



HULL  
FOULING:  
THE LEGAL  
AND THE  
PRACTICAL



# THE CONTEXT

As 2020 draws to an end, it has been a year characterised by interruptions to supply chains, humanitarian crises and increased layers of complexity in international trade due to the COVID-19 pandemic. One of the issues the industry has had to grapple with this year is the emergence of increasingly restrictive quarantine requirements. Although thrown into sharp relief in the context of crew changes, one of the related lower profile consequences has been an increase in the risk of hull fouling due to the resulting increase in delays in port or the use of ships as floating storage.

Hull fouling claims typically involve an interesting interplay between practical and legal aspects. In this publication, we delve into each of these aspects and consider how the landscape is developing in respect of this type of claim.

*The Club is grateful to Daria Hinz of Brookes Bell for her technical input in this publication.*



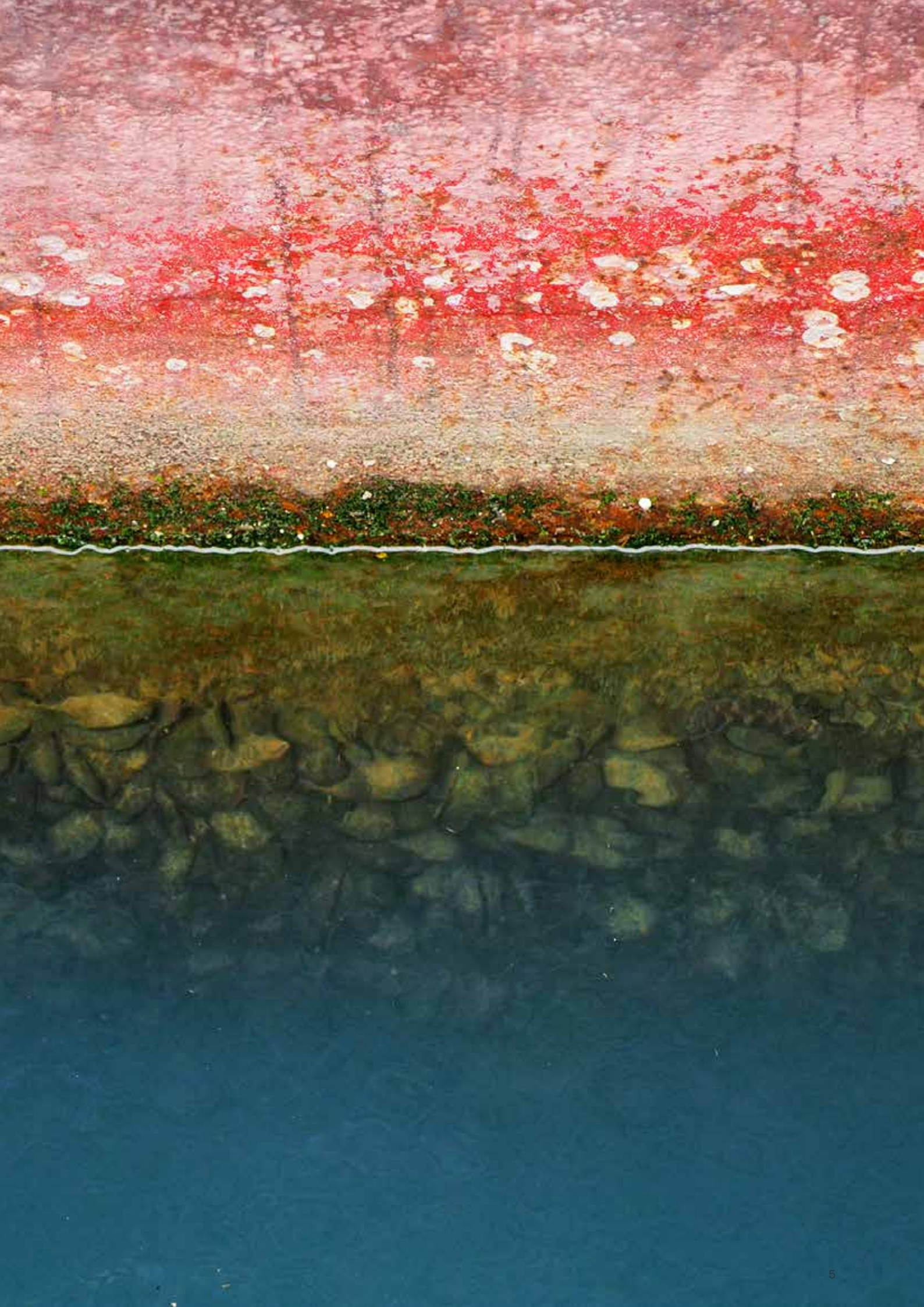
# THE PRACTICAL

## **Barnacles**

Barnacles probably represent the dominant group of ship-fouling organisms. They colonise hard substrata, predominantly rocks, via dispersive larvae in plankton. The larvae of certain “fouling” species settle equally readily on man-made structures such as jetties and oil rigs, as well as on a ship's hull and on flotsam. This propensity to colonise on a ship's hull and other floating materials has facilitated the dispersion of barnacles around the world. Tropical and sub-tropical barnacles are capable of reaching maturity within a matter of weeks and, having been transported to a new location, can release free-swimming larvae which, if the local conditions are appropriate, can settle and may form new breeding populations.

Many species of barnacle are now effectively distributed world-wide in warm temperature seas. In terms of the rate of growth on a ship's hull, experts conclude that newly settled barnacles have been found to grow up to 10mm high within fourteen to twenty days at water temperatures of 25 – 29 degrees Celsius. Studies have shown that growth in a common species of barnacle is fastest during its early days of settlement and the average lifespan is estimated to vary between four months in the Mediterranean to twenty-two months in South Africa and Argentina. Ships will typically have anti-fouling paint applied to the hull. Self polishing anti-fouling coatings work by the continual renewal of the surface layer during movement of the ship through the water.

