is no specific format for the notification, it is recommended that ships use the format provided in Appendix 1 of resolution MEPC.320(74), 2019 guidelines for Consistent Implementation of the 0.50% Sulphur Limit Under Annex VI: FONAR.
 - d. Failure to make the notifications required by Annex VI, Regulation 18.2.4 may result in a vessel control (e.g., detention) and/or enforcement action.
 - e. **A MI/PSCO encountering a ship using fuel oil with sulfur content exceeding the allowable sulfur limit (0.10% m/m while operating in either ECA under U.S. jurisdiction; 3.50% m/m for ports outside either U.S. ECA until December 31, 2019, and 0.50 m/m on or after January 1, 2020) should determine why the vessel is not in compliance and determine whether a valid claim of non-availability exists. When determining whether the claim is valid, the MI/PSCO should consider the following factors:**
 - 1) If the ship is claiming non-availability of compliant fuel as the reason for non-compliance, determine whether the ship submitted a FONAR;
 - 2) Verify if notification was also provided to the Flag Administration;
 - 3) Review records of actions taken to attempt to achieve compliance and any evidence that the ship attempted to purchase compliant fuel oil in accordance with voyage plan;
 - 4) Obtain a copy of the bunker delivery note(s) for the fuel oil in use while operating in the North American ECA/U.S. waters (VI/Reg. 18.7.1);
 - 5) If the ship is scheduled to receive compliant fuel oil during the port call (or has already received bunkers);
 - 6) Obtain a copy of the bunker delivery note; and
 - 7) Refer to enclosure (1) for deficiency examples and recommended actions.
 - f. **A MI/PSCO encountering a ship with fuel oil onboard with a sulfur content exceeding 0.5% m/m should utilize enclosure (1) for deficiency examples and recommended actions.**
7. **Ship operators seeking exception and/or exemption under Annex VI, Regulation 3.2:** Trials for Ship Emission Reduction and Control Technology Research allows an exemption from specific provisions of the Annex in cooperation with other Administrations (as appropriate) for a ship to conduct trials for the development of ship emission reduction and control technology. Under APPS, the Coast Guard is responsible for administering Annex VI Regulation 3 (exceptions/exemption), and the EPA has authority for implementing certain Annex VI regulations, including Regulations 13 (NOx) and 14 (SOx). EPA has the technical expertise relevant to the determination of equivalent emissions reduction methods. The Coast Guard in consultation with the EPA interprets Annex VI Regulation 3.2 “in cooperation with other Administrations” to mean that matters regarding an “exception or exemption,” as they pertain to compliance with the U.S. established ECA(s), will be addressed between the Coast Guard and other flag State’s Administration, prior to issuing a permit for such an exception or exemption. Therefore, these exceptions and/or exemption must be submitted to CG-CVC similar to paragraph 2.c.1 above. A permit issued by the flag Administration under Annex VI

Regulation 3 for a U.S. established ECA(s) that has been received, reviewed and accepted by the Coast Guard should have a copy of the Coast Guard correspondence on this matter accompany the permit for placement onboard the vessel.

8. **Transfer Monitors:** Coast Guard Personnel conducting transfer monitors are reminded that ships may purchase fuel oil for operating outside the ECA with a sulfur content of 3.50% m/m (0.50% after January 1, 2020), or 0.10% m/m for operating within the ECA. If the vessel is fitted with equipment or apparatus to meet the SOx requirements (e.g. scrubber), then the vessel may purchase fuel oil with a higher sulfur content.
 9. The U.S. Coast Guard will investigate all reports of non-compliance with Annex VI to determine what actions may be warranted. Such actions may include detaining the vessel and/or pursuing civil penalties. The Coast Guard may also refer the matter to EPA for administrative enforcement, or to the U.S. Department of Justice for criminal prosecution.
- F. Equipment casualty or failure. Annex VI, regulation 3.1.2, allows for non-compliant emissions resulting from damage to a ship or its equipment. Furthermore, Annex VI, regulation 5.5 states, “whenever an accident occurs to a ship or a defect is discovered that substantially affects the efficiency or completeness of its equipment covered by this Annex, the master or owner of the ship shall report at the earliest opportunity to the Administration, a nominated surveyor or recognized organization responsible for issuing the relevant certificate.” When equipment approved by an Administration under Annex VI Regulation 4 (equivalency – e.g., scrubber) for complying with the standards set forth in Regulation 13 and 14 experiences a failure, the Coast Guard expects a certain degree of redundancy so that the ship may continue to operate in compliance with Regulation 13 or 14 (e.g. pumps, available spare parts onboard, or alternative arrangements (e.g. Low Sulfur Fuel Oil tanks)). The Coast Guard will take into consideration a ship that has reported an accident or a defect in accordance with Annex VI, regulation 5.5 whose flag Administration (or their representative) has issued an interim compliance scheme and an outstanding condition due to equipment casualty or failure. Additionally, it is highly recommend that companies leverage their safety management system (SMS) to address Annex VI compliance robustly enough to empower shipboard crews to adequately address when issues with method of compliance arise (e.g. scrubber malfunction, fuel oil compatibility etc.) through contingency plans.
- G. Deficiencies. MI/PSCOs should document deficiencies using the appropriate Coast Guard approved form, which is CG-835V (domestic), Port State Control Report of Inspection (Form B) (foreign), or the Deficiency Report (COC outside of 12 nm). The ECA Job Aid, enclosure (1) includes a chart table to assist in determining compliance with Regulation 14, proper documentation of ECA deficiencies, and what evidence should be collected and entered in MISLE. Additional guidance is provided within enclosure (1); and CG-543 policy letter 09-01, the latter being for other related Annex VI deficiencies.
- H. MISLE – Documentation. As soon as practicable, but in all cases not later than close of business the day following the exam, the MI/PSCOs should enter the Annex VI related deficiency in the Coast Guard’s MISLE database under the associated inspection activities’, “Inspection Results.” MIs/PSCOs should choose the appropriate MISLE system, subsystem and component based on the deficiency codes published by CG-CVC found on the office’s [public website](#).

