Bunkers: a guide to quality and quantity claims
Engine damage and resultant lost time caused by bunker quality problems occur all too frequently.
Introduction

The quality of bunker fuel continues to be a source of concern to shipowners and charterers. Over the last 30 years or so, enhanced refining techniques have resulted in a decline in the quality of residual fuel and the refinery side streams used as blend components. Added to this the demand for low sulphur fuel has resulted in heavy blending and the use of inappropriate blend components. Unfortunately some marine fuels have also been used as a dumping ground for waste chemicals and organic substances that have caused serious operating problems. Engine damage and resultant lost time caused by bunker quality problems occur all too frequently.

Claims arising from these problems are in general complicated and they are often frustrated by lack of evidence, including representative samples, storage and consumption documentation and fuel analysis reports. In some cases the fuel quality appears to have met the relevant fuel specification but further extensive testing reveals the presence of unusual contaminants. Linking these to engine damage has proved difficult and it has been necessary to undertake metallurgical examination of worn or damaged components to determine causation. Preservation of damaged parts has become as important as preserving representative fuel samples.

In this publication we set out some important procedures that should be adopted in order to reduce the chances of fuel related engine damage and ship down time and provide valuable evidence should a bunker quality claim occur. We also highlight steps that can be taken to minimise the likelihood of bunker quantity claims and review some of the key legal principles relating to the supply of bunkers.
Pre - delivery checks

The ship's crew need to be instructed to check the quality of the fuel to be supplied according to the bunker delivery receipt. Although this document does not provide a full analysis of the fuel, it should contain at least the viscosity, density and sulphur content. The Chief Engineer needs to check that these meet with his requirements.

Most suppliers' terms and conditions of sale provide that sampling will be carried out on the barge and that such samples will be used to determine quality in case of dispute. Not all barges are fitted with drip sampling devices and, even where they are fitted, it is important that the ship's crew verify that they are correctly installed and operated throughout the entire delivery. If the barge has no drip sampling device and samples are drawn from the barge's tanks then, where possible, the Chief Engineer should establish that the fuel is supplied from the tanks that the samples are taken from. If the Chief Engineer is not satisfied he should issue a note of protest and make an entry in his log book. Photographs of any irregularities would provide useful evidence should a claim arise.

A competent member of the ship's crew should attend on the barge before and after the delivery to measure and record the contents of all the barge tanks. This involves sounding or ullaging the tanks, taking temperatures, establishing the barge trim and using the calibration tables to determine volumes. If possible the sounding should include the use of water finding paste to establish the amount of free water at the bottom of the tank. The density of the fuel provided on the bunker receipt may be used to find the correct conversions for volume at standard temperature and weight. If this process is carried out correctly there should be no dispute on the quantity of fuel discharged from the barge. If the Chief Engineer has any concerns that the
barge calibration tables are not correct or that the barge may have tanks that he has not been able to measure he needs to issue a letter of protest at the time and, if necessary, call an independent surveyor to examine the barge.

All shipowners are advised to use the services of a bunker testing company and to take continuous drip samples at the ship’s receiving manifold and have these tested for every delivery. The barge crew should be invited in writing to witness this sampling and be offered a part of this sample on completion of the bunkering. If the supplier refuses to witness this sampling or to receive a sample the Chief Engineer should again issue a note of protest and make an appropriate record in his log book.

The Chief Engineer should whenever possible avoid mixing fuels from different supplies. New bunkers should be loaded into empty tanks. If this is not possible then he should try to avoid 50/50 mixing of old fuel with new as this is the worst combination if the fuels are not compatible. Segregation will also prevent pre-existing fuel becoming contaminated with an off-specification new fuel. Prior to loading the Chief Engineer needs to measure and record the contents of all bunker tanks and, at the end of the delivery operation, repeat this process.

**Procedures during the delivery**

Throughout the delivery the sampling on the barge and the ship should be constantly monitored. It may be necessary to adjust the drip sampling to ensure that about 5 litres of bulk sample is collected by the end of the bunkering. Frequent checks of the loading rate and receiving tank contents need to be made to avoid spillage.