Barnacles do not settle or feed at water velocities much above two knots. When a ship is not moving and sits idle, its coatings are generally accepted to be functional in resisting fouling for up to twelve to fourteen days. The accumulation of marine growth on a ship's hull in warm tropical waters, typically when a ship remains waiting at anchor for a period of more than three to four weeks, often results in a subsequent significant reduction in a ship's speed and an impairment of the ship's performance. This has obvious implications under a time charter between an owner and a charterer in terms of the resulting potential for additional costs and time loss.



# THE LEGAL

Broadly speaking, there are two categories of losses which might arise, being: the time and cost of cleaning operations and underperformance resulting from hull fouling.

English law has developed to deal with the first issue since the 2005 decision of *The Kitsa* [2005] 1 Lloyd's Rep. 432 (which was supported by the Club). Prior to *The Kitsa*, the industry tended to regard hull fouling as something for which a ship's charterer could be held responsible. This reflected the position taken by the court in the 1981 case of *The Rijn* [1981] 2 Lloyd's Rep. 267, in which it was held that hull fouling was effectively the inevitable consequence of complying with the charterer's orders in the context of a standard NYPE off-hire clause, so the risk of delay associated with hull fouling rested with the charterer.

## ***The Rijn*: responsibility for delay**

In *The Rijn*, the owner let the ship to a charterer under a time charter on NYPE form for about four months, twenty days more or less in the charterer's option. The ship waited at the load port of Lourenco Marques for nearly three months, during which period the ship's hull suffered considerable fouling. When the ship eventually set off on its laden voyage to Baltimore, the hull fouling significantly affected its performance and, consequently, the ship put in to Cape Town for underwater cleaning. The charterer claimed that the ship was off-hire either because the full working of the ship was prevented or because the loss of time arose from a defect in the hull of the ship, namely the hull fouling. The owner submitted that the hull fouling arose as a consequence of the charterer's orders.