1. MISLE – Deficiencies.

a. Due to the limited character constraints in the MISLE “detail block” MI/PSCO’s should provide: The deficiency code, regulatory cite and a brief description of the deficiency.

b. Under the “Requirement/Resolution” section, enter the following:

1) Due Date - select the date of the Annex VI verification exam and select “To the satisfaction of the Coast Guard” or “To the satisfaction of the RO” option.

2) If the Annex VI deficiency was resolved or corrected by the conclusion of the vessel exam:

a) Place a check-mark in the “Resolved/Corrected” block.

b) Select the date of the Annex VI correction.

c) Enter the details of the resolution in the “Resolution” block. (e.g., ship received compliant Fuel Oil on MM/DD/YY and has provided a copy of the relevant Bunker Delivery Note).

2. Placing documents/evidence into MISLE. Documents collected during an inspection/examination for deficiencies regarding the ECA violation(s) (e.g., bunker delivery note, copy of logs, copy of voyage plan, etc...) should be scanned as one file and entered under a Activity’s “document” tab as follows: AnnexVI-ECA-DDMMYY.PDF (e.g., AnnexVI-ECA-01JAN20.pdf or AnnexVI-IMO2020-01MAR20.pdf)

3. Narrative section. Since processing Annex VI violations involves multiple agencies, a well written narrative is essential. The narrative should include observations and findings, if the deficiency was corrected by the conclusion of the inspection/exam, a description of any documentary evidence (copies of bunker delivery note(s), IAPP, etc., received by the MI/PSCO) or pictures obtained or viewed, and what control actions, if any, the Coast Guard has taken to address the deficiency. For example, if there is no IAPP Certificate on board and the Coast Guard takes a control action (Code 30), then that action should be described – i.e. ship was subject to an IMO detention for the following reason: ship’s master could not produce a valid IAPP Certificate during the PSC examination. For Annex VI deficiencies identified, the MI/PSCO should also provide a brief statement whether the deficiency was referred for Coast Guard enforcement (e.g., LOW, NOV), the relevant enforcement activity number, or indicate no Coast Guard enforcement action was taken. If no deficiencies were identified regarding Annex VI, a brief statement should be entered in the narrative as follows: MARPOL Annex VI – No deficiencies were identified regarding compliance with the (ECA name – e.g., North American) ECA or global sulfur limit.

I. Enforcement of detected violations.

1. **Coast Guard detection of violations referred to the EPA for enforcement action (non-criminal).** Decisions to offer to refer a case to the EPA will generally reside with the appropriate USCG Captain of the Port (COTP), which will usually be the COTP of the port where the violation was discovered. To assist the COTP or other appropriate official in making that decision, the attending Marine Inspector, Port State Control

Officer, and/or Investigating Officer will collect the evidence gathered to support the enforcement action. The Coast Guard will effect referral in a written (hard copy or email) document which lists the evidence and cites the specific APPS provision and Annex VI regulation that was violated. The Coast Guard will also share with the EPA any history of violations, which the Coast Guard would consider if it were pursuing enforcement itself. The referral document will also include a point of contact at the local unit, which conducted the initial inspection, examination, and/or investigation. See reference (g) for additional guidance regarding referral of violations to EPA.

2. **Coast Guard detection of violations that are not referred to EPA for Enforcement Action.** The COTP/OCMI retains the ability to pursue USCG enforcement action including but not limited to: Letter of Warning, Notice of Violation (NOV) and Civil Penalty. Regardless if the vessel is detained by the USCG, enforcement action can be pursued for any violations of Annex VI under the authority of 33 USC § 1908. See reference (g) for more information.
 3. **Coast Guard Detection of Violations, evidence of Criminal Liability.** The Coast Guard will be the lead Agency to conduct the investigation under the authority of 14 USC 522 where evidence of criminal liability on the part of the mariner, owner, operator or other involve party of the ship is found (e.g., intentional use of non-compliant fuel oil with falsified log books). In these cases the EPA will assist as needed. See enclosure (1) for examples of deficiencies and actions required.
 - a. CG-CVC will liaison with their EPA Headquarters counterparts for timely sharing of reports or information. Captain of the Port/Officer in Charge, Marine Inspection are encouraged to established contact with the local EPA Agents.
 - b. The EPA may be invited by the cognizant COTP/OCMI to assist in the investigation (e.g., fuel sampling) into the allegations for reports received of this nature during an ongoing Coast Guard inspection or examination. When evidence of a criminal violation is substantiated, the investigation will be completed by the Coast Guard under the authority of 14 USC 522 and referred to the Department of Justice (DOJ) in accordance with existing Coast Guard policies and regulations. During joint investigations, EPA must work through and defer to the Coast Guard MI/PSCO or investigator in charge and work under the authorities of the Coast Guard until such time when the authorities of 14 USC 522 have been exhausted (typically after the Coast Guard has referred the case to DOJ).
 - c. When evidence of a suspected criminal activity is not substantiated under this section, but deficiencies detected are subject to enforcement actions, each Agency will take the appropriate enforcement (civil penalty) action as discussed in the paragraphs above.
- J. **Questions.** Questions concerning this WI and guidance should be directed to the Office of Commercial Vessel Compliance (CG-CVC) at CG-CVC@uscg.mil.

