

Frequently Asked Questions: North American Emission Control Area (ECA)
U.S. Coast Guard Office of Commercial Vessel Compliance

The USCG and EPA have compiled this consolidated list of FAQs and associated responses from queries received since the implementation of the North American ECA. Also included at the end of the document is a list of questions received which are currently under review by the USCG/EPA. The USCG will update the FAQs on an as needed basis and will identify a revision date located at the top of the first page of this document. Questions may be submitted directly to ECA-USflag(AT)uscg.mil or ECA-foreignflag(AT)uscg.mil. The email subject line should include the following text: Question regarding the North American ECA.

The responses within this document are provided by the U.S. Government (U.S. Coast Guard & the U.S. Environmental Protection Agency (EPA)) for vessels operating within an established Emission Control Area(s) (ECA) under the jurisdiction of the United States of America (U.S.). Owner/operators are reminded that the U.S. Coast Guard is not the flag Administration for vessels other than those registered under the United States and the responses, recommendations or guidance provided (unless specifically noted) herein do not convey concurrence/acceptance/or approval of the vessels flag Administrations or other ECA Administrations for compliance within waters subject to their jurisdiction. Owner/Operators are reminded to contact their flag Administration and/or the Administration for another MARPOL Annex VI established ECA (outside U.S. jurisdiction) for clarification regarding ECA compliance.

Originally published on 8/30/2012

What vessels must comply with the North American ECA?

With limited exceptions, all vessels of any type whatsoever operating within the geographic boundaries of the North American ECA must comply with the fuel sulfur requirements.

What vessels are excepted or exempted from the fuel sulfur requirements of the 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.

All vessels powered by propulsion boilers (steamships) which were not originally designed for continued operation on marine distillate fuel or natural gas are exempt from the ECA’s sulfur requirements beginning on 1 January 2013 through January 1, 2020

(MEPC.202(62)). U.S. flagged Great Lakes steamships (operating exclusively on the Great Lakes) have been exempted by the EPA through 2025. USCG Marine Inspectors or Port State Control Officers will not check for ECA compliance onboard U.S. or foreign flagged steamships during the interim period prior to 1 January 2013.

USCG Marine Inspectors or Port State Control Officers will not check for fuel oil sulfur requirements compliance on vessels operating exclusively in the Great Lakes (Great Lakes vessels). Great Lakes vessels (non-steamships both U.S. and foreign flagged) may apply the interim provisions described in 40 CFR 1043.95 (c) for Great Lakes Residual Fuel Availability Waiver. Under this waiver, Great Lakes vessels may use fuel exceeding the ECA sulfur limit through December 31, 2014 if no other acceptable fuel is available. In addition, Great Lakes vessels utilizing this waiver must submit fuel oil non-availability reports directly to the EPA in accordance with 40 CFR 1043.95(d). USCG Marine Inspectors or Port State Control Officers may continue to check for compliance with other portions of MARPOL Annex VI if applicable to the vessel and route. Vessels (non-steamships both U.S. and foreign flagged) which do not operate exclusively on the Great Lakes must comply with the provisions of 40 CFR 1043.

Additional exceptions to MARPOL Annex VI are contained in Regulation 3: emissions necessary for the purpose of securing the safety of a ship or saving life at sea; emissions resulting from damage to a ship or its equipment, if the conditions in set forth in Regulation 3.1.2 are met; an exemption issued in connection with trials for ship emission reduction and control technology research, as described in Regulation 3.2; emissions directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources; and fuel sulfur requirements do not apply to the use of hydrocarbons that are produced and subsequently used on site as fuel, when approved by the Flag State.

Are yachts, recreational vessels, fishing vessels, etc. exempted from the requirements of the ECA?

No. Except for the exceptions/exemptions listed above, Regulation 14 of MARPOL Annex VI and the accompanying U.S. Emission Control Area regulations at 40 CFR 1043 do not specifically exclude any vessel type, vessels on a particular route, or include tonnage thresholds for applicability.

That said, vessels that use only marine distillate fuels meeting the requirements of 40 CFR 80 (essentially number 2 diesel and lighter) purchased in the U.S. are deemed to be in compliance with the ECA (see 40 CFR 1043.60(d)).