The English High Court decided that the excessive hull fouling was the natural consequence of the ship remaining at the load port for an abnormally long period of time and there was nothing fortuitous about it. In relation to the first part of the charterer's off-hire argument, the court found it would be unjust for the charterer to seek financial relief for the natural consequences of the delay as it was the charterer's election to keep the ship in tropical waters for nearly three months. In relation to the second part of the off-hire argument, the court held that the accumulation of marine growth during the service could not be considered a 'defect' in the hull, within the meaning of the wording of the unamended clause 15 of the NYPE time charterparty form.

## ...the risk of the ship suffering hull fouling by being inactive in a warm water port as a result of a legitimate order of the charterer was foreseeable...

The court observed:

*“even if it were [a defect] the defect arose as a natural consequence of the way in which the charterers chose to employ the vessel and the loss of time thus caused ought not to be deducted from the amount of time for which hire was payable.”*

The court therefore held the ship remained on hire for the time spent hull cleaning.

### ***The Kitsa*: responsibility for cleaning costs**

Not surprisingly, when a dispute subsequently arose in *The Kitsa* between the parties to a time charter regarding the costs of cleaning operations to remedy hull fouling, the owner argued that it was entitled to reimbursement of the costs pursuant to an implied indemnity.

In this case, the owner time chartered the ship for a period of four to six months (later extended to about seven to nine months) on an amended NYPE charterparty form. The ship was delayed at Visakhapatnam, India for over three weeks during which time the hull became seriously fouled. The owner undertook de-fouling work, and claimed the costs from the charterer on the basis that such costs were covered by an implied indemnity in the charterparty. It was common ground that by operation of clause 8 of the NYPE charter and the wide trading limits usually written into a charterparty, there was an implied indemnity to the effect that the charterer was to indemnify the owner against the consequences of complying with the charterer's orders as to the employment of the ship.

The matter was first determined by London arbitration and then by the English High Court. The court confirmed its agreement with the arbitration award, which found that the charterer was not liable for the de-fouling costs. It found as a question of fact that although the cargo might have been discharged at Visakhapatnam in a shorter time, it was not outside an owner's reasonable expectation that the ship might spend three weeks there in the entirely ordinary course of employment. The court found that the risk of the ship suffering hull fouling by being inactive in a warm water port as a result of a legitimate order of the charterer was foreseeable, and in fact foreseen by both sides at the time the charterparty was entered into.

# THE LEGAL

The court therefore held, somewhat controversially at the time, that the cost of de-fouling was not within the scope of the implied indemnity under the charterparty, but an ordinary expense of trading and so for the owner's account. Furthermore, the ship was to remain off-hire for the duration of the de-fouling operations and any underperformance claim advanced by the charterer under the subject voyage was to be allowed.

## **Underperformance: *The Coral Seas***

*The Kitsa* was followed more recently in the 2015 case of *The Coral Seas* [2016] EWHC 1506 (Comm), which was also supported by the Club. This case involved an underperformance claim by the charterer following a stay of around four weeks at a Brazilian port. The owner argued that, in effect, the charterer was responsible because the underperformance had resulted from hull fouling which had occurred due to compliance with the charterer's orders. Following the approach that hull fouling did not fall within the scope of any implied indemnity arising from complying with a charterer's employment orders, the court found that the owner nevertheless had to comply with the speed and performance warranties in the charterparty.

*The Coral Seas* involved underperformance resulting from hull fouling arising during the same charter period. On the other hand, as matters stand, there is no court judgment dealing with a ship's underperformance during a subsequent charterparty and it seems unlikely that such a case would arise in practice as a matter of general principle. Were an owner to refrain from dealing with hull fouling at the end of one charterparty, that would likely be a breach of its delivery and maintenance obligations under the next charterparty and it is difficult to see how it could hold a previous charterer responsible for its own breach. As such, in the absence of specific contractual provisions, it seems likely that this category of loss will remain with an owner where it elects not to clean its ship's hull after fouling occurs.

