

## BUNKERING PRECAUTIONS AND AVOIDANCE OF BUNKER QUALITY DISPUTES

BUNKERING OPERATIONS ARE PIVOTAL IN MARITIME LOGISTICS AND PRESENT DISTINCT RISKS AND CHALLENGES.

Each bunker operation is to be regarded as a unique event which possesses its own individual risks. Therefore, shipowners must conduct a comprehensive risk assessment of every bunker operation as part of their Safety Management System (SMS) before starting.

Disputes arising from bunker quality are multifaceted, often hindered by insufficient evidence including representative samples and fuel analysis reports. The ISO 8217 specification may not adequately detect fuels with unusual compositions or contaminants until issues arise during usage. Possible issues may include, but are not limited to, blockage of fuel filters, overloading of purifiers, sticking of fuel injection pumps, broken piston rings, and ultimately, engine shutdowns.

Even when fuel quality appears to meet specifications, further analysis may reveal unexpected contaminants, creating challenges to link them to engine damage. Furthermore, the global transition to low sulphur fuel has exacerbated the situation, leading to more variant blending for commercial reasons, which consequently may create quality inconsistencies.

To mitigate the risk of fuel-related engine damage and downtime, and to strengthen evidence for potential bunker quality claims, adopting preventive measures and procedures is essential. Additionally, gaining an understanding of key legal principles surrounding bunker supply would be highly beneficial.

## **QUALITY DISPUTES**

# RESOLVING A DISAGREEMENT ON QUALITY CAN PRESENT GREATER CHALLENGES AS COMPARED TO A QUANTITY DISPUTE.

Identifying the actual root cause can be intricate and not readily discernible. Securing legal protection via contractual agreements becomes even more critical, alongside implementing appropriate operational precautions.

#### OPERATIONAL CONSIDERATIONS

Before initiating the bunkering operation, shipowners should verify and reasonably ensure compliance with the following:

- Compliance with Safety Management System (SMS):
   Adherence to the owner's SMS procedures for bunkering, including the completion of thorough risk assessment prior to the operation.
- Bunker plan: The ship should prepare a comprehensive bunker plan outlining key details such as the designated bunker tank(s), the order for filling these tanks, allocations for various fuel grades, recommended transfer rates, procedures for topping up, and the status of the fuel oil overflow tank (usually kept empty during bunkering). Whenever possible, take the new bunkers into empty tanks. Thoughtful and meticulous planning can help minimise risks associated with cross-contamination.
- Bunker survey: If appointed, the surveyor should perform an independent investigation to identify the cause of any quality issues and discrepancies, if present. Additionally, they would also assist in the sampling and sealing process.
- Recording & documentations: The ship should document all relevant/significant events during the bunkering operation, including start/stop times, flow rates and any unexpected stoppages.

- Preparation, inspection, monitoring: Thoroughly plan for
  the preparation of the receiving bunker tank(s),
  prioritising tasks such as inter-tank transfers if
  operationally critical, before bunkering to ensure
  alignment with industry standards. Conduct careful
  inspections to verify the suitability and condition of
  bunker tanks. Maintain vigilant monitoring throughout
  bunkering. Before and after bunkering operations,
  visually identify and inspect non-nominated bunkering
  tanks to rule out any 'cargo passing' that may be caused
  by faulty valves or other issues, which could lead to
  cross-contamination and quality concerns.
- Additional precautions: If 'off-spec' bunkers have been delivered, a case-by-case approach should be followed, considering the severity and type of specification that is 'off'. This involves evaluating compliance with international safety regulations. Consulting experts, conducting additional lab tests, and engaging with engine manufacturers are essential steps. In some cases, flag class authorities may also be involved.
  - Should the chief engineer have any concerns or find the results unsatisfactory, a letter of protest must be issued, clearly stating the reason, and an entry must be made in the engine logbook to document the concern / circumstances, do not sign the Bunker Delivery Note (BDN). Instead, the ship should promptly contact the owners, charterers, and/or the local Club's correspondent to determine the next course of action.

#### CONTRACTUAL CONSIDERATIONS

Prioritising due diligence in supplier selection entails thorough vetting procedures and reputation assessments. Understanding the terms outlined in the Charter Party, particularly bunker clauses, is crucial. Contracts should clearly specify the required fuel specifications for delivery. In the event of a quality dispute, designating the "referee" sample holding contractual significance is vital.

#### ISO 8217 STANDARD

ISO 8217 sets specific parameters to determine whether the delivered bunker fuel can be safely consumed. It is recommended to apply the latest version of the ISO 8217 standard to best protect

the owner's interests. Older versions of the ISO 8217 standard are still in use but may provide less protection. Clause 5 of the ISO 8217 standard, for example, which aims to protect the owner against contamination not otherwise identified by the standard ISO 8217, varies from version to version.

However, the ISO 8217 standards, irrespective of version, still have their limitations. Ever-changing components for blending could potentially introduce new types of 'contaminants' into the fuel.

To address potential stability issues, it is advisable to consume the fuels within three months of bunkering, following proper quality testing. Since their characteristics may change during storage, fuels that meet specifications when bunkered could become off-spec when used. With the typical time bar in bunker supply contracts set at 30 days, proving such claims may become increasingly difficult for owners.