M. EDWARDS
Captain, U.S. Coast Guard
Chief, Office of Commercial Vessel Compliance
By direction

Enclosures: (1) ECA & Global Sulfur Cap Job Aid December 2019
(2) USCG EPA Referral Protocol: Division of Authorities Table

UNITED STATES COAST GUARD

ECA & Global Sulfur Cap JOB AID

Domestic & Foreign Vessels

Office of Commercial Vessel Compliance (CG-CVC)

12/18/2019

Section 1: Information

Section 2: Annex VI Check-off (all inclusive): A complete check list encompassing all of Annex VI is provided to supplement the inspection / vessel type specific Job Aids. 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 inspection 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 PSCO's impressions and/or observations.

Section 3: ECA & Global Sulfur Cap (carriage ban) 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) and the global sulfur cap (carriage ban).

ECA & GLOBAL SULFUR CAP JOB AID
Section 1 Information
December 2019

MARPOL Annex VI, Regulation 4, Regulation 14 and Regulation 18
[U.S. Domestic Regulations for same - 40 CFR § 1043]

This Job Aid is intended to be used by Coast Guard Marine Inspectors (MI) and Port State Control Officers (PSCO) to assist in identifying and documenting compliance with MARPOL Annex VI, Regulation 14 while operating within the North American & U.S. Caribbean Sea Emission Control Areas (ECA), as well as compliance MARPOL Annex VI requirements while operating on the high seas. Compliance with Annex VI Reg. 14 can be achieved by several means: Utilization of Low Sulfur Fuel Oil (Reg. 14); by Equivalence (Reg. 4); or by receiving (temporary) Exemptions (Reg. 3). In order to determine the approved method of compliance, MI/PSCOs must review the Supplement to the IAPP sections 2.3. (content of sulfur used and equivalent arrangements, if any, as listed in 2.6). For vessels that are issued Exemptions under Annex VI Reg. 3, separate documentation will be issued by an Administration permitting the exemption and will not be captured on the Supplement to the IAPP Certificate).

A vessel using an Equivalence or Exemption approved by an Administration is not considered in violation of Annex VI. When an Equivalence is issued to the vessel, the MI/PSCO should ensure that it is appropriately documented as per MARPOL Annex VI Regulation 4 – documented on IAPP Supplement and in the IMO [Global Integrated Shipping Information System \(GISIS\)](#).



MARPOL Annex VI

Notifications communicated under the provisions of MARPOL Annex VI (Regulations for the Prevention of Air Pollution from Ships).

(Go to hyperlink, click on MARPOL Annex VI icon, use/create a GISIS public account, click on Regulation 4.2 link, then search for vessel by IMO number).

For vessels that use 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 259(68), Adopted on 15 May 2015: 2015 Guidelines for Exhaust Gas Cleaning Systems and 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 systems (EGCS) under Regulation 4 to ensure that they provide effective equivalence to requirements of regulations 14.1 and 14.4 of MARPOL Annex VI.

The Coast Guard will continue to use the guidance CG-543 Policy Letter 09-01 when performing Domestic inspections and Port State Control examinations. This policy letter outlines the minimum items that MIs and PSCOs should review or examine. Special care should be exercised to enforce the requirements at the time of the inspection/examination (i.e. on 01 January 2020, the sulfur content of fuel oil carried onboard a vessel for use outside ECA should not exceed 0.50% m/m, unless vessel has an equivalency). CVC-WI-020 outlines the compliance and enforcement procedures specific to MARPOL Annex VI, Regulation 14 & 18 for the ECAs. Additional PSC guidance is provided in the *2019 Guidelines for Port State Control under the Revised MARPOL*

Annex VI (MEPC.321(74). 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 used for compliance, and the competency of the vessel’s crew.

Fuel Oil Non-Availability Report (FONAR):

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. As of July 2019, FONARs should be submitted to the Captain of the Port; EPA is no longer receiving FONARs per [MSIB 05-19](#).

Deficiency codes associated with the PSC Form B:

The following codes shall be used for documenting Annex VI deficiencies:

PSC Form B - Deficiency Codes: MARPOL Annex VI (SO_x, ECA)

01124 – IAPP Certificate	14614 - Sulfur oxides
01125 – EIAPP Certificate	14617 – Sulfur content of fuel used
14601 – Technical File	14616 – Alternative arrangement / Equivalent
14604 – Bunker Delivery Note	14699 – Other
14612 – SO_x records	
14615 – Change-over Procedures	

ECA Job Aid Section 2

MARPOL ANNEX VI COMPLIANCE CHECK SHEET

(This check sheet is not required to be completed in its entirety)

December 2019

MARPOL Annex VI – General (All vessels / conducted during PSC A and PSC B exams)

REVIEW INTERNATIONAL AIR POLLUTION PREVENTION (IAPP) CERTIFICATE

ONBOARD (VALID)

SUPPLEMENT INCLUDES (SPOT CHECK):

DESCRIPTION OF OZONE DEPLETING SUBSTANCES CONTAINED IN SYSTEMS AND EQUIPMENT (IAPP Section 2.1)

DESCRIPTION OF DIESEL ENGINES > 130 KW (175 HP) AND INSTALLED OR CONVERTED AFTER 1/1/2000 THAT COMPLYⁱ WITH NO_x EMISSION STANDARDS (IAPP Section 2.2).

