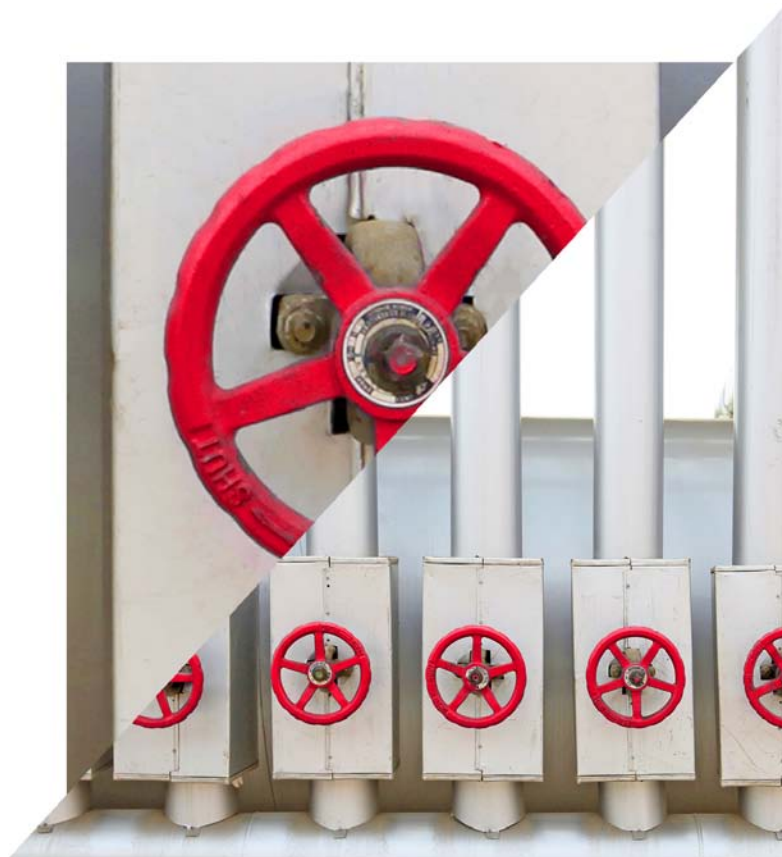


THE INTERNATIONAL MARITIME ORGANIZATION: LOOKING AHEAD

Unni Einemo, Managing Editor, Platts Bunkerworld

IBIA Annual Convention
5 November 2015, Cancun, Mexico



CONTEXT: MARPOL ANNEX VI 2008 REVISION, REGULATES:

- **Sulphur**

Regulation 14.1 and 14.4 on fuel sulphur limits (tested using ISO 8754:2003)

- **Non-specified chemical contaminants**

Regulation 18.3 fuel oil quality requirements: “Fuels derived from petroleum refining must be free from inorganic acid; may not include added substance or chemical waste that jeopardizes ship safety or adversely affects machinery performance, is harmful to personnel, or contributes to additional air pollution.”

(Based on Clause 5 in ISO 8217)

- **Appendix VI to MARPOL Annex VI**

Sulphur verification procedure regarding how to interpret test results + sulphur limits gain another decimal (e.g. 3.5% became 3.50%) to narrow down room for interpretation.

MARPOL ANNEX VI & SULPHUR SO FAR SO GOOD – NOW WHAT?

- Ships are responsible for sulphur compliance but have no control over what they receive from suppliers
- For low sulphur fuels, suppliers will have financial incentive to blend close to upper limits
- Local authority control of bunker suppliers who exceed sulphur limits has been limited
- Conflict between commercial and statutory sulphur verification procedures



ISO 4259 VS APPENDIX VI TO MARPOL ANNEX VI

- **Market standard for interpreting sulphur test results is ISO 4259**
Provides a calculation to describe, with 95% confidence, when a fuel can be considered to meet a specific limit value
- **IMO sulphur verification procedure is more stringent**
Moving the goal post?



ISO 4259 VS APPENDIX VI CONSEQUENCES & QUESTIONS

- Ships may be deemed to have non-compliant fuel based on PSC tests of MARPOL sample
- Buyer's grounds for successful commercial claim against supplier is dubious if S% result is within 95% confidence limits
- What happens if buyer seeks compensation from supplier on basis of damage caused by breach of statutory limits?
- Would PSC authorities have a successful court case against supplier if ISO 4259 confidence limits are met?
- Majority of non-compliance cases (Notes of Protest) reported to IMO have been within 95% confidence limits

ANALYSIS OF NOTES OF PROTEST (NOPS) REPORTED TO IMO DURING 2014

Bunkerworld analysis of information submitted to the IMO from the flag state administrations of Cyprus, Liberia and Norway for H1, 2014 and by Cyprus and Liberia for H2, 2014 where ships' test results exceeded MARPOL limits.