It is not unknown for a barge to deliver a slug of contaminated fuel in the hope that this will not be picked up by the drip sample, especially where the delivery is short and the barge then makes up the missing amount at the end of the delivery. The Chief Engineer should note any stops/start and then pay particular attention to the fuel delivered in that period.

**Post-delivery procedures**

All the barge tanks and ship’s tanks need to be re-measured and the quantity discharged by the barge, and received by the ship, calculated and recorded.

The barge outturn figure (mt) should be recorded on the bunker delivery receipt as this will provide the information for the invoice. If the Chief Engineer does not agree with this figure he must issue a note of protest and make a record in the log book or the oil record book. The oil record book should also state the contents of all the ship’s bunker tanks before and after the delivery.

One representative sample should be despatched immediately to the testing company.

The supplier has a duty to provide the ship with a “Marpol” sample and the seal number of this must be recorded on the bunker delivery receipt along with the seal numbers of any other samples issued by the supplier. Some shipowners take their own Marpol sample but under the Marpol regulations the official Marpol sample is that issued to the ship by the supplier. If the Chief Engineer is not satisfied that the Marpol sample was taken properly he should issue a note of protest.

All the samples and documentation from the bunkering operation must be kept in a safe location on board as it may be needed by a Port State Control officer and would provide valuable evidence in case of a dispute on quality.
Shipowners and charterers need to ensure that fuels supplied and consumed comply with Marpol and other regional regulations concerning sulphur content.

Port State Control officers may board ships in port and ask to see documentation showing that ships are compliant. This would include bunker delivery receipts, records of Marpol samples and log books showing when compliant fuels were put into use. In some ports, officers have obtained samples from ships’ bunker tanks and tested these for sulphur content and compliance. Ships can be detained and/or fined for non-compliance.

The current situation is set out below.

- Maximum sulphur content of fuels used outside restricted areas (global cap) 4.5%
- Maximum sulphur content in restricted areas (ECAs) 1.0% (Baltic Sea, North Sea and English Channel)
- Maximum sulphur content for ships in EU ports 0.1%
- California has its own regulations requiring ocean-going ships transiting to or from California to use either marine gas oil of 0.3% to 1.5% sulphur content or marine diesel oil with a sulphur content of 0.5% or less in all main engines, auxiliary engines and auxiliary boilers from 24 nm from shore. The sulphur limits are scheduled to decrease to 0.1% in January, 2012.

The ability to properly pursue or defend bunker quality or quantity claims depends on the quality of the evidence. Good record keeping is essential. If the ship maintains detailed records, log book entries and samples and the Member involves the Association in good time to allow statements to be taken, and a proper investigation conducted, then the Member will be in the best position.

The prompt appointment of the right expert is particularly important and the Association can assist in this. There is a risk that vital evidence will not be secured if an inappropriate person is appointed to visit the ship.

Typical documentation in a bunker dispute would include, ship’s log books (deck, engine and scrap logs books), oil record books, maintenance records, pre-arrival checklist, bunker start up and completion times, bunker tank contents records, consumption records (which fuel used when), bunker receipts, historic sample results, photographs of damaged parts, survey reports, class records, statements of engineers, invoices for spare parts, other costs documents and correspondence.
If there are aspects of the delivery that are unsatisfactory, a note of protest must be issued to the barge Master. The note of protest should give details of the problem and a copy should be retained on board for reference and submission to the bunker supplier.

**Evidence if problems arise**

A situation may arise where fuel has to be used before the analysis results have been received or perhaps no analysis has been carried out. Ship’s staff may experience problems treating and/or burning the fuel and engine damage may occur. In this case, it is important to document everything, with dates and times of occurrences, including when the fuels were first used and for how long they were used, which tanks have been used and when problems first occurred. Damaged components must be retained onboard and photographic/video evidence taken of any blocked filters and separators. Samples should be taken from the fuel system at various locations including before and after the separators, inlet to the main engine and after the transfer pump. Samples of any sludge or sediment from filters and separators, as well as exhaust valve and turbo charger deposits, should also be taken and sent for analysis.