How will the U.S. enforce the ECA on Canadian flagged vessels on the Great Lakes?

In light of Canada's intention to implement a fleet averaging regulatory regime in the Great Lakes that will provide equivalent benefits to the EPA regulatory regime for air emissions in the Great Lakes, Canadian vessels in U.S. Great Lakes waters that have a Canadian Air Pollution Prevention certificate will be deemed to be compliant with the

U.S. regulations as of August 1st, pending the finalization of a reciprocal agreement. Similarly, we understand that U.S. vessels will be deemed to be in compliance in Canadian waters if they satisfy the EPA rules for the Great Lakes.

Canadian vessels will be deemed compliant with U.S. NA ECA if:

- 1) the vessel is utilizing compliant fuel oil;
- 2) the master follows the interim provisions permitted under 40 CFR 1043.95; or
- 3) they have onboard a valid Canadian Air Pollution Prevention Certificate.

U.S. vessels cannot utilize the Canadian certificate for compliance and are subject to the EPA reg/requirements.

How do I demonstrate compliance with the ECA?

If utilizing low sulfur fuel oil (1.00% m/m) for compliance with the ECA:

- Vessels that enter/exit the ECA:
 - Record in a logbook the volume of low sulfur fuel oils in each tank, date, time, and position of the ship when any fuel oil changeover operation is completed prior to the entry into or commenced after exit of an ECA.
 - Carry written fuel oil changeover procedures showing how and when changeover is completed.
- Vessels that operate solely within the ECA, that change from non-compliant to compliant fuel on or before 1 August 2012 to meet the ECA implementation, shall record in a logbook the volume of low sulfur fuel oils in each tank, date, time, and position of the ship when the fuel oil changeover operation is completed.
- All vessels over 400 GT ITC operating internationally must receive and maintain bunker delivery notes or similar documentation, provided by their fuel supplier upon bunkering, that contains the specifications of the fuel loaded.
- Vessels operating domestically using marine distillate fuel purchased in the U.S. are considered in compliance with the ECA.

Is fuel purchased in the U.S. automatically ECA compliant?

No. Fuel oil may still be purchased with a sulfur content exceeding 1.00% for use onboard a vessel when operating outside of the U.S. established ECA's (up to 3.50% sulfur intended for worldwide use). However, marine distillate fuel that complies with 40 CFR Part 80 purchased in the U.S. is considered in compliance with the ECA.

What happens if my fuel receipts do not include information about sulfur content?

Vessels over 400 GT on international routes must have Bunker Delivery Notes containing standard information (including sulfur content) as required in 40 CFR 1043.80 and MARPOL Annex VI Regulation 18.5 and Appendix 5.

Smaller vessels and/or vessels on domestic routes can demonstrate compliance with fuel receipts showing the delivery of marine distillate fuel (as defined in 40 CFR 80, essentially number 2 diesel and lighter) purchased in the U.S. These marine distillate fuels purchased in the U.S. will be considered to be ECA compliant by the Coast Guard.

For other small vessels, the Coast Guard recommends that the fuel supplier or crew write the sulfur content on the receipt when receiving fuel oil. Although not required, vessels may also request a bunker delivery note or bill of lading from the supplier in order to indicate compliance. The Coast Guard has been in contact with several bunker suppliers in various ports and is aware that most fuel receipts provided to small vessels will not contain sulfur content information or list the precise grade of fuels provided.

Is soot blowing regulated under the ECA requirements?

No. The ECA requirements only address sulfur limits in fuel oil and record keeping requirements related to that fuel oil. Other international, federal, state or local requirements may address specific operational practices like soot blowing.

How will the U.S. handle ECA violations occurring outside of U.S. waters?

- Violations of MARPOL Annex VI, including the North American Emission Control Area (NA ECA) requirements by U.S. flagged vessels are subject to enforcement action by the U.S. government no matter where the violation occurred.
- Violations of MARPOL Annex VI, including the NA ECA requirements, by foreign flagged vessels visiting U.S. ports or places are subject to enforcement by the U.S. government if the violation occurs (or is ongoing) in waters/areas under U.S. jurisdiction.
- Violations of MARPOL Annex VI, including the NA ECA requirements, by foreign flagged vessels which occur outside of waters/areas under U.S. jurisdiction will be referred to the flag state administration for appropriate action.
- Foreign flagged vessels visiting U.S. ports or places remain subject to enforcement by the U.S. government for violations of international and U.S. law related to recordkeeping.
- Enforcement actions will be consistent with international and U.S. law.