DESCRIPTION OF METHOD TO OPERATE IN AN EMISSION CONTROL AREAS (ECA) (IAPP Section 2.3, fuel sulfur content or Section 2.6, equivalent arrangement)

VESSELS OPERATING UNDER AN EXEMPTION (REG. 3): ISSUED SEPARATE DOCUMENTATION BY THE ADMINISTRATION AND USCG – PERMIT (Uncommon)

DESCRIPTION OF INCINERATOR, WHICH MEPC RESOLUTION THAT APPLIES 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

ⁱ See CVC-WI-014 regarding enforcement discretion guidance regarding MARPOL Annex VI Tier III standards

REVIEW EXHAUST GAS CLEANING SYSTEMS (EGCS) DOCUMENTATION (IF FITTED)

Resolution MEPC.259(68), Adopted on 15 May 2015: 2015 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS or

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

ONBOARD FOR EACH ENGINE

VERIFY ETM-A (SCHEME A) OR ETM-B (SCHEME B) IS ONBOARD AND APPROVED BY ADMINISTRATION/RO

IF ETM-A, VERIFY "VERIFICATION PROCEDURE" IS PROVIDED AND APPROVED BY ADMINISTRATION/RO

REVIEW BUNKER DELIVERY NOTES AND SULFUR CONTENT OF FUEL OIL ONBOARD

COMPARE CERTIFIED VALUE/OPERATING PARAMETERS TO SULFUR CONTENT OF FUEL OIL BEING UTILIZED/ONBOARD I.E. MAXIMUM SULFUR CONTENT THAT EGCS CAN CLEAN TO MEET MARPOL ANNEX VI SO_x STANDARD

DOES THE EGCS REQUIRE AN ADJUSTMENT WHEN VESSEL ENTERS AN ECA?

IS IT CAPTURED IN A PROCEDURE?

IS THE CREW FAMILIAR WITH IT?

EGCS WASHWATER

ASK MASTER/CHIEF ENGINEER IF WASHWATER MONITORING IS OPERATING AS DESIGNED

IF IT IS NOT OR MASTER/CHIEF ENGINEER IS UNSURE OR CANNOT VERIFY, THEN ISSUE A DEFICIENCY IAW THE MATRIX BELOW FOR INOPERABLE EGCS, CONSIDER ISSUING A VGP DEFICIENCY AS WELL

REVIEW TYPE APPROVAL CERTIFICATE FOR INCINERATOR

REQUIRED FOR INCINERATORS INSTALLED ON OR AFTER 1 JANUARY 2000

ENCLOSURE (1)

- 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 0.50% M/M (AFTER 01 MARCH 2020) AND NOT TO EXCEED 0.10% M/M FOR ECA – NOTE EXHAUST CLEANING SYSTEMS MAY SUBSTITUTE FOR LOWER SULFUR CONTENT FUEL TO MEET SO_x REQUIREMENTS.
 - ECA - SULFUR CONTENT 0.10% 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)
 - IF VESSEL HAS A EGCS, COMPARE CERTIFIED VALUE/OPERATING PARAMETERS TO

ENCLOSURE (1)

SULFUR CONTENT OF FUEL OIL BEING UTILIZED/ONBOARD (I.E. MAXIMUM SULFUR CONTENT THAT EGCS CAN CLEAN TO MEET MARPOL ANNEX VI SO_x STANDARD:
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 GLOBAL SULFUR CAP (0.50%) AND ECA (0.10%)

- 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 AN EGCS FOR EQUIVALENCE (REG. 4) FOR COMPLIANCE WITH THE ECA

- APPROVED METHOD (Supplement to the IAPP Certificate section 2.6)
 - IS EGCS OPERATIONAL Y / N , IF NO THEN PROCEED TO EXPANDED EXAM SECTION OF JOB

ENCLOSURE (1)

AID

TYPE (e.g. scrubber / manufacturer):_____

COMPLIANCE METHOD APPROVED Scheme A OR Scheme B

OTHER PROCEDURES APPROVED FOR COMPLIANCE: _____

DOES DATA RECORDING AND PROCESSING DEVICE SHOW EVIDENCE OF TAMPERING: Y / N, IF YES THEN PROCEED TO EXPANDED EXAM SECTION OF JOB AID

DOES THE EGCS DATA RECORDING AND PROCESSING DEVICE AND/OR CREW INDICATE THAT THE SYSTEM IS NOT FUNCTIONING AS DESIGNED (E.G. ACTIVE OR RECENT VISUAL FAULTS/ALARMS AND UNFAMILIARITY BY CREW WITH PROPER OPERATION OF THE EGCS: Y / N, *IF YES THEN PROCEED TO EXPANDED EXAM SECTION OF JOB AID*

VESSELS UTILIZING EQUIVALENCE (REG. 4) FOR COMPLIANCE WITH THE ECA OTHER THAN EGCS

APPROVED METHOD (Supplement to the IAPP Certificate section 2.6)

IF USING EQUIPMENT - OPERATIONAL Y / N

TYPE (:_____

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 (REG. 3) FROM COMPLYING WITH REG. 14 (ECA): TO CONDUCT TRIALS FOR SHIP EMISSION REDUCTION AND CONTROL TECHNOLOGY RESEARCH (UNCOMMON)

HAS FLAG ADMINISTRATION ISSUED DOCUMENTATION APPROVING THE EXEMPTION 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 / PSC EXPANDED EXAM MARPOL ANNEX VI :

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_x 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_x 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 (POST BUNKERING FUEL ANALYSIS REPORT)

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)