The quality of the evidence and the decisions taken at the time a bunker problem arises will be crucial to a party’s success in prosecuting or defending a claim at a later stage.
**Legal issues**

**Charterparty considerations**

Under most time charterparties, the supply of bunkers is the responsibility of the charterer. The relevant provisions of the NYPE (both the 1946 and 1993 versions) and Shelltime 4 are very similar and provide that the charterer shall “provide and pay for all fuel”.
**Property in the bunkers**

In most cases, bunkers become the property of the charterer upon delivery of the ship. During the currency of the charterparty, the owner simply has the possession of the bunkers as bailee until they are purchased back by the owner upon redelivery, which transfers ownership back to the owner.

**Quantity of bunkers**

On delivery, if the ship has less bunkers on board than the minimum quantity required under the charterparty this will not entitle the charterer to refuse delivery. This is provided it does not make the ship unfit for service and that it has sufficient bunkers to sail safely to the next port. When the charterparty term qualifies the quantity of bunkers on board on delivery with the word “about”, it is the owner’s obligation to provide an honest estimate based on reasonable grounds.

With regard to the quantity of bunkers the charterer should supply, the owner is under a general duty to co-operate and to provide the charterer with all relevant information. This should include the previous and current consumption and any particular characteristics of the ship in order to allow the charterer to supply the required bunkers. The charterer, on the other hand, will not be allowed to order quantities which are not required for the performance of the chartered service in order, for example, to make a trading profit on bunker prices on redelivery.

When the charterparty makes no provision for the bunker prices to be paid on delivery or re-delivery, the market price will apply without regard to the price actually paid, although certain charterparty forms either specify the price or provide a mechanism for establishing the price. By way of example, the Shelltime 4 form (line 290) provides that: “Such prices are to be supported by paid invoices.”

The charterer has the right to select the port at which the ship is to take bunkers. If the charterer directs the ship to an unsafe bunkering place either directly or indirectly through its agent (including the bunker supplier) and this results in damage to the ship, the charterer is likely to be held liable for the losses.

**Quality of bunkers**

In terms of quality, it is generally accepted that the charterer is under an absolute obligation to provide bunkers of a reasonable quality which are suitable for the ship in question. If the charterparty includes express requirements regarding the type and grade of bunkers, the charterer will have to comply. Clause 9 (b) of the NYPE 1943 form, for example, expressly requires the charterer to supply bunkers of a quality suitable for the ship’s engines and auxiliaries and conforming to agreed specifications. Should the charterer fail to comply with the charterparty terms it may be responsible for any damage to the main engine directly caused by the use of such bunkers.

**Fit for purpose**

It is also important to note that as well as complying with contractual specifications, under English law, the fact the bunkers may comply with the basic specifications is not enough. Under the Sale of Goods Act 1979, as amended by the Sale and Supply of Goods Act 1994, the bunkers must be “fit for purpose”.

So what does ‘fit for purpose’ mean? This arose in an unreported arbitration decision in 2004, concerning a case in which bunkers had been found within specification by DNV, but had poor ignition qualities due to the fines content. The tribunal found that in addition to an express term in the charterparty there was also an implied term that the bunkers had to be fit for the purpose intended and that the poor ignition qualities in the fuel caused the damage to the engine and so could not have been fit for purpose. The tribunal accordingly found the charterer in breach and liable for the engine damage.

In that case, the engine was not unusual, in that it had no particular characteristics or requirements. However, where the engine is unusual or has particular requirements the charterer will only be liable for any damage caused if the charterer has been advised of the unusual characteristics of the engine prior to the supply of the bunkers.

**Causation**

In bunker dispute cases, it must be established whether the damage complained of to the ship was caused by the poor quality of bunkers or some other extraneous cause. The burden of proof is on the owner to establish causation and that there is a link between the bunker quality and the damage sustained to the engine. It is a high burden which, if not met, is likely to mean that an owner’s claim will fail.

The charterer has the right to select the port at which the ship is to take bunkers.
Mitigation

Even if bunkers are off specification and may have caused damage to the engine, the ship’s crew will be under a duty to mitigate any loss. This will include de-bunkering any contaminated bunkers if they cannot be blended and used. The owner will invariably seek to have the charterer arrange and pay for the de-bunkering. However, if the charterer denies liability and refuses, the owner should in mitigation consider paying the de-bunkering costs and claiming them from the charterer at a later date. This is especially important where the ship may be delayed waiting for the charterer to reach a decision on de-bunkering. In the event the owner decides to de-bunker and sell the contaminated fuel, possibly as slops or for refining, it is important to involve an appropriate expert to assist in achieving the best price for the sale.