Compliant Fuel Oil – 1% m/m ; what methodology applies to testing for compliant fuel oil regarding the ECA (ISO or Annex VI (1%) max); and what is the max % of sulfur permitted based on the testing results which will be deemed compliant?

In accordance with MARPOL Annex VI, Regulation 18.8.2, if the U.S. government requires the MARPOL fuel oil representative sample to be analyzed to determine whether the fuel oil meets the requirements of Regulation 14, the analysis will be conducted in accordance with the fuel verification procedures set forth in appendix VI to MARPOL Annex VI. When the U.S. government independently collects fuel oil samples from fuel oil suppliers or from ships as part of a compliance inspection, the fuel oil must meet the 1.00% standard.

My company policy (SMS, etc.) requires that I wait for third party lab results before burning newly loaded bunkers. How does the requirement to burn only ECA compliant fuel affect this?

Vessels electing to continue utilizing non-compliant fuel oil (exceeding the 1.00% m/m sulfur content) until fuel quality test results are received should note this testing requirement on their fuel oil non-availability reports submitted to the USCG and EPA. In addition the report should include an estimate of the delay for fuel switchover related to fuel testing. This does not alleviate the vessel of the requirement to submit fuel oil non-availability reports to the USCG and EPA, nor does it relieve the vessel of the requirement to locate and begin using compliant fuel prior to entering the ECA.

As the ECA fuel oil sulfur requirements become a routine part of voyage planning, it is expected that vessel operators will locate worldwide fuel suppliers and/or develop operating standards that facilitate compliance with ECA fuel oil sulfur requirements. In other words, use of non-compliant fuel within the ECA is the exception rather than the rule. Additional information on this topic can be found in the EPA's Interim Guidance on the Non-Availability of Compliant Fuel Oil for the North American Emission Control Area.

What vessels must comply with the bunker delivery note and fuel oil sample/ storage requirements of MARPOL Annex VI Regulation 18 Paragraphs 8.5 & 6 and 8.1?

Only vessels over 400 GT on international voyages must comply with the bunker delivery note and fuel oil sample storage/ testing requirements of MARPOL Annex VI Regulation 18 Paragraph 8.1. Other vessels do not have to comply with these fuel oil sample storage and testing requirements but are not relieved from compliance with the fuel oil sulfur requirements of the ECA.

Updated for 10/31/2012

Do the ECA restrictions apply to waste oil sludge burned in incinerators? (10/31/2012 updated response)

The use of an incinerator to incinerate sludge, including sludge with a sulfur content exceeding 1.00% generated on board ship is permitted by regulation 16 of MARPOL Annex VI, including within the ECA.

Do the requirements of the ECA apply to MODUs?

Vessel emissions directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources are detailed in MARPOL Annex VI Reg 3.3.1.

Fixed and floating drilling rigs and other platforms are required to comply with the provisions of MARPOL Annex VI, Regulations for the Prevention of Air Pollution from Ships, per Chapter 1, Reg 1: The provisions of this Annex shall apply to all ships, except where expressly provided by otherwise in regulations 3, 5, 6, 13, 15, 16, and 18 of this Annex.

For the purposes of this regulation, fixed and floating drilling rigs and other platforms means Mobile Offshore Drilling Units (MODU's) and FPSO's, involved in the exploration, exploitation and associated offshore processing of sea-bed mineral resources.

Fixed and floating drilling rigs (ex. MODUs) and other platforms will be inspected. Per Chapter 2, Regulation 5; every ship of 400 gross tonnage and above and every fixed and floating drilling rig and other platforms shall be subject to the surveys specified in this Annex.

Fixed and floating drilling rigs and other platforms will receive an IAPP certificates. Per Chapter 2, Regulation 6; an IAPP Certificate shall be issued, after an initial or renewal survey in accordance with the provisions of regulation 5 of this Annex, to:....“(2) platforms and drilling rigs engaged in voyages to waters under the sovereignty or jurisdiction of other Parties.”