- ❑ VERIFY PROPER SCRUBBER OPERATION (BE FAMILIAR WITH MEPC.259(68) AND/OR MEPC.184(59))
 - ❑ REVIEW ONBOARD MONITORING MANUAL (OMM)
 - ❑ VERIFY OMM IS APPROVED BY THE ADMINISTRATION/RO
 - ❑ REVIEW SO_x EMISSIONS COMPLIANCE PLAN (SECP)
 - IF SCHEME A, REVIEW OPERATIONAL PARAMETERS REQUIRED TO MEET MARPOL ANNEX REGULATION 14
 - IF SCHEME B, REVIEW HOW CONTINUOUS EXHAUST GAS EMISSIONS MONITORING FUNCTIONS TO ENSURE EQUIVALENT LEVEL OF COMPLIANCE
 - ❑ SCHEME A VERIFICATION (OPERATIONAL PARAMETERS)
 - ❑ VERIFY DATA RECORDING AND PROCESSING DEVICE DOES NOT APPEAR TAMPERED
 - ❑ DIRECT CREW TO SHOW DATA RECORDED DURING PREVIOUS VOYAGE; SPOT CHECK THAT SENSOR READINGS ARE WITHIN THE OPERATIONAL PARAMETERS FOR THE EGCS
 - ❑ IF DEVIATIONS FROM OPERATIONAL PARAMETERS ARE NOTED -> DIRECT CREW TO CONDUCT VERIFICATION PROCEDURE TO VERIFY SUCCESSFUL OPERATION.
 - ❑ IF VERIFICATION PROCEDURE IS UNSUCCESSFUL OR CREW IS UNABLE TO PERFORM, THEN ISSUE DEFICIENCY IAW WITH DEFICIENCY MATRIX FOR INOPERABLE EGCS
 - ❑ SCHEME B VERIFICATION (CONTINUOUS EXHAUST GAS MONITORING)
 - ❑ VERIFY DATA RECORDING AND PROCESSING DEVICE DOES NOT APPEAR TAMPERED
 - ❑ DIRECT CREW TO SHOW DATA RECORDED DURING PREVIOUS VOYAGE; SPOT CHECK THAT SENSOR READINGS (SO_x / CO₂) REPRESENT AN EQUIVALENT LEVEL OF COMPLIANCE BASED ON THE SECP
 - ❑ IF DEVIATIONS IN EXHAUST GAS MONITORING IS NOTED -> ISSUE DEFICIENCY IAW WITH DEFICIENCY MATRIX FOR INOPERABLE EGCS

ENCLOSURE (1)

- ❑ REVIEW EGCS WASHWATER DATA TO ENSURE IT IS WITHIN RANGES SPECIFIED BY 2013 VGP AND IS BEING RECORDED
 - ❑ pH (No less than 6.5 pH while vessel is stationary)
 - ❑ PAH (No greater than 50 µg/L)
 - ❑ TURBIDITY (No greater than 25 FNU (formazin nephelometric units) or 25 NTU (nephtoletic turbidity units))
 - ❑ TEMPERATURE (should be continuously recorded and accurate)
- ❑ FUEL SAMPLING, WHEN DEEMED NECESSARY BY OCMI/COTP TO VERIFY COMPLIANCE
 - ❑ REQUEST OR DIRECT (COTP ORDER) VESSEL TO UTILIZE THIRD PARTY COMPANY/LABORTORY TO CONDUCT SULFUR CONTENT ANALYSIS TO VERIFY SUBSTANTIAL COMPLIANCE (NOTE: ADDITIONAL TESTING BY U.S. GOVERNMENT ENTITY MAY BE REQUIRED FOR CRIMINAL CASES)
 - ❑ DETERMINE FUEL SAMPLING LOCATION(S) BASED ON AREAS OF CONCERN AND PRACTICALITY

DOCUMENTATION:

- ❑ **ECA RELATED DEFICIENCIES IDENTIFIED*:**
 - ❑ MASTER INFORMED THAT DEFICIENCIES IDENTIFIED MAY BE REFERRED TO THE EPA FOR POSSIBLE ENFORCEMENT ACTION
 - ❑ HAVE THE MASTER MAKE COPIES OF DOCUMENTS (BUNKER DELIVERY NOTE(S)/VOYAGE PLAN¹/LOG BOOK PAGE(S)/OTHER RELEVANT EVIDENCE PRESENTED), STAMP (VESSEL SEAL IF AVAILABLE), AND SIGN FOR INCLUDING IN THE MISLE ACTIVITY.
 - ❑ MISLE ACTIVITY CASE WORK COMPLETED IN ACCORDANCE WITH MOST CURRENT GUIDANCE
 - ❑ DEFICIENCY DOCUMENTED I.A.W. TIME FRAME (NO LATER THAN 4 HOURS)
 - ❑ 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-01DEC19.pdf)

¹ 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.

ENCLOSURE (1)

- ❑ FOR VESSELS OPERATING WITH AN EXCEPTION/EXEMPTION (UNCOMMON) – E-MAIL SENT TO CGCVC@uscg.mil (see Section (1) of the ECA Job Aid for details) Y / N / N/A

*NOTE: ANNEX VI / ECA RELATED DEFICIENCY DATA IS FREQUENTLY SHARED AND DISCUSSED WITH EPA. UNIFORM CASE WORK, WITH RESPECT TO MARPOL ANNEX VI, IS IMPORTANT TO PROVIDE CONSOLIDATED CASEWORK PACKAGES TO EPA AS NECESSARY FOR CIVIL AND CRIMINAL ENFORCEMENT