- H1, 2014: Only 19.5% of sulphur content objections exceeded 95% confidence limits.
- H2, 2014: Only 17.6% sulphur content objections exceeded 95% confidence limits.

Period	> 3.67% S	3.5-3.67%S	>1.06% S	1-1.06% S	>0.11%S	0.1-0.11%S
H1, 2014	0.00	13.00	56.00	216.00	0.00	2.00
H2, 2014	2.00	8.00	14.00	67.00	0.00	0.00
% of total	0.53	5.56	18.52	74.87	0.00	0.53

IBIA CAMPAIGN FOR IMO TO REVISE APPENDIX VI TO MARPOL ANNEX VI

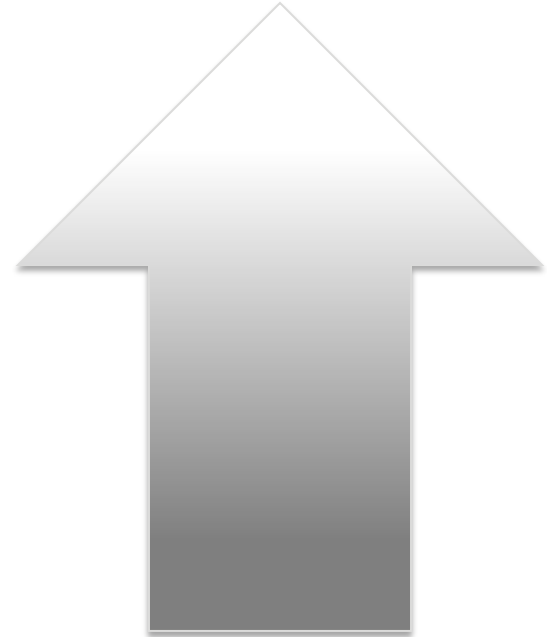
- **IBIA submission to PPR 2, January 2015**
Proposed to align the MARPOL Annex VI sulphur verification process with ISO 4259 and recognise the result of a single test as compliant as long as it falls within 95% confidence limits
- **IBIA submission to MEPC 68, May 2015**
Put forward further arguments to adopt ISO 4259 at IMO, seeking MS sponsor for 'unplanned output'
- **India submission to MEPC 68, May 2015**
In line with IBIA's proposal to PPR2
- **Norway submission to MEPC 68, May 2015**
Argued for status quo



ADOPTING ISO 4259 AT IMO

WHAT ARE THE CONSEQUENCES?

- Universal and unambiguous approach to sulphur verification in all jurisdictions
- No conflict between commercial and statutory methods (fewer NOPs)
- Cut cost and administrative burden for PSC by simplifying procedure
- Protect shipowners against unfair bias caused by statistically normal variations in test results



ADOPTING ISO 4259 AT IMO

WHAT ARE THE CONSEQUENCES?

- IMO procedure meant to encourage suppliers to blend fuels slightly below sulphur target
- Adopting ISO 4259 could tempt suppliers to blend to upper sulphur limit
- Could affect ships' ability to reach ECA compliance i.c.w. fuel changeovers



ISO4259 VS IMO SULPHUR VERIFICATION WAY FORWARD?

- Norway's call for status quo got more support than IBIA's proposal at MEPC 68
- Comeback will be hard and would need MS taking lead

Current status

Alternative solution?

- Specify sulphur content below the relevant limit when ordering fuel
- Test result exceeding ordered sulphur content +0.59R would give cause for commercial claim.

- Will buyer be willing to pay premium to order fuel with sulphur below MARPOL limits?
- Will suppliers be prepared to offer it?
- What is the legal case against supplier if ship suffers financial loss due to non-compliance?

Questions to consider

SHOULD IBIA CONTINUE ATTEMPT TO ALIGN IMO WITH ISO 4259?

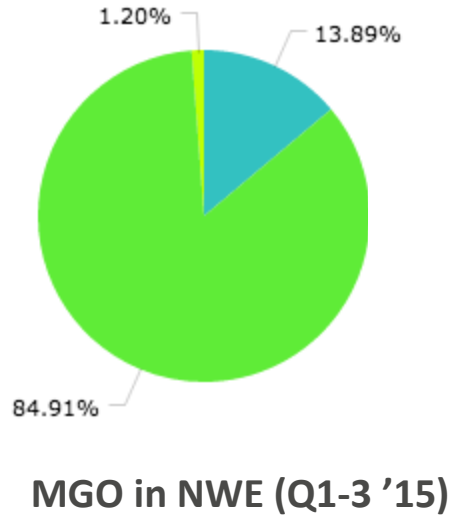
Is it worth the effort?