While a fixed or floating drilling rig or platform is “engaged in voyages” as described in Regulation 6, it is required to meet the requirements of MARPOL Annex VI. Emissions directly arising from fixed or floating drilling rig or platform's engagement in exploration, exploitation and associated offshore processing of sea-bed mineral resources are exempt from the MARPOL Annex VI regulations. (see Reg 3 for list of exempted emissions)

For example, a drill ship traveling from Norway is required to have an IAPP and meet all applicable regulations while engaged in a voyage to U.S. waters.

What exemptions are in place for MODUs?

Chapter 1, Regulation 3 allows for exceptions and exemptions.

Regulation 3.3.1: "Emissions from sea-bed mineral activities" Emissions directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources are, consistent with article 2(3)(b)(ii) of the present Convention, exempt from the provisions of this Annex.

Emissions include:

3.3.1.1 emissions resulting from incineration of substances that are from the result of exploration, exploitation and associated offshore processing of sea-bed mineral resources.
.2 the release of gases and volatile compounds entrained in drilling fluids and cuttings;
.3 emissions associated with the treatment, handling or storage of sea-bed minerals; and
.4 emissions from marine diesel engines that are solely dedicated to the exploration, exploitation and associated offshore processing of sea-bed mineral resources.

3.3.2: The requirements of regulation 18 shall not apply to the use of hydrocarbons that are produced and subsequently used on site as fuel.

What about vessels using dynamic positioning?

Emissions arising from the operation of Dynamic Positioning equipment do not fall under the Regulation 3.1 exemption, whether the vessel is transiting to location or is maintaining position on location during exploration, exploitation and associated offshore processing of sea-bed mineral resources.

Are vessels in "innocent passage" through an ECA required to shift to LSFO?

Example:

*A vessel will be passing by Key West from Panama en route a discharge port in Europe.
The vessel's port of departure is not within the NA-ECA.
The vessel's port of destination is not within the NA-ECA.
The vessel will make no stops en route while inside the NA-ECA.
While passing by within 200 NM of Key West (inside the NA-ECA) does the vessel have to switch over to LSFO?*

USCG/EPA response:

MARPOL Annex VI, Regulation 14.4 provides in relevant part that while ships are operating within an Emission Control Area, the sulfur content of fuel oil used on board ships shall not exceed 1.00% m/m after August 1, 2012. There is no "innocent passage" exception or exemption contained in Regulation 1 (applicability) or in Regulation 3 (Exception/Exemption) of Annex VI or in section 1902 of the Act to Prevent Pollution

from Ships for ships. Additionally, Section 1912 of APPS states that any action taken under APPS shall be taken in accordance with international law."

Put another way, vessels operating in an established ECA are required to burn compliant fuel regardless of the vessel's final destination.

Is it expected that the requisite sample be taken in accordance with the 2009 Guidelines on Fuel Sampling for Compliance with MARPOL Annex VI (MEPC.182(59)) or would a sample provided by the bunker supplier be sufficient?

USCG/EPA response:

The 2009 Guidelines on Fuel Sampling for Compliance with MARPOL Annex VI (MEPC.182(59)) is intended to ensure that the representative sample corresponds to the fuel oil delivered/received. The representative sample is required to be sealed and signed by the supplier's representative and the master or officer in charge of the bunker operation on completion of the bunkering operations (see MARPOL Annex VI, regulation 18.8.1). Nothing prohibits the use of other sampling techniques but whatever sampling method is used (sample provided by the bunker supplier or otherwise), the master or officer in charge of the bunker operation is responsible for ensuring that the representative sample retained onboard for compliance with Annex VI (18.8.1) accurately reflects the fuel that was received. The 2009 Guidelines on Fuel Sampling for Compliance with MARPOL Annex VI (MEPC.182(59)) is one recognized way of collecting a representative sample* for accompanying the bunker delivery note required under MARPOL Annex VI, regulation 18.8.1.

*Definitions provided by MEPC 182(59):

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

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

If engine maintenance is being performed prior to and while in the ECA zone, then repair/maintenance is completed prior to exiting the ECA zone, can the engine be started to test, while still in the ECA zone?

