

Issue Date: 27 February 2015

USCG Sector New Orleans Requirements for Vessels Operating on Low Sulfur Fuel Oil

ECA Entry: In accordance with MARPOL Annex VI, Regulation 14.4 and Title 40 CFR 1043.60, the sulfur content of fuel oil used on board ships operating in the North American Emission Control Area (ECA) shall not exceed 0.1%. The North American ECA begins 200 Nautical Miles Offshore.

For vessels bound for ports on the Lower Mississippi River (LMR), the Captain of the Port for the Port of New Orleans has issued <u>two</u> Marine Safety Information Bulletins.

(1)

US Coast Guard Sector New Orleans Marine Safety Bulletin Volume XV Issue: 011

"North American Emission Control Area (NA-ECA)

Low Sulfur Fuel Oil Changeover Concerns"

Date of Issue: 12 January 2015

<u>Summary of Requirements</u>: Those vessels required to conduct a NA-ECA related fuel changeover after entering the Vessel Traffic Service Lower Mississippi River Area as defined in 33 CFR 161.65(a) have three options:

- 1. Utilize, for the duration of their operation while in the Vessel Traffic Service Lower Mississippi River Area, the fuel being used upon entering the VTS Area*;
- 2. Employ tugs of adequate horsepower to the satisfaction of the attending pilot if the NA-ECA fuel changeover takes place while underway. Note: A vessel employing this option should expect the CG to issue a COTP Order under the authority noted in 33 CFR 160.111(c) mandating the use of tugs; or
- 3. Conduct and fully complete any required NA-ECA fuel changeover operations dockside or at anchorage. Vessel operator shall allow sufficient time for main engines to completely cycle the LSFO through the propulsion system and ensure the engines are performing properly before getting underway.

*Note: If a vessel chooses to enter and operate on the Vessel Traffic Service Lower Mississippi River Area using non-compliant fuel, the COTP will notify the EPA and continue to take appropriate enforcement action in accordance with existing CG policy regarding the use of non-compliant fuel.

The complete MSIB is attached.



Issue Date: 27 February 2015

USCG Sector New Orleans Requirements for Vessels Operating on Low Sulfur Fuel Oil (continued)

(2)

US Coast Guard Sector New Orleans Marine Safety Bulletin Volume XV Issue: 019
"Requirements for Vessel Operating on ECA Compliant Fuel"

Date of Issue: 27 January 2015

Summary of Requirements:

- 1. Vessel operators shall switch-over to compliant fuel in accordance with the approved shipboard procedures <u>BEFORE</u> entering into the North America Emissions Control Area. [Note: The Coast Guard will verify whether or not approved shipboard fuel change-over procedures were complied with during any post casualty investigation related to the use of compliant fuel.]
- 2. All vessels <u>shall</u> report to the U. S. Coast Guard *all known or anticipated* reductions in maneuverability as a result of using compliant fuel. These reports should include [but are not limited to] any main engine performance/reduction in available revolutions per minute or delayed responsiveness to engine order commands.
- 3. When ordering a Mississippi River Pilot vessel operators shall report to the pilot dispatch any change in the vessel's performance as compared to the information stated on the pilot card as a result of using compliant fuel. This same information should be immediately communicated with the pilot assigned to your vessel upon boarding during review of the pilot card information with the Master. In accordance with 33 CFR 164.11, upon boarding the vessel, the Pilot must be informed of any abnormal circumstances on the vessel that may affect its safe navigation.

The complete MSIB is attached.



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USCG Sector New Orleans Requirements for Vessels Operating on Low Sulfur Fuel Oil (continued)

Recommendations for Safe Fuel Change-Over

Preventing Loss of Propulsion

It is recommended each ship crew conduct a "trial" fuel switching within 14 days prior to entering ECA waters: main and auxiliary engines should be operated no less than (4) hours on low sulfur fuel oil (LSFO). This may help identify any fuel switching problems.

The purpose of this Bulletin is to increase awareness of recent loss of propulsion cases and provide general guidance, based on lessons learned, to help prevent future incidents found to be related to fuel switching.