- must be compelling reason

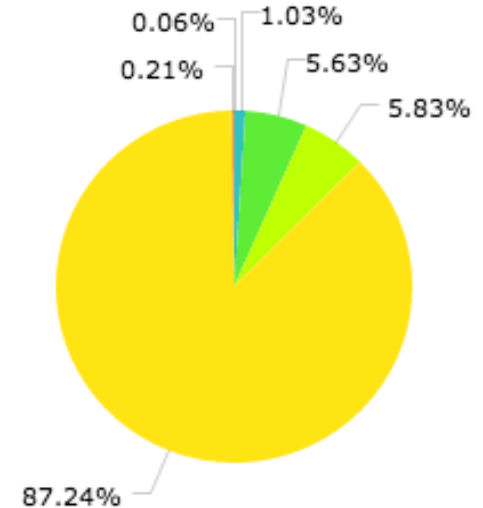
Fewer NOPs in 2015?

Less sulphur off-specs in 2015?

Global 0.50% sulphur cap = surge in NOPs?



IFO380 globally (Q1-3 '15)



MARPOL ANNEX VI & QUALITY

WHAT ARE THE ISSUES?

- Some fuel can cause operational problems on ships
- INTERTANKO submission to MEPC 62 (2011) highlighted the risk to ships (1.4% of bunkerings led to machine problems)
- Majority of cases reported in INTERTANKO submission related to chemical contamination
- Chemical contamination is not picked up in routine fuel analysis
- Growing concern about safety implications of 'off-spec' fuels gain momentum at IMO in 2014

MARPOL ANNEX VI & QUALITY DEVELOPMENTS IN 2014

ALARM OVER 'OFF-SPEC' FUEL RISK SETS OFF QUALITY DEBATE AT IMO

MEPC 66 (April)

- Joint submission from Liberia, the Marshall Islands, INTERTANKO and INTERCARGO
- Joint submission from IBIA and BIMCO

MSC 93 (May)

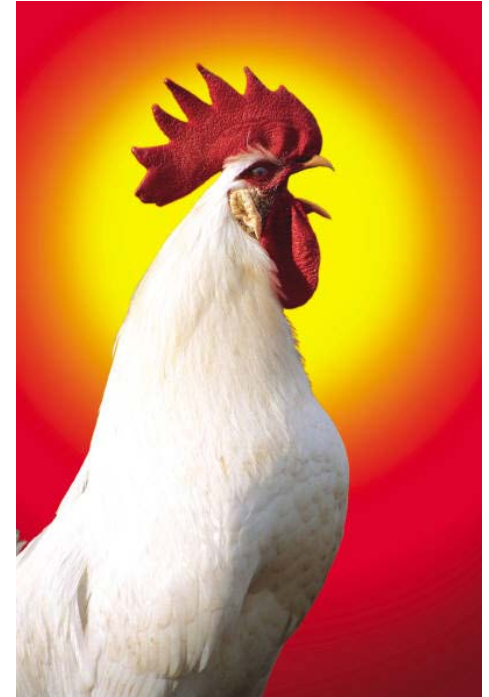
- INF paper from ICS & IPTA

MEPC 67 (October)

- Joint submission from Liberia, the Marshall Islands, ICS, BIMCO, INTERTANKO, CLIA, INTERCARGO and IPTA
- IBIA submission
- International Association of Ports and Harbors (IAPH)
- United States submission

MSC 94 (November)

- INF paper from Singapore
- US proposal to review FP limit (SOLAS regulation)



2014 QUALITY PROPOSALS

KEY OBJECTIVES & CONCERNS

Improve control of fuel quality prior to delivery to ensure ships receive bunkers that:

- comply with sulphur limits, and;
- are 'on-spec' and safe to use

Why now?

- A perception that there has been an increase in off-spec or poor quality fuels, in particular w.r.t. catalyst fines
- Operational problems related to fuel quality either happening more frequently or getting more attention
- LSFO blends for ECA use may have contributed to above trends
- Confusion between fuel quality and fuel management?

BUT HOW?

ENFORCEMENT WITH REGARDS TO SUPPLIERS APPEARS TO BE LACKING, OR AT LEAST LACKING IN UNIFORM IMPLEMENTATION.

PROPOSALS TO MEPC 66/67:

- Examine ways to strengthen implementation of the current provisions in regulation 18 of MARPOL Annex VI” and be more proactive in auditing and inspecting local bunker suppliers”
- Introduce "specific criteria and requirements for the operation of local suppliers" developed at the IMO
- Introduce a supplier licensing scheme, ban unregistered and unlicensed suppliers
- Register quality specification agreed between supplier and buyer on the BDN
- PSC to report results of investigations and follow-up actions in response to Notes of Protest

OUTCOME:

MOST OF THE CONCRETE PROPOSALS TO MEPC 67 WERE FLATLY REJECTED IN A US SUBMISSION BECAUSE:

- "The responsibility for procuring and using MARPOL Annex VI compliant fuel is the responsibility of the ship"
- Quality issue should "remain a commercial contract arrangement between the ship and the supplier"
- Majority of deliveries cause no quality disputes
- Too burdensome for many countries to set up systems to control that bunker suppliers meet criteria

Proposal to develop non-mandatory guidelines to help authorities assure that local suppliers have quality controls in place was agreed.