MARPOL Annex VI, Reg. 14.6 - "...a written procedure showing how the fuel oil changeover is to be done, allowing sufficient time for the fuel oil service system to be fully flushed of all fuel oils exceeding the applicable sulfur content specified in paragraph 4 of this regulation (Reg. 14) prior to entry into an emission control area." The U.S. Government (U.S. Coast Guard and Environmental Protection Agency) interprets this to mean that machinery in operation or subject to being placed into operation would be

flushed of all non-compliant fuel oil prior to entering the U.S. established ECAs. This would include advanced preparation (flushing of fuel oil lines) for performing scheduled maintenance on an engine while underway or in port within an ECA. This process/procedure specifically addressing the flushing of the fuel oil lines prior to performing scheduled maintenance should be captured in the vessels Safety Management System and/or the written change over procedures.

MARPOL Annex VI, Reg. 3.1 states: Regulations of this Annex shall not apply to: (3.1.1) - any emission necessary for the purpose of securing the safety of the ship or saving life at sea; or (3.1.2) - any emission resulting from damage to a ship or its equipment: (3.2.2.1) - provided that all reasonable precautions have been taken after the occurrence of the damage or discovery of the emission for the purpose of preventing or minimizing the emission. Additionally, MARPOL Annex VI, Reg. 5.5 - Whenever an accident occurs to a ship or a defect is discovered that 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. Maintenance performed on machinery/equipment due to a casualty or failure (unscheduled maintenance) which was not capable of being flushed w/compliant fuel oil prior to entering/operating in a U.S. established ECA: would not be restrict from being started and/or tested utilizing the residual fuel oil remaining in the line after completing repairs in order to verify the engines operational condition. With the exception of needing the machinery/equipment in an emergency situations (no restrictions), once the engine is tested and verified operationally OK, the U.S. Government expects that the change-over to compliant fuel oil will be completed allowing the remaining fuel oil system to be flushed with compliant fuel oil. The U.S. Government expects equipment to be placed into a stand-by status after completing repairs would be operated for a sufficient amount of time to flush the remaining fuel system with compliant fuel oil, prior to securing.

Is it necessary to start and flush the stand-by engines prior to entering the ECA zone?

MARPOL Annex VI, Reg. 14.6 - "...a written procedure showing how the fuel oil changeover is to be done, allowing sufficient time for the fuel oil service system to be fully flushed of all fuel oils exceeding the applicable sulfur content specified in paragraph 4 of this regulation (Reg. 14) prior to entry into an emission control area." The U.S. Government (U.S. Coast Guard and Environmental Protection Agency) interprets this to mean that machinery in operation or subject to being placed into operation (stand-by engines) would be flushed of all non-compliant fuel oil prior to entering the U.S. established ECAs. This process/procedure specifically addressing stand-by engines should be captured in the vessels written change over procedures and probably more so in the Safety Management System. In addition to meeting the ECA requirements and probably more importantly when changing from one fuel oil source to another, the SMS should provide for specific measures aimed at promoting the reliability of such equipment of systems (critical equipment) (ISM Code 10.3); which may be to operate the equipment effected by this process (change-over) to ensure that the essential (stand-by)

equipment is ready for immediate use and this process (fuel oil change-over) did not inadvertently effect the readiness/reliability of the equipment.

The memorandum of understanding (MOU) between the EPA and USCG states that “USCG performs ship inspections and examinations during the course of flag State and port State examinations”; can you elaborate on what that means precisely? Will every vessel entering the ECA be inspected or will inspections be random? If random, with what regularity will vessels be inspected? Do compliance verifications occur only in port? What is the formal procedure that vessel operators will expect to undergo?

The USCG may check for ECA compliance during the course of normally scheduled port state control exams, domestic vessel inspection, and uninspected vessel safety examinations. Separate exams to verify ECA compliance will generally not be conducted. USCG port state control examiners, marine inspectors and boarding officers attend vessels for a variety of purposes both in port and at sea. Vessel operators should be prepared to demonstrate compliance with the ECA.

What is the penalty for noncompliance and how is it assessed? Do penalties become more severe if a vessel/operator is found to be in violation on more than one occasion?

Violations of MARPOL in U.S. waters are governed by the provisions of the Act to Prevent Pollution From Ships (33 U.S.C. §1907(9)(b)). If a vessel is found not in compliance, civil penalties of up to \$25,000 per day could be assessed. Each day of non-compliance constitutes a separate violation.