The chain of causation may also be broken if the crew continue to burn the bunkers (which are, or are suspected to be, off specification) and this causes or exacerbates any engine damage.

Bunker supply contracts

Where the ship is employed under a voyage charterparty, the owner remains responsible for the provision of bunkers and will therefore enter into a direct contract with a bunker supplier. There are nearly as many different forms of terms and conditions as there are suppliers in the market place but a common thread is that the terms and conditions are heavily weighted in favour of the supplier.

In terms of quantity, a typical bunker contract will try to make the quantity recorded by the supplier prevail, meaning that the supplier’s figures are conclusive.

With regard to quality, a supplier’s conditions may try to exclude any implied terms or warranties. However, if the supply contract is governed by English law the Sale and Supply of Goods Act 1994 will still apply.

As for samples, supply contracts frequently seek to make the supplier’s samples binding and conclusive.

The supplier’s terms may also seek to impose strict terms as regards the notification of claims and have very short time bars (often 7 days from delivery). Suppliers may attempt to limit their liability to the value of the bunkers and exclude any other consequential losses. Where possible an owner should obtain the supplier’s terms and conditions in advance in order to be aware of any restrictive clauses.

Whether the bunkers are ordered by the owner under a voyage charter or by the time charterer, the ship may be exposed to an arrest by the bunker
supplier if the bunkers have not been paid for. The bunker contract will invariably contain a lien clause or a Romalpa/retention of title clause. The legal position may vary dependant upon the jurisdiction.

In the case of the Saetta [1993] 2 Lloyds Rep 268, the charterparty provided that the charterer would pay for all bunkers on board at the time of delivery and the owner would on redelivery accept and pay for all bunkers remaining on board. Bunkers were supplied to the ship at the request of the charterer, who did not pay for them. The bunker supply contract contained a retention of title clause, whereby property in the bunkers was not to pass to the buyer until they had been paid for. The ship was subsequently withdrawn from the charterer's service for non payment of hire. The bunker supplier sued the owner for the price of the bunkers. The owner claimed it had acquired title in the bunkers when the ship was withdrawn. The court held that it was the owner's obligation on termination to accept and pay for all bunkers remaining on board. Accordingly, the transfer to the owner was not voluntary under the Sale of Goods Act, and the owner was guilty of conversion of the bunkers when it assumed ownership on withdrawal of the ship and consumed the bunkers.

This can be contrasted to the recent case of the Fesco Angara [2010] EWHC 619 (QB), where the supplier sued the owner for the price of bunkers which had not been paid by the time charterer. The charterparty had been terminated by mutual agreement and the owner had offset the unpaid hire against the value of the bunkers remaining on board. The Court held that title in the bunkers transferred to the owner upon redelivery by reason of the offset notwithstanding the retention of title clause in the bunker supply contract. The bunker supplier was unable to obtain payment from the owner.

However, this decision was based on the fact that the owner had no knowledge of the lien clause in the bunker contract or that the bunkers had not been paid for and that the agreed delivery of the bunkers to the owner was a voluntary transfer of possession by the charterer under the Sale of Goods Act.

In the BIMCO Standard Bunker Contract, an attempt has been made to strike a fair balance between the interests of buyers and sellers. For example, the sampling is to be carried out in the presence of both parties and at a mutually agreed point. Under this contract, the Master is also allowed to make reservations on the bunker receipt or in a letter of protest regarding quantity or quality. Furthermore, it sets a more generous time limit of 30 days from the date of delivery for any claim the owner or the time charterer may have against the supplier.
Bunker claims and the role of the Association

Bunker claims tend to relate either to claims made by suppliers for unpaid bunkers or between an owner and a time charterer for engine damage caused by the use of off specification bunkers. In addition, underperformance claims can arise. These types of claims generally fall within the scope of the Association’s cover.