#### SAMPLING POINT & CONSIDERATIONS

The process of proper sampling and sealing is critical, especially in the context of quality disputes. The following guidelines serves to maintain the integrity of the sampling process:

- **Pre-bunkering checks:** Prior to hose connection, it is recommended to inspect manifolds and hoses for cleanliness and absence of contamination or foreign materials. Such due diligence helps prevent quality issues from the outset.
- Sealing and integrity: When sealing drip sampling points to cubitainers, employ a method that makes tampering evident through broken seals. Regular monitoring of manifold connections and seals is recommended to maintain the integrity of the sampling process.
- Sampling protocol: Typically, five samples are collected through continuous drip sampling at a designated, mutually agreed-upon, and monitored location during bunkering. These samples serve contractual purposes, though the ship or surveyor may opt to take additional samples. The different samples include:
  - 1. MARPOL Sample To prove compliance with MARPOL's sulphur regulations. It should be noted that this sample may only be removed by the vessel by or after approval from a proper authority.
  - 2. Bunker Supplier's Sample
  - 3. Ship's Retention Sample
  - 4. Ship's Laboratory Analysis Sample
  - 5. Bunker Surveyor's Sample Collected by the surveyor (if in attendance)
- **Documentation**: If additional samples are taken beyond the typical five, ensure their corresponding seal numbers are accurately recorded in the BDN as well. This step is essential for traceability and supports dispute resolution.

To strive for consistent quality across all samples, distribute the fuel homogeneously into the sample bottles through several passes (see below photos for visual guidance).







#### SEALING CONSIDERATIONS

- Number of seals: Seals involving the participation of different stakeholders typically result in enhanced security and help mitigate the risk of tampering.
- Seal application: Properly apply seals across both the cap and the body of the bottle, ensuring they pass through both sides. This method aims to ensure that the bottle cannot be opened without breaking the seal.
- Unique Identification: Seals shall be numbered uniquely, and those involved in bunker operations are preferably assigned sequential numbers. This practice aids in tracking and authenticating samples by providing an easily traceable reference.
- Documentation of seals: List the samples and their corresponding seal numbers in the BDN or a similar document of record for establishing a formal record of the sample at the time of collection. Whenever applicable, incorporate the seal numbers and sample details into other relevant documents to reinforce the traceability and accountability of the sample management process.

Adhering to proper sampling and sealing practices, along with meticulous documentation, safeguards the integrity of samples from collection to analysis, facilitating effective resolution of quality disputes for owners.



# EVIDENCE COLLECTION AND PRESERVATION

THE FOLLOWING ITEMS, DOCUMENTS AND COPIES MAY BE USEFUL FOR EVIDENCE COLLECTION TO NOT ONLY PROTECT THE SHIP'S INTERESTS IN THE MATTER BUT ALSO FACILITATE EFFICIENT PRELIMINARY INVESTIGATIONS ABOARD THE SHIP.

Please note that while this list aims to offer general assistance, it may not cover every scenario, given the diverse nature and complexities of disputes.

Therefore, it is crucial to adapt and expand this list based on the unique circumstances and challenges of each case:

- Certificate of quality/analysis: Provided by the supplier, reporting the quality standards of the bunker fuel.
- Pre/post bunker meeting & checklists: Includes
  operational and safety checklists such as, but not limited
  to, the pre-delivery safety checklist and Mass Flow
  Meter (MFM) System Seals checklist, verifying applicable
  precautions are taken before and after delivery.
- Bunker Delivery Note (BDN): This is an important document that confirms that the bunker transaction has been carried out between the supplier (seller) and ship (buyer). It is important for the BDN to document valid information in accordance with MARPOL 73/78 Annex VI Regulation 18.5 and to be retained for at least 3 years. Additionally, it is highly crucial to clearly and accurately document the seal numbers corresponding to samples on the BDN, particularly in the event of a dispute.
- Surveyor's inspection report: Contains sample report
  with clear records of seals and counter-seals
  corresponding to samples. Always personally verify the
  accuracy of the data and condition of the sample itself
  before signing an acknowledgment.
- Barge & vessel gauging report: Part of the surveyor's report, documenting gauging before and after bunkering operations for measurement and figure reconciliation.
- Photographic/video evidence: Capture relevant visuals, such as, but not limited to, manifold drip sampling point with intact seals (before/after), e.g., damaged machinery components, and foam on the surface of FO tank for thorough documentation.

- MFM calibration certificate: Verify validity and match against the MFM's serial number, if applicable.
- Gauging equipment calibration certificate: Verify validity and match against corresponding equipment serial numbers if surveyor's equipment is utilised, if applicable.
- Bunker samples: Properly labelled and sealed. Safely store and safeguard samples earmarked for the ship after distribution, as they may need to be off-loaded for further analysis.
- Letter of protest: If necessary, to be issued with the detailed circumstances and purpose clearly stated – document any issues or disputes related to the bunker operation.
- Statement of engineers: Record promptly while incident details are fresh in memory.
- Oil record book, engine log book, sludge discharge record, maintenance records, vessel consumption records, etc.: Keep thorough documentation for comparison and historical data tracking.
- Other relevant data & documents: Maintain comprehensive records of all relevant events and information as applicable for complete documentation.

Ensuring effective bunkering requires careful preparation, watchful operation, and thorough documentation to prevent and resolve quantity and quality disputes. Adhering to these guidelines may help to mitigate risks associated with bunkering operations, safeguarding ship operations and financial interests.

In all cases, if in doubt or suspicion of any malpractice or concerns about the quality of provided bunker, please contact the P&I Club's local correspondent immediately for further advice.

### FOR FURTHER INFORMATION

For further information, please do not hesitate to email lossprevention@tindallriley.com.

#### **DISCLAIMER**

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