In summary, the general position is that unless the period of delay can be considered abnormal, the risk of hull fouling is an ordinary trading risk in relation to which an owner is already compensated by the hire payable under the charterparty.







## ...careful drafting is required to ensure that a clause has the desired effect.

There may be an alternative route for an owner to hold its charterer responsible for the consequences of hull fouling beyond an implied indemnity. This was illustrated in London Arbitration 25/17 where the charterer's redelivery obligations expressly required the ship's hull to be in like good order and condition as on delivery. In view of this specific contractual requirement, when the ship was redelivered by the charterer with extensive hull fouling, the tribunal found that there was a separate breach of the charterparty which enabled the shipowner to claim damages, including the cost of underperformance claims under the subsequent charterparty. However, importantly, the owner was also able to demonstrate that it had explored the possibility of undertaking cleaning operations before the subsequent charter and could justify its decision to refrain from doing so. Had the owner not been able to demonstrate this, its inaction may have broken the chain of causation and prevented it from recovering damages.

### **Contractual clauses**

Despite the clear framework developed in the *The Kitsa* and *The Rijn*, the legal position is still unsatisfactory for the industry since the fine line between normal and abnormal delay creates scope for uncertainty. As a result, it has become commonplace for parties to include clauses clearly defining what is considered to be normal delay by reference to a specific number of days and expressly allocating the risk of hull fouling to the charterer if the number of days is exceeded, more in line with the court's comments in *The Rijn*. However, due to the fact that the risk lies with the owner in the absence of an express clause, careful drafting is required to ensure that a clause has the desired effect.

BIMCO has created a standard clause for the industry and this was revised in 2019 in response to a developing trend of charterers ordering ships to steam for short intervals in order to interrupt the qualifying period of delay. Consequently, the clause was amended to take into account the possibility that there might be multiple periods of delay, rather than one uninterrupted period.

# THE LEGAL

## **BIMCO Hull Fouling Clause for Time Charter Parties 2019**

- (a) If, in accordance with Charterers' orders, the Vessel remains at or shifts within or between waiting areas, ports, places, anchorages and/or berths, and does not in the interim undertake a sea passage with speed and duration sufficient to remove the marine growth from the Vessel's underwater parts resulting from the Vessel's waiting there, for an aggregated period exceeding:
  - (i) a period as the parties may agree in writing in a Tropical Zone or Seasonal Tropical Zone\*; or
  - (ii) a period as the parties may agree in writing outside such Zones\* any warranties concerning speed and consumption shall be suspended pending inspection of the Vessel's underwater parts including, but not limited to, the hull, sea chests, rudder and propeller.
- (b) In accordance with sub-clause (a), either party may call for inspection which shall be arranged jointly by Owners and Charterers and undertaken at Charterers' risk, cost, expense and time.
- (c) If, as a result of the inspection either party calls for cleaning of any of the underwater parts, such cleaning shall be undertaken by the Charterers at their risk, cost, expense and time in consultation with the Owners.
  - (i) Cleaning shall always be under the supervision of the Master and, in respect of the underwater hull coating, in accordance with the paint manufacturers' recommended guidelines on cleaning, if any. Such cleaning shall be carried out without damage to the Vessel's underwater parts or coating.

\* If no such periods are agreed the default periods shall be 15 days.

- (ii) If, at the port or place of inspection, cleaning as required under this Sub-clause (c) is not permitted or possible, or if Charterers choose to postpone cleaning, speed and consumption warranties shall remain suspended until such cleaning has been completed.
- (iii) If, despite the availability of suitable facilities and equipment, Owners nevertheless refuse to permit cleaning, the speed and consumption warranties shall be reinstated from the time of such refusal.
- (d) Inspection and/or cleaning in accordance with this clause shall always be carried out prior to redelivery. If, nevertheless, Charterers are prevented from inspecting and/or cleaning, the parties shall, prior to but latest on redelivery, agree a lump sum payment in full and final settlement in lieu of inspecting and/or cleaning.
- (e) If the time limits set out in Sub-clause (a) have been exceeded but the Charterers thereafter demonstrate that the Vessel's performance remains within the limits of this Charter Party the vessel's speed and consumption warranties will be subsequently reinstated and the charterers' obligations in respect of inspection and/or cleaning shall no longer be applicable.