The Association has considerable experience and expertise in the handling of bunker related disputes and a Member should contact the Association as soon as it becomes aware of a claim or potential claim. The Association’s legally qualified staff can then assist in the early appointment of an appropriate expert to ensure the preservation of evidence, including log books, documents and samples, and the taking of statements from the ship’s crew. Even if the bunkers are found to be off specification, it is still necessary to establish a causal link between the use of the bunkers and the engine damage. This will often involve detailed analysis of all relevant records, including engine logs and maintenance records and bunker storage records.

In addition, the Association offers guidance to Members as to the appropriate steps to take throughout the bunkering process including the following:

1. **Compliance with the fuel specifications contained in the charter party or used when ordering fuel.** Members are advised to use a recognised fuel standard such as ISO 8217 and to endeavour to make a specific reference to elements such as aluminium and silicone. Reference should also be made to stability and to the need to prohibit the blending of spent lubricants with fuel oils.

2. **Ensuring, insofar as possible, that the terms and conditions covering the purchase of fuel do not unduly favour the supplier.**

3. **To have in place proper sampling procedures.** As samples from tanks may be claimed to have been mixed with previous bunkers or residues, Members are advised to arrange for drip samples to be taken throughout bunkering. Procedures should cover the exchange, witnessing and storage of samples.

4. **The entering of a ship in a fuel analysis scheme (such as FOBAS) and following recommendations made under that scheme.**
The Association’s experience

The Association regularly assists Members in the handling of bunker quality and quantity claims and some common problems and issues can be identified. The following examples give a flavour of some of the difficulties that can arise when the procedures highlighted earlier are not followed.

Bunker quality disputes can be complex and costly

The Association supported a time charterer Member in pursuing its claim for damages in the approximate sum of $2 million against its sub-charterer following a supply of contaminated bunkers. In that case, analysis by DNV found the bunkers to be off specification in a number of respects. In order to complete the voyage the ship had to deviate to take on replacement bunkers and then, upon completion of the voyage, the off specification bunkers had to be removed and the ship’s tanks had to be cleaned. The sub-charterer denied liability, put the ship off hire during the deviation and refused to pay for further bunkers or any cleaning costs. In mitigation the Member incurred the costs and expenses and continued to pay the owner hire.

Lawyers and experts were retained at an early stage to attend the ship, collect evidence and generally protect the Member’s position. Several bunker samples were taken and analysed, all of which were found to be off specification except one sample taken from the ship’s manifold and retained by the bunker supplier. In view of that one sample analysis result (the authenticity of which was disputed) the sub-charterer denied liability and when faced with the Member’s claim, passed it onto the bunker supplier.

The Member’s claim against the sub-charterer was pursued in London arbitration whereas the proceedings between the sub-charterer and the bunker brokers/supplier were in New York and were not initiated until the London proceedings were well advanced. This resulted in lengthy delays in the London proceedings whilst the sub-charterer collected evidence from the bunker suppliers in the New York arbitration. Ultimately, the matter was settled at a mediation held in London between all the parties. The costs incurred by the Association on behalf of the Member in that claim were in the region of $200,000.

Short time bars can cause difficulties

In another case the owner Member’s ship sustained damage to the main and auxiliary engines from contaminated bunkers. The Member’s claim against the time charterer under the charterparty was for the repair costs and other losses sustained, including debunkering costs and loss of time. The costs of pursuing the claim were apportioned between this Association and the Member’s hull and machinery underwriters. The charterer denied liability on the grounds that the Member did not notify it or the bunker supplier in writing of any bunker quality issue within 30 days of the supply of the bunkers, in accordance with the Singapore bunkering procedure.
The Member’s lawyers advised that there was no similar term in the charterparty requiring written notice to be provided to the charterer or the supplier within a specified time and therefore the Member was not under an obligation to do so. Although the case ultimately settled, it does highlight the exposure a charterer can face when it receives a bunker claim from an owner after the time bar in the bunker supply contract has expired.