Can the USCG or EPA issue exemptions or waivers from the ECA fuel sulfur requirements due to port closures or fuel supply disruptions caused by a natural disaster (hurricane, flood, etc.)?

Port closures or fuel supply disruptions caused by a natural disaster can result in some vessels exhausting their on board supplies of low sulfur fuel oil. This may cause some those vessels to shift to higher sulfur fuels not meeting the requirements of MARPOL Annex VI Regulation 18 and U.S. Environmental Protection Agency regulations at 40 CFR 1043.

MARPOL Annex VI Regulation 18 and 40 CFR 1043 do not include waiver or exemption provisions for this situation. Fuel sulfur content waivers issued by the EPA during natural disasters are promulgated under specific Clean Air Act authority and do not include ECA marine fuels.

Vessels that can no longer comply with the fuel sulfur content limits for the North American Emission Control Area (ECA) must submit Fuel Oil Non-Availability Reports to the EPA. These reports to the EPA should detail the vessel's original plan to comply

with the ECA requirements and specifically reference the impact that the natural disaster and related port closures or fuel supply disruptions had on their voyage and port call.

EPA's guidance and procedures for preparing fuel oil non availability reports may be found on the EPA's website at <http://www.epa.gov/compliance/resources/policies/civil/caa/mobile/finalfuelavailabilityguidance-0626.pdf>. The reports shall be sent to marine-eca@epa.gov and HQS-PF-fldr-ECA-Foreign@uscg.mil

Updated for 12/03/2014

On any given day, thousands of ships are cruising, or anchored, within the US emission control area. How will the US Coast Guard logistically oversee such a large number of vessels to guarantee compliance with EPA guidelines starting January 2015?

This regulation is no different than any other regulation. We ensure compliance by scheduled and unscheduled examinations and inspections. In the case of the ECA we may also rely on remote sensors to help identify vessels that may not be in compliance. We are incorporating compliance checks with the new ECA standard into our ongoing compliance inspections and we require non-compliant vessels to come into compliance when we discover deficiencies. Non-compliant vessels may also be subject to fines.

What about vessels that call the US after 1st Jan 2015 that do not have the fuel oil tank capacity to store 0.1% low sulphur fuel for the duration of their stay in US ports and within the 200 miles range, or those that cannot bunker the low sulphur at the last port. Will they be able to file a Fuel Oil Non Availability Report and be exempt, depending on the situation?

Based on the extensive interactions we have had with industry, we believe that ships will have adequate tank capacity; voyage planning should include measures to ensure an adequate supply of compliant fuel. Fuel Oil Non Availability Reports, or FONARS, are an acknowledgement of non compliance but not a pass. The EPA owns the FONAR process and the EPA webpage on FONARs provides the most current guidance. The main point to address is whether a ship we are inspecting is using the proper fuel and, if it does not, why is the ship not using the proper fuel? Answers to this question will factor into our compliance and enforcement strategy for such a vessel. In general, yes, it will be case-by-case. However, if a vessel has no tank capacity because the owner/operator choose to use all the available tank volume for higher sulfur fuel, that may be considered as a case of poor planning.

Questions awaiting answers from EPA or USCG:

These questions have been received by the USCG and EPA. Both agencies are currently researching and coordinating a response to be included in the next revision to this document.

What kinds of oils are straight distillate fuels, fuel oil with viscosity less than 11 centistokes in EPA's instruction?

If the vessel does not have distillate fuels which meet the definition of an ECA compliant fuel oil (the 1.00% sulfur ECA standard) but the vessel has fuel oil with viscosity less than 11 centistokes which meet that definition, must the vessel use the oil with viscosity less than 11 centistokes?

If the vessel does not have oil which meets the definition of an ECA compliant fuel oil (the 1.00% sulfur ECA standard) and cannot take bunkers and also does not have fuel oil with viscosity less than 11 centistokes which meet the definition, is the FO NON-COMPLIANCE AND NON-AVAILABILITY REPORT required by EPA?

With respect to low sulfur fuel oil availability, the MOU states that the EPA “will maintain a register of local suppliers of fuel oil”; where can this register be found?