TOR FOR CG ON FUEL QUALITY AGREED AT MEPC 67:


1. develop draft guidance for assuring the quality of fuel oil delivered for use on board ships;
2. consider the adequacy of the current legal framework in MARPOL Annex VI for assuring the quality of fuel oil for use on board ships taking into account the outcome of MSC 94, when available; and
3. submit a report to MEPC 68.

MSC 94 agreed to forward new INF paper from Singapore and INF paper from MSC 93 to CG


FORMAT/KEY ELEMENTS OF GUIDELINES

Three Tier system mooted with a 'menu' based approach to fit local need/capacity

Level 1 - Documentation/information sharing. Proposes public 'review' platform of suppliers' performance and identifying non-complying fuel suppliers. Needs to be moderated.



Level 2 - Introduce fuel quality management systems (voluntary or mandatory) for suppliers to demonstrate control throughout supply chain.



Level 3 - Level 2 becomes mandatory requirement in supplier licensing scheme. Compliance and enforcement measures of suppliers in licensing scheme put in place.

IS THE CURRENT LEGAL FRAMEWORK OF MARPOL ANNEX VI ADEQUATE?

THE CASE FOR

- Ship master should remain responsible for buying and using compliant fuel
- Commercial contract between ship and fuel provider allows ship to instigate legal action to recover fines and damages in case of enforcement actions arising from non-compliant fuels
- MARPOL focus is preventing pollution, safe and 'fit for purpose' fuel is matter between buyer knowing what spec to order and supplier delivering it



THE CASE AGAINST

- Too much onus on ship to comply when they have no control over delivered quality
- System is reactive rather than proactively trying to prevent supply of non-compliant fuel
- Suppliers do not accept liability for ships' costs and damages
- Inadequate follow-up of NOPs by IMO and suppliers' Administrations

MEPC 68 OUTCOME: BACK TO THE DRAWING BOARD

- Very limited support for a 'menu based' three-level approach
- Majority said the current legal framework is not adequate
- Most calling for more regulation of suppliers
- CG to continue with almost identical ToR and report to MEPC 69
- IBIA is participating in this CG and has received positive feedback for a common sense approach



CG ON QUALITY: EMERGING THEMES

No consensus on adequacy of legal framework
Guidance on 'Best Practice'

Suppliers:
Quality controls
throughout the supply
chain, including testing
wherever possible

Fuel users:
Know your specs,
insist on proper
documentation from
suppliers, good fuel
handling procedures

Member States:
Implement regulations
properly and increase
control of suppliers.

(SS600)

WHERE ARE WE GOING, AND DO WE WANT TO GO THERE?

- Conflict of interest in how various parties see quality issue (owner, charterer, supplier)
- Are manageable versus critical 'off-specs' well understood?
- Are fuel management issues confused with quality issues?
- Has anybody done a cost/benefit analysis of tightening control of fuel quality prior to delivery?
- IMO's role is to provide minimum standards – commercial contracts and national regulations can go beyond
- Will non-mandatory guidelines make any difference?



EXAMPLE OF IMO GUIDELINES: MARPOL SAMPLE

- Representative fuel oil samples, taken at the time of fuel oil delivery (Annex VI Regulation 18.8.1)
- IMO guidelines call for MARPOL sample to be obtained at the receiving ship's inlet bunker manifold

Reality check...

- Open for PSC interpretation → variable practices
- Commercial samples generally taken at barge outlet manifold, or even from shore tank
- 'Here's one I prepared earlier'
- Suppliers in states that are not signatories to Annex VI may refuse to provide MARPOL sample

WHAT ELSE IS HAPPENING?

- MSC 94: IMO agreed to review the 60° C limit after a US proposal to align it with limits applicable to automotive diesel in the US (52° C)
- IGF Code coming into force in 2017 dealing with LNG
- Other low flash point fuels (below 60° C minimum stipulated in SOLAS Convention can be added to IGF Code or dealt with under 'alternative designs')
- Low FB oil fuels now to be addressed under the IGF Code. Discussions also begun on providing for methanol under the IGF Code



CONCLUDING REMARKS

- Finding consensus on how to address quality will be tough
- Discussions in CG suggest wide agreement that there is a need for 'best practice' guidelines for fuel providers and more proactive enforcement in member states
- Most sophisticated/effective guidelines would likely only be taken up by major bunkering ports
- Even ports with strict supplier requirements have off-spec fuel deliveries
- Complete control (including testing) of all bunker fuel prior to delivery would require radically changing current practices

STAY IN TOUCH!

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