Advanced planning and preventive maintenance are critical to the proper operation of a vessel's main engine and prevention of losses of propulsion. In order to manage risk and improve safety, vessel operators should:

Maintain:

- Ensure manufacturer's technical publications are onboard and sufficient equipment/spare parts are available to perform routine preventive maintenance;
- Establish a rigorous inspection and maintenance schedule;
- Ensure engine components are maintained in serviceable condition and operated per manufacturer's guidelines, particularly start air valves and fuel system seals, gaskets, flanges, fittings, brackets and supports;

Train:

• Conduct initial familiarization and periodic crew training on pertinent systems and IMO/U.S./State requirements;

Check Fuel Systems:

- Exercise tight control, when possible, over the quality of fuel oils received;
- Ensure fuel system components are operational, including flow indicators, pressure/temperature alarms, etc.;
- Ensure a detailed fuel system diagram is available and posted in vicinity of pertinent systems;

Check Air:

• Ensure start air supply is sufficient and fully charged prior to maneuvering.



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USCG Sector New Orleans Requirements for Vessels Operating on Low Sulfur Fuel Oil (continued)

Recommendations for Safe Fuel Change-Over (continued)

Improving Fuel Switching Safety

Additionally, the following guidance may assist in preventing losses of propulsion when operating on marine distillates.

Prepare:

- Consult engine and boiler manufacturers for fuel switching guidance, and base ALL fuel switching procedures on manufacturer recommendations, including but not limited to fuel coolers, segregated fuel tanks, changes in piston oil, fuel sampling and testing, recommended time to clear fuel lines and returns, and any other requirements specified by the manufacturer.
- Establish detailed written fuel switching procedures/checklists and ensure procedures are followed. Include fuel rack adjustments to account for potential pressure differentials between residual fuel oil & distillates:
- Establish written procedures regarding speed limitations and required engine response times on marine distillates;
- Complete fuel switching procedures and engine testing (ahead/astern) well before entering restricted waters or traffic lanes;

Check Viscosity:

Ensure proper heat management of fuel systems prior to, during, and after fuel switching to
maintain minimum viscosity values and ensure fuel viscosity does not drop below engine
manufacturer specifications; and

Monitor:

• Establish parameters for accelerated preventative maintenance of engine/fuel system components, monitor for accelerated wear, and re-evaluate maintenance period intervals.

Ronald W. Branch Captain, USCG (Ret.)

President, Louisiana Maritime Association

Attachments: USCG Sector New Orleans MSIB Volume XV, Issues 011 & 019

UNITED STATES COAST GUARD SECTOR NEW ORLEANS

MARINE SAFETY INFORMATION BULLETIN

Volume XV Issue: 011

TIME: 1300

DATE: 1 2 JAN 2015

North American Emission Control Area (NA-ECA) Low Sulfur Fuel Oil Changeover Concerns

The North American Emissions Control Area (NA-ECA) requirement to use 0.1% sulfur content fuel oil went into effect on 01 January 2015. Fuel changeover to comply with the NA-ECA elevates the risk of propulsion loss and vessel operators are reminded that proper maintenance and fuel changeover procedures lower this risk. Vessel operators are encouraged to review ISO Standard 13613, "Ships and Marine Technology maintenance and testing to reduce losses in critical systems for propulsion", sections 3.3.5 and 3.3.6 "fuel switching" for guidance on fuel changeover.

Sector New Orleans has been contacted by senior members of the local maritime industry, flag state representatives, and foreign vessel masters who expressed concern regarding an elevated risk of propulsion loss associated with conducting NA-ECA fuel changeover procedures while navigating in port on restricted waters. The elevated risk of propulsion loss/irregularity associated with conducting a NA-ECA fuel changeover while underway in the Vessel Traffic Service Lower Mississippi River Area has been determined by the COTP to be a Hazardous Condition as defined in 33 CFR 160.204 and shall be reported to the USCG IAW 33 CFR 160.215.

Vessels complying with the new NA-ECA requirements should complete all required fuel changeover procedures well before entering the Lower Mississippi River. However, a number of vessels have entered the Lower Mississippi River since 01 January 2015 which needed to conduct a NA-ECA fuel changeover in port as result of either entering with compliant fuel but not having enough to make both the inbound and outbound transit or not having been able to obtain compliant fuel in previous ports and subsequently being able to obtain compliant fuel in the Greater New Orleans area after entering port.