MARPOL Annex VI
 Regulation 14
 Deficiency Matrix
 Section 3
 December 2019

For Vessels within an ECA (North American or U.S. Caribbean Sea ECA)				
Observation	Code	Description	Cite	Code/Action Taken
<p>VESSELS UTILIZING LOW SULFUR F/O TO COMPLY WITH REG. 14</p> <p>Vessel did not have compliant fuel oil onboard for operating in the ECA; the F/O utilized was >0.10% sulfur. The master provided the proper documentation that efforts were made to procure compliant fuel oil and that the appropriate notifications to the United States (FONAR) and the vessel's flag administration were made prior to entering the North American ECA IAW Annex VI Regulation 18;</p>		<p>Foreign Vessel:</p> <p>While ships are operating within an emission control area (ECA), the sulfur content used on board ships shall not exceed 0.10%. The PSCO discovered that the vessel has been operating within the (Designate ECA – North American ECA) from DD/MM/YY to DD/MM/YY² utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p> <p>U.S. Domestic Vessel:</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>U.S. and Foreign Vessel: Issue a Code 17 -Prior to departure</p> <p>Actions / Clear the Deficiency:</p> <ul style="list-style-type: none"> Review records of actions taken and evidence submitted to Flag/USCG; conduct a more detailed inspection with respect to the applicable portion of the vessel's SMS If the vessel has received compliant fuel oil prior to or during USCG exam, obtain a copy of the BDN – amend with Code 10; or Request a corrective action plan signed by the master stating that compliant fuel oil is: <ul style="list-style-type: none"> scheduled to be received prior to departure - Upon receipt of a corrective action plan and copy of receipt & BDN clear the deficiency – Issue code 10 At the next U.S. port (if compliant fuel is unavailable at current US port) (request a copy of the receipt & BDN be sent to the issuing unit); amend with a Code 15; clear the Code 15 when receipt/BDN received – Issue Code 10 (AFTER 01 MARCH 2020) If non-compliant fuel is above 0.50%, then vessel should provide a plan for offloading fuel at current port; once offloaded then amend with Code 10 <u>if not practical</u>, subject to the discretion of the USCG COTP, then the vessel's company must request permission to offload fuel at subsequent port (regardless of destination) from their flag administration and subsequent port's Port State prior to requesting authorization from the USCG Captain of the Port to depart port. Non-compliant fuel should be prohibited for use by the flag administration prior to departure. Amend w/ Code 50

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

MARPOL Annex VI Regulation 14 Deficiency Matrix Continued:

For Vessels within an ECA (North American or U.S. Caribbean Sea ECA)				
Observation	Code	Description	Cite	Code/Action Taken
<p>VESSELS UTILIZING LOW SULFUR F/O TO COMPLY WITH REG. 14 (Continued):</p> <p>Vessel did not have compliant fuel oil onboard for operating in the ECA; the F/O utilized was >0.10% sulfur: The master could 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 not made prior to entering the North American ECA IAW Annex VI Regulation 18.</p>		<p>Foreign Vessel:</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/YY³ utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p> <p>U.S. Domestic Vessel:</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>U.S. and Foreign Vessel: Issue a Code 17 -Prior to departure Actions / Clear the Deficiency:</p> <ul style="list-style-type: none"> Request the master/operator provide notification to the Administration; Request the master/operator of the vessel to submit a FONAR to the cognizant Captain of the Port; Review records of actions taken and evidence for submittal to Flag Administration 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 Request a corrective action plan signed by the master stating that compliant fuel oil is: <ul style="list-style-type: none"> Scheduled to be received prior to departure - Upon receipt of a corrective action plan and copy of receipt & BDN clear the deficiency – code 10/ U.S. Vsl Clear; At the next U.S. port (request a copy of the receipt & 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; 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"> 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.

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

MARPOL Annex VI Regulation 14 Deficiency Matrix Continued:

For Vessels within an ECA (North American or U.S. Caribbean Sea ECA)				
Observation	Code	Description	Cite	Code/Action Taken
<p>VESSELS UTILIZING LOW SULFUR F/O TO COMPLY WITH REG. 14 (Continued):</p> <p>Vessel did not have compliant fuel oil onboard for operating in the ECA; the F/O utilized was >0.1% sulfur: The master could not 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 not made prior to entering the North American ECA IAW Annex VI Regulation 18.</p>		<p>Foreign Vessel:</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/YY⁴ utilizing fuel oil that does not comply with the MARPOL Annex VI ECA sulfur limits.</p> <p>U.S. Domestic Vessel:</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>Foreign vessel – Detain⁵ Code 30. U.S. Vessel – Detain Code 30. Actions / Clear the Deficiency:</p> <ul style="list-style-type: none"> Request the master/operator provide notification to the Administration; Request the master/operator of the vessel to submit a Non-Availability Report to the cognizant USCG COTP; Review records of actions taken and evidence for submittal to Flag Administration Conduct a more detailed inspection including review of the applicable portion of the vessel’s SMS 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 Request a corrective action plan signed by the master stating that compliant fuel oil is: <ul style="list-style-type: none"> scheduled to be received prior to departure - Upon receipt of a corrective action plan and copy of receipt & BDN clear the deficiency – code 10/U.S. Vsl Clear; At the next U.S. port (request a copy of the receipt & 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; 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"> 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. Utilize USCG/EPA Enforcement protocols to determine appropriate course of action for enforcement

⁴ MI/PSCO’s may need to review the bridge log or other relevant documents for determining entry and time in the ECA

⁵ 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.