**Cleaning shall always be under the supervision of the Master and, in respect of the underwater hull coating, in accordance with the paint manufacturers' recommended guidelines...**



It is often impractical for inspections to be carried out immediately after the possible hull fouling event.

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Like any well-balanced piece of drafting, there are limitations to the BIMCO clause. The clause squarely addresses underperformance under the same charterparty during which the hull fouling occurred and the time and cost associated with cleaning operations. However, it notably does not purport to deal with underperformance under a subsequent charter. This is probably for the reason that no charterer would voluntarily assume responsibility for the ship's performance under a subsequent charterparty. However, depending on commercial bargaining power, owners might seek to amend the clause to address this.

It is often impractical for inspections to be carried out immediately after the possible hull fouling event. In addition, whilst this is addressed by a provision for payment of lump sum compensation in respect of anticipated inspection and cleaning costs, in practice, this may be difficult to enforce as there is no cause of action until the costs have been incurred. Similarly, where there is hull growth which is insufficient to affect the ship's performance, a charterer is discharged from its obligations under the clause. A charterer may also consider amending the clause to link its obligation to carry out cleaning more clearly to satisfactory evidence that any hull fouling has been directly caused by the long stay in question and not during a prior voyage under another charter.

## **Future development of the law**

Until now, the issue of hull fouling has only ever arisen in the context of time charters, possibly because until very recently, the general view was that a shipowner's remedy for delay under a voyage charter was limited to demurrage or damages for detention. However, the recent decision of *The Eternal Bliss* [2020] EWHC 2373 (Comm) allows for the possibility that there might be other types of loss which could be recoverable in addition to demurrage. It is possible that this case may lay the foundations for the inclusion of hull cleaning clauses in the context of voyage charterparties. Nevertheless, it is likely to be some time before the industry sees a similar allocation of responsibility for the risk of hull fouling in the context of voyage charters, not only because the decision in *The Eternal Bliss* is under appeal, but also because of the current market conditions.

