INTERNATIONAL MARITIME ORGANIZATION

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ANY OTHER BUSINESS

Safety Implications arising from the supply of "Out of Specification" Marine Fuels

Submitted by ICS

SUMMARY

Executive summary:	This submission provides information regarding recent cross industry consideration of the potential safety implications arising from the supply of "Out of Specification" marine fuels
Strategic direction:	5.2
High-level action:	5.2.1
Planned output:	
Action to be taken:	Paragraph 18
Related documents:	MSC.286(86)

Introduction

1 ICS has recently coordinated two cross industry meetings on the topic of Safety and quality of Bunker Fuels. During those meetings representatives from across the shipping industry have reported a number of concerns relating to the supply of poor quality fuel which can lead to significant safety implications for the ship.

Background

2 It is clear both from cross industry discussions and from information provided by fuel testing establishments that levels of non-compliance with respect to both quality and safety parameters for marine fuels are steadily increasing. Specific factors contributing to this situation include:

- Increasing levels of cat fines due to increased demand for low Sulphur fuels which in turn leads to, for example, increased use of slurry oil as cutter stock
- Increasing pressures on fuel supply, particularly for low Sulphur fuels.
- Increasing numbers of incidents where fuels with a flashpoint less than the IMO minimum requirement are being offered as marine fuel.

Sampling, testing and reporting of out of specification fuels

3 ICS considers that there is a need for more consistent reporting of problems to IMO by Port States. Although this approach should already be in place, it is understandable that Port States may be reluctant to carry the responsibility of policing this matter due to apparent cost.

4 When a ship is supplied with non-compliant fuel, the Port State should notify the flag State and IMO. However, in reality there are concerns and reports of ships being penalised. For example, in some ports if an operator refuses to sign up to inflexible pre-delivery conditions from an individual supplier, then the ship may in effect be black listed by other suppliers in the port.

5 Operators report that IMO guidance on fuel sampling is often not being applied. Furthermore the IMO requirement for provision of Material Safety Data Sheets (MSDS) for fuels is often being circumvented by the provision of generic MSDS sheets.

6 IMO guidance on bunker delivery notes and fuel oil sampling is provided in MEPC.1/Circ.508. IMO guidelines for sampling of fuel oil for determination of compliance with MARPOL Annex VI are provided in MEPC.182(59).

Fuel Quality

7 Operators have expressed concern relating to certain suppliers refusing to supply to the 2012 version of the ISO 8217 standard and instead only supplying to the 2005 version;

8 Bunker suppliers resist testing on board ship, with, for example, even the required MARPOL sampling at the receiving ship's manifold being under pressure to be taken on the barge for alleged reasons such as "health and safety of access".

Catalytic Fines

9 Increasing levels of cat fines are being reported, particularly in relation to low Sulphur fuels which are often subject to increased use of blending with cutter stock containing high levels of slurry oil. In addition there is on-going pressure for optimisation of refinery efficiency. This is compounded by an assumption that excessive cat fines can simply be removed on board using the ship's fuel purification equipment.

10 Ship operators are finding it increasingly difficult to purify fuel by removing cat fines to the extent needed as fuel is regularly being supplied with levels of cat fines in excess of the relevant ISO standard which itself allows levels significantly in excess of the requirements for modern engines on the assumption that on-board purification will take place. Furthermore, given the excessive levels of contaminants being experienced, there is a problem with some fuel purification systems being required to operate at much higher capacity than was originally intended. There is additional concern over the settling and service tank capacity currently being provided on some ship designs.

Low Flashpoint Fuels

11 During the recent cross industry discussions it has been identified that there has been an increase in incidents where fuel oils with a flashpoint significantly lower than the minimum SOLAS requirement of 60^{o}C (SOLAS II-2, Reg. 4(2)) have been delivered.

12 Noting the on-going implementation of Emission Control Areas and the impending further reduction of the allowable upper limits on Sulphur content in response to the requirements of MARPOL Annex VI, further increase in the number of incidents can be anticipated.

13 In response to recent incidents ICS issued a safety notice to its members advising that in the event of determining that a non SOLAS compliant, low flashpoint fuel is on board, appropriate actions to consider would include:

1. Immediately contacting the classification society to agree any additional safety precautions to be taken; and
2. Reporting the situation to the P&I club also, confirming that the safety precautions recommended by the classification society have been implemented

Alternative Fuels

14 Due to the introduction of increasingly rigorous regulatory requirements for fuels that will have both a reduced environmental impact and contribute to the on-going focus on energy efficiency of ships, there is a strong tendency to consider the use of alternative fuels. These alternatives are already under active consideration/trial (e.g. Methanol) and in some cases have already been introduced (e.g. LNG) as highlighted by the development of the draft IGF Code.

15 As such fuels become more common it will be essential to ensure that fuel supplied on board is safe for use, not only in the case of innovative fuels but also to ensure that whilst, for example, ships designed and certified for the use of lower flashpoint fuels can be supplied with such fuel, other ships are supplied with fuel verified as being safe for use on those ships.

Recent Initiatives in two major ports

16 The industry welcomes recent initiatives taken by a small number of port authorities, for example the initiatives in Singapore including strong encouragement of the use of mass flow meters. Such initiatives provide an initial move towards beginning to address some of the relevant concerns. It is also understood that the Port of Rotterdam has commenced work on a “Bunker Covenant”. However, ICS believes that to provide assurance of safety within the bunkers supply chain, there is a need to establish an international requirement for the verification of the safety related parameters of the fuel supplied.

17 The verification of relevant safety parameters for fuel being supplied to ships would be greatly facilitated by the development of unified IMO guidance on sampling and testing of fuel before it is supplied on board. Ideally shore based random inspection and testing. This has traditionally disregarded as an option on the grounds that IMO cannot prescribe shore based activity. However we have the precedents of the IMDG, IMSBC, and IBC Codes which set International standards and requirements that must be satisfied before the specific substances addressed can be placed on board a ship. This has been done in the interests of the safety of the ship and its crew. ICS believes that the same approach is necessary in the case of marine fuels.

Way Ahead

18 ICS suggests that the consideration should be given to development of the following items:

a. Unified IMO guidance on sampling, verification and documentation of fuel supplied on board. To cover both SOLAS and MARPOL aspects.

b. Random inspection and sampling prior to loading on board.

ICS will continue work on the proposed developments and will provide substantive proposals to a future session.

Action requested of the Committee

The Committee is requested to note the suggestions made above.

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