Due to the concerns regarding an increased risk of propulsion loss/irregularities associated with fuel changeover operations associated with NA-ECA compliance within restricted waters noted above, the COTP has determined that a vessel required to conduct a NA-ECA related fuel changeover after entering the Vessel Traffic Service Lower Mississippi River Area as defined in 33 CFR 161.65(a) has three options:

- 1. Utilize, for the duration of their operation while in the Vessel Traffic Service Lower Mississippi River Area, the fuel being used upon entering the VTS Area;
- 2. Employ tugs of adequate horsepower to the satisfaction of the attending pilot if the NA-ECA fuel changeover takes place while underway. Note: A vessel employing this option should expect the CG to issue a COTP Order under the authority noted in 33 CFR 160.111(c) mandating the use of tugs;

or

3. Conduct and fully complete any required NA-ECA fuel changeover operations dockside or at anchorage.

UNITED STATES COAST GUARD SECTOR NEW ORLEANS

MARINE SAFETY INFORMATION BULLETIN

Volume XV Issue: 011

TIME: 13 ØØ

DATE: 1 2 JAN 2015

North American Emission Control Area (NA-ECA) Low Sulfur Fuel Oil Changeover Concerns

Note: If a vessel chooses to enter and operate on the Vessel Traffic Service Lower Mississippi River Area using non-compliant fuel, the COTP will notify the EPA and continue to take appropriate enforcement action in accordance with existing CG policy regarding the use of non-compliant fuel.

Contact the Sector New Orleans Port State Control Branch if additional information or clarification is required.

Coast Guard Sector New Orleans Port State Control: (504) 365-2361 pscnola@uscg.mil Vessel Traffic Center Lower Mississippi River: VHF Ch: 11, 12, 05A, (504) 365-2514 Coast Guard Sector New Orleans Command Center: (504) 365-2200

CAPTAIN P.C. SCHIFFLIN
Captain of the Port New Orleans

For a current list of MSIB's within the COTP New Orleans Zone click: https://homeport.uscg.mil/nola under "Safety and Security"

UNITED STATES COAST GUARD SECTOR NEW ORLEANS

MARINE SAFETY INFORMATION BULLETIN

Volume XV, Issue 19

TIME: 1415

DATE: 27 FEB 2015

Requirements for Vessels Operating on ECA Compliant Fuel

In accordance with MARPOL Annex VI, Regulation 14.4 and Title 40 CFR 1043.60, the sulfur content of fuel used on board ships operating in the North American Emission Control Area shall not exceed 0.1%.

For vessels bound for ports on the Lower Mississippi River, the Captain of the Port in New Orleans has issued the following requirements:

- 1. Vessel operators shall switch-over to compliant fuel in accordance with the approved shipboard procedures <u>BEFORE</u> entering into the North America Emissions Control Area. [Note: The Coast Guard will verify whether or not approved shipboard fuel change-over procedures were complied with during any post casualty investigation related to the use of compliant fuel.]
- 2. All vessels <u>shall</u> report to the U. S. Coast Guard all *known or anticipated* reductions in maneuverability as a result of using compliant fuel. These reports should include [but are not limited to] any main engine performance/reduction in available revolutions per minute or delayed responsiveness to engine order commands.
- 3. When ordering a Mississippi River Pilot vessel operators shall report to the pilot dispatch any change in the vessel's performance as compared to the information stated on the pilot card as a result of using compliant fuel. This same information should be immediately communicated with the pilot assigned to your vessel upon boarding during review of the pilot card information with the Master. In accordance with 33 CFR 164.11, upon boarding the vessel, the Pilot must be informed of any abnormal circumstances on the vessel that may affect its safe navigation.

Additionally, vessel operators which enter port without compliant fuel on board and subsequently acquire compliant fuel while in the Mississippi River shall comply with the operating requirements noted in U.S. Coast Guard Sector New Orleans Marine Safety Bulletin Volume XV Issue: 011 - "North American Emission Control Area (NA-ECA) Low Sulfur Fuel Oil Changeover Concerns".

For further information, contact the following:

Coast Guard Sector New Orleans Command Center: (504) 365-2200

Coast Guard Sector New Orleans Port State Control: (504) 365-2361 or 2362

CAPT P. C. SCHIFFLIN

Captain of the Port New Orleans