MARPOL Annex VI Regulation 14 Deficiency Matrix Continued:

For Vessels within an ECA (North American or U.S. Caribbean Sea ECA)				
Observation	Code	Description	Cite	Corrective Action
<p>LOGBOOK (minor discrepancies):</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 & time; or the position of ship when fuel oil changeover operation was completed (prior to entry or after exit from the ECA).</p>		<p>Foreign Vessel:</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>U.S. Domestic Vessel:</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>U.S. and Foreign Vessel - Issue a Code 17: Prior to departure <i>(Use deficiency code 14699 to ensure data consistency)</i></p> <p>Actions / Clear the Deficiency:</p> <ul style="list-style-type: none"> • 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. Amend deficiency with Code 10 once completed. • Conduct a more detailed inspection including review of the applicable portion of the vessel’s SMS

MARPOL Annex VI Regulation 14 Deficiency Matrix Continued:

Observation	Code	Description	Cite	Corrective Action
<p>LOGBOOK (major discrepancies):</p> <p>Entries in the logbook as recorded by the crew indicate that the change-over procedures for switching from 0.50% to 0.10% 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>U.S. & Foreign Vessel:</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>U.S. and Foreign vessel - Detain Code 30.</p> <ul style="list-style-type: none"> • Conduct a more detailed inspection including review of the applicable portion of the vessel’s SMS • Utilize USCG/EPA Enforcement protocols to determine appropriate course of action for enforcement

MARPOL Annex VI Regulation 14 Deficiency Matrix Continued:

For all vessels subject to USCG jurisdiction outside of an ECA (Guam, Western Alaska, etc.) – AFTER 01 JANUARY 2020 UNTIL 01 MARCH 2020				
Observation	Code	Description	Cite	Code/Action Taken
<p>VESSELS UTILIZING LOW SULFUR F/O TO COMPLY WITH REG. 14</p> <p>Vessel did not have compliant fuel oil onboard; the F/O utilized was >0.50% sulfur.</p>		<p>Foreign Vessel:</p> <p>The sulfur content of any fuel oil used onboard ships shall not exceed 0.50%. The PSCO discovered that the vessel has been utilizing fuel oil that does not comply with the MARPOL Annex VI sulfur limits.</p> <p>U.S. Domestic Vessel:</p> <p>The MI discovered that the vessel has been utilizing fuel oil with sulfur content that exceeded 0.50%. Vessel must provide plan to OCMI in order to come into compliance prior to departure.</p>	<p>MARPOL Annex VI, Reg. 14.1</p> <p>40 CFR 1043.60</p>	<p>U.S. and Foreign Vessel - Issue a Code 17 -Prior to departure</p> <p>Actions / Clear the Deficiency:</p> <ul style="list-style-type: none"> • Review records of actions taken and evidence submitted to Flag/USCG <ul style="list-style-type: none"> • Direct notification to flag administration if it has not been done • If the vessel has received compliant fuel oil prior to or during USCG exam, obtain a copy of the BDN – amend with Code 10; or • Request a corrective action plan signed by the master stating that compliant fuel oil is: <ul style="list-style-type: none"> • scheduled to be received prior to departure - Upon receipt of a corrective action plan and copy of receipt & BDN clear the deficiency – Issue code 10 • At the next U.S. port (if compliant fuel is unavailable at current US port) (request a copy of the receipt & BDN be sent to the issuing unit); amend with a Code 15; clear the Code 15 when receipt/BDN received – Issue Code 10 • Not scheduled for purchased, nor does the owner/operator intent to purchase compliant fuel oil – Amend to Code 30; then amend to Code 10 to allow departure after flag administration and RO (as applicable) address deficiency subject to the discretion of the COTP. • If the latter two are chosen, inform the master that the Owner/operator is subject to a violation for each day of operation (subject to U.S. jurisdiction) of noncompliance with MARPOL Annex VI.

For all vessels subject to USCG jurisdiction (Foreign Vessels w/in U.S. Waters and all U.S. Vessels) – AFTER 01 MARCH 2020				
Observation	Code	Description	Cite	Code/Action Taken
<p>VESSELS UTILIZING LOW SULFUR F/O TO COMPLY WITH REG. 14.1 (Global carriage ban/ 0.50% sulfur content)</p> <p>Vessel has fuel oil containing more than 0.50% sulfur content onboard. This should be based on BDNs, statements by Master and/or fuel sampling(only when necessary);</p>		<p>Foreign Vessel:</p> <p>The sulfur content of fuel oil used or carried for use on board a ship shall not exceed 0.50% m/m. The vessel has fuel oil onboard with X.XX% sulfur content.</p> <p>U.S. Domestic Vessel:</p> <p>The MI discovered sulfur content of fuel oil used or carried for use on board exceeded 0.50% m/m. The vessel has fuel oil onboard with X.XX% sulfur content. Vessel must present a plan to the OCMI/COTP for proper removal of the non-compliant fuel.</p>	<p>MARPOL Annex VI, Reg. 14.1</p> <p>40 CFR 1043.60</p>	<p>U.S. and Foreign Vessel: Issue at a <i>minimum</i> a Code 17 -Prior to departure</p> <p>Consider DETENTION – Code 30 for the following:</p> <ul style="list-style-type: none"> • Condition was not reported to USCG • Based on objective evidence, there was an insufficient effort made to utilize/offload non-compliant fuel prior to 01 March 2020 • Repeat occurrences of non-compliance (within U.S and globally) <p>Actions / Clear the Deficiency:</p> <ul style="list-style-type: none"> • Conduct a more detailed inspection including review of the applicable portion of the vessel’s SMS • Vessel should provide a plan for offloading fuel at current port; once offloaded then amend with Code 10 • <u>if not practical</u>, subject to the discretion of the USCG COTP, then the vessel’s company must request permission to offload fuel at subsequent port (regardless of destination) from their flag administration and subsequent port’s Port State prior to requesting authorization from the USCG Captain of the Port to depart port. Non-compliant fuel should be prohibited for use by the flag administration prior to departure. Amend w/ Code 50. • If onboard a U.S. Vessel in a foreign port, then coordination with local port state control authorities is required prior to clearing deficiency.