**Importance of measurement of quantity of bunkers**

The Association regularly assists Members in disputes concerning the quantity of bunkers provided to a ship. In one particular case the crew of the bunker barge persuaded the ship’s staff that they only needed to measure the oil content of those tanks on board the bunker barge from which the bunkers were to be supplied. On completion there was a 40 mt discrepancy between the barge tank measurements and the quantity measured in the ship’s tank. The Master requested the assistance of the Association, but the barge had sailed away before a surveyor could reach the ship. The bunker supplier relied on a term in the supply contract that provided that the barge figures were final and binding and pursued the shipowner for payment for the 40 mt which the ship never received.

**Witnessing of samples is essential**

The Association was involved in pursuing a bunker quality claim for an owner Member with the Member’s case relying on sealed samples bearing the Chief Engineer’s signature and ship’s stamp. When the Chief Engineer went on vacation, a junior engineer advised the Member that the Chief Engineer had signed the labels in his office, and that nobody on the ship had witnessed the taking of the sealed samples or knew where the samples, verified by the Chief Engineer’s signature, had been drawn from.

**Bunkers should be loaded in to empty tanks where possible**

A time charterer supplied low sulphur fuel oil to the owner Member’s ship, but the Chief Engineer arranged to take the low sulphur fuel into a bunker tank which still had a residue of previous high sulphur fuel. Port State Control attended on board at the next port and a sample drawn from the tank was found to exceed the 1% sulphur limit. The ship was detained for some days while the fuel tank was emptied, cleaned and new low sulphur fuel oil supplied, at the owner’s expense. The ship also missed the cancelling date for her next employment.
Conclusion

Damage caused to ship’s engines from poor quality bunkers can be very costly, not only in terms of repair costs, but also de-bunkering costs and the loss of time incurred in dealing with the problem.

There are a number of practical steps which can be taken, as highlighted above, to try to minimise the problems that can arise.

In the event a bunker claim arises, the early involvement of the Association is crucial. This is in order that an appropriate expert can be appointed to preserve all available evidence and so that the Member can benefit from the considerable experience and expertise that the Association has to offer in dealing with bunker related claims.
Bunker Checklist*

Some key points to consider:

1. Charterparty clauses:
   (i) Detailed fuel specification requirements should be set out in clause including:
       - recognised fuel standard eg latest version of ISO 8217
       - sulphur requirements – bunkers to comply with Marpol Annex VI, EU Sulphur Regulations
   (ii) Bunkers to be suitable for ship’s engines/auxiliaries
   (iii) Bunker quality, escalation, sulphur content clause
   (iv) Bunkers to be tested by recognised fuel analysis scheme

2. Bunker supply contracts:
   (i) Check terms of contract – are there onerous time bars and do seller’s supply figures prevail
   (ii) When does title in bunkers pass

3. Lien avoidance:
   If the Master is asked to acknowledge receipt for bunkers on charterer’s behalf then wherever possible invoices should be stamped:
   “The goods and/or services being hereby acknowledged, receipted for, and/or ordered are being accepted and/or ordered solely for the account of the charterers [insert name] and not for account of said ship or her owners. Accordingly no lien or other claim against said ship can arise therefrom”

4. Sampling:
   (i) Drip samples to be taken throughout bunkering process at ship's manifold
   (ii) Sample containers to be sealed in presence of Chief Engineer. Seal numbers of all samples should be recorded in the respective sample labels and bunker delivery notes
   (iii) Samples including Marpol sample) to be retained in safe place on-board
   (iv) One representative sample to be despatched to testing company

5. Claims
   (i) Place charterer supplier, or underwriters (hull, charterer's liability) on notice
   (ii) Note of protest to be issued
   (iii) Sampling to take place by independent testing company
   (iv) Off-specification bunkers to be discharged (by charterer if liability is established)
   (v) Damaged engine parts to be retained, photographic and written records should be taken

* This is only a summary guide and is not an exhaustive analysis of all issues that need to be considered.
Engine damage claims or malfunction claims in particular can be difficult to pursue and the preservation of evidence, including log books, documents and samples is crucial, as is the early appointment of an expert.
The UK Defence Club is a mutual insurance company managed on behalf of its Members by Thomas Miller.

Thomas Miller provides a range of insurance solutions for the international shipping and transport sectors.

Hellenic War Risks, ITIC, TT, UK P&I, UK War Risks
Strength with independence.