For all vessels utilizing a EGCS as an equivalency to meeting MARPOL Annex VI				
Observation	Code	Description	Cite	Code/Action Taken
<p>VESSELS UTILIZING EGCS AS AN EQUIVALENT TO COMPLY WITH REG. 14</p> <p>Vessel's EGCS is malfunctioning (emission exceedances) or crew is unable to demonstrate that EGCS is functioning as designed other than short term exceedances.</p> <p><i>NOTE: Short Term Exceedances: Short term exceedances as defined by MEPC.1/Circ.883 are acceptable (less than 1 hour). Other exceedances and long term exceedances/are unacceptable other than the duration of the voyage after EGCS failure occurs until the vessel arrives in port (MARPOL VI/3.1.2.2)</i></p>		<p>Foreign Vessel:</p> <p>The Administration of a Party may allow any fitting, material, appliances, or apparatus to be fitted in a ship if arrangement is at least equivalent to the emissions reduction of MARPOL Annex VI. The EGCS installed onboard is not functioning as designed. (or the PSCO cannot verify that the EGCS is functioning as designed due to lack of crew familiarity with the system).</p> <p>U.S. Domestic Vessel:</p> <p>The MI discovered (or <i>Vessel's master reported</i>) that the vessel's EGCS installed for an equivalent level of compliance for MARPOL Annex VI is inoperable.</p>	<p>MARPOL VI/4 (MARPOL VI/10, <i>if crew is unable to verify proper operation of system</i>)</p> <p>40 CFR 1043.60</p>	<p>U.S. and Foreign Vessel: Issue a Code 17 -Prior to departure</p> <p>Consider DETENTION – Code 30 for the following:</p> <ul style="list-style-type: none"> • Vessel does not have compliant fuel (<0.10.% within ECA or <0.50% outside of an ECA) onboard • Condition was not reported to USCG and/or; • Long term exceedances not reported to Flag/RO • It is determined that lack of ECGS maintenance was the cause of the failure <p>Clear the Deficiency:</p> <ul style="list-style-type: none"> • Review records of actions taken and evidence submitted to Flag/USCG • Conduct a more detailed inspection including review of the applicable portion of the vessel's SMS • Request a corrective action plan signed by the master stating how the vessel intends to comply or portion of their SMS prescribing steps to be taken for inoperable EGCS <ul style="list-style-type: none"> • Verify compliant fuel is onboard or will be loaded to comply w/ Annex VI; ensure condition is reported to Flag and RO – amend deficiency w/ Code 16 (rectify w/in 14 days) allowing compliant fuel to be utilized in lieu of EGCS for short period. • If compliant fuel cannot be loaded onboard (insufficient capacity for next voyage), then vessel should be held in port until EGCS is fully operational or fuel transfers (offloading/onloading) are conducted to allow for compliant fuel to be utilized in lieu of EGCS for short period; amend with Code 16.

SPECIAL NOTE EXAMPLE:

<p>SPECIAL NOTE FOR non-availability report received (5.a.i.(2))</p>				<p>DDMMYY (e.g., 01Dec19) (Unit name – Sector New Orleans) received a report from the (master, agent, etc.) notifying the US that the vessel was not able to receive 0.10% ECA compliant fuel oil. The vessel reported the issue to the unit, 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. The vessel claimed it was unable to acquire compliant fuel in the following port areas: (list port areas CITY/COUNTRY).</p>

**Division of Authorities between USCG and EPA to carry out MARPOL Annex VI
Under the Act to Prevent Pollution from Ships¹⁵**

RESPONSIBILITY	USCG	EPA	APPS AUTHORITY (33 U.S.C.)
Waive Annex VI requirements via an Exemption Permit under regulation 3	Full ¹⁶	No	§ 1903(a) ¹⁷
Conduct Onboard Inspections	Full	No	§ 1904(c), § 1907(f)(1), and § 1903(a)
Detain a vessel	Full	No	§ 1904(e)(2)
Review detention order	Full	No	§ 1904(g)
Effect revocation of clearance to leave port	Full	No	§ 1904(f)
Investigate evidence of violations of and enforce regulations 17 and 18	Joint	Joint	§ 1907(f)(3)
Investigate evidence of all other violations	Full	Limited (depends on referral by USCG)	§ 1907(b) (USCG) § 1907(f)(3)(EPA)
Enforcement of provisions outside regulations 17 and 18	Full	Limited (depends on referral by USCG)	§ 1903(b)(3), § 1907(f)(2)(EPA) § 1903(a)(USCG)
Issue EIAPP (Engine International Air Pollution Prevention certificates)	No	Full	§ 1903(b)(1)
“Administer” Annex VI regulations 12, 13, 14, 15, 16, 17, 18	Joint	Joint	§ 1903(b)(2)(EPA) § 1903(a)(USCG)
Issue regulations to “carry out” ¹⁸ Annex VI regulations 12, 13, 14, 15, 16, 17, 18	Joint	Joint	§ 1903(c)(2)(EPA)
Issue regulations to “carry out” Annex VI (all other Annex VI regulations)	Full	No	§ 1903(c)(1)

¹⁵ APPS is the starting point for an analysis of the respective responsibilities of the EPA and the USCG to administer Annex VI. The attachment of this chart to the Referral Protocol is not intended to foreclose the use of other authorities, which the USCG or the EPA has identified as the source of a particular power.

¹⁶ USCG relies on EPA for assistance in evaluating decisions relating to air emission impacts and engine performance.

¹⁷ “Unless otherwise specified in this chapter [APPS], the Secretary [DHS] shall administer and enforce the MARPOL Protocol...” Authority to administer regulation 3 is not specified in APPS.

¹⁸ APPS implements the treaty (to a large part directly); APPS says that EPA and USCG may issue regulations to “carry out” the provisions of MARPOL. EPA’s regulations are codified at 40 CFR part 1043.