# THE LEGAL

## **Proving the claim**

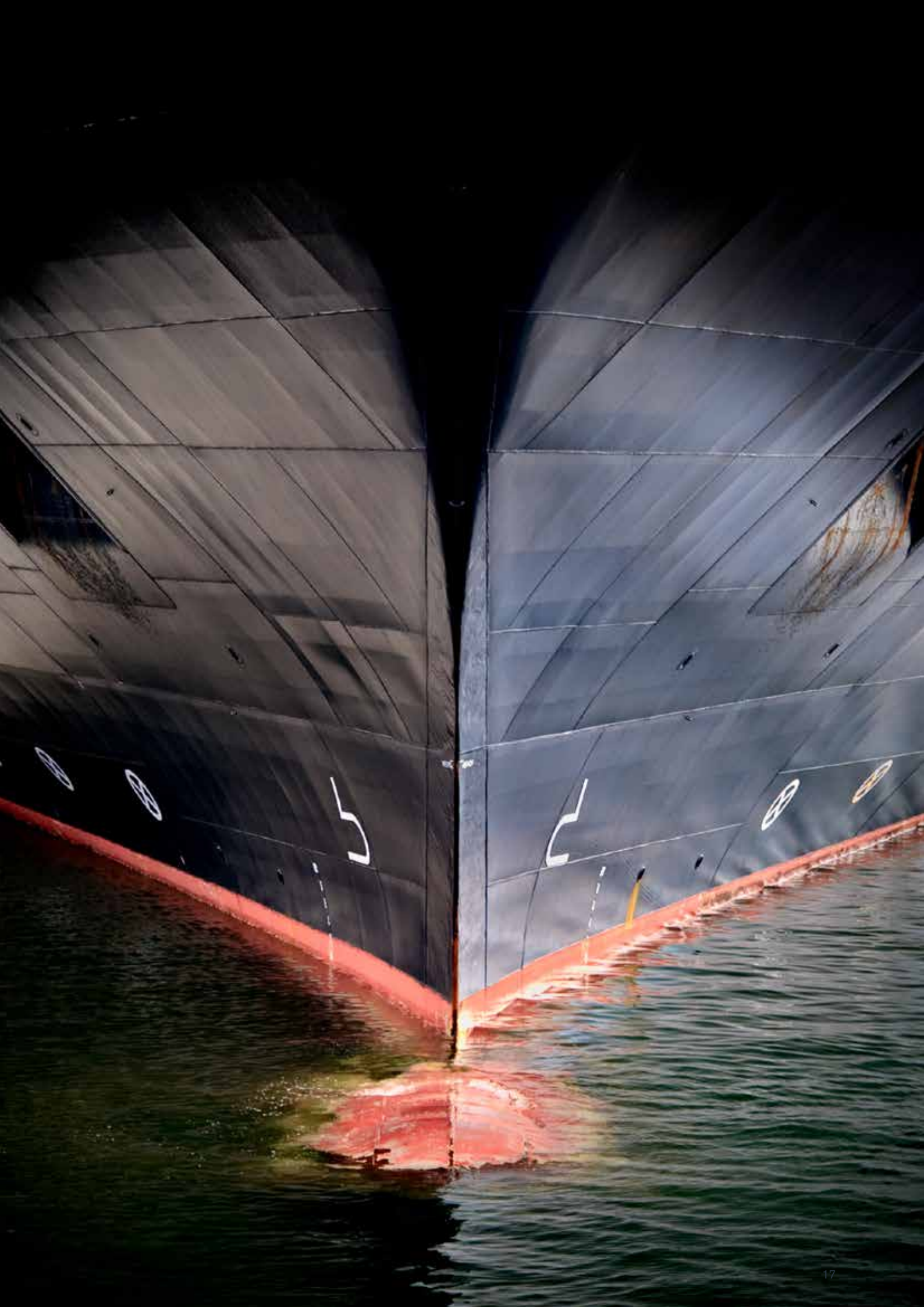
Obtaining evidence of both the extent and the cause of hull fouling can be key to a successful claim. It is not sufficient to show merely that hull fouling has occurred, an owner will also have to prove causation: in other words that the fouling in question resulted from the charterer's orders. By analysing the species and age of the barnacles, algae or other marine growth, experts can often pinpoint its origin very effectively, providing valuable evidence to support a claim.

Some bespoke clauses also require proof that the ship's performance has been adversely affected by the fouling. This is relatively straight-forward where fouling occurs at a load port and the ship's performance can be assessed whilst undertaking a laden voyage for the same charterer. However, such clauses potentially leave an owner with a dilemma where fouling occurs at the final discharge port under a charterparty. In that situation, the shipowner is left with the unenviable choice of cleaning and compromising any contractual claim by foregoing evidence of the anticipated underperformance or refraining from cleaning to secure such evidence, but being left to deal with underperformance claims under the next fixture.

As a matter of good practice, where possible, it is advisable to take photos of the hull before a voyage, particularly if a long port stay is anticipated, and keep careful records of the ship's cleaning and painting history. Note should be taken of anti-fouling specifications, including any guarantee exemptions for idle periods and low activity. After a long stay has occurred, an owner should try to perform an underwater survey as soon as possible and in any event before cleaning is carried out, so as to preserve evidence of the hull's condition following the long stay. Samples should be taken of any hull growth and anti-fouling paint, for later analysis by an expert.

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# WHAT DOES THE FUTURE HOLD?

## **Tightening environmental biofouling regulations**

The shipping industry has seen an increased focus on its environmental impact in recent decades, with strengthening regulation to protect local marine species from foreign invasion through ballast water management and anti-biofouling measures.

California, for example, has had legislation dealing with this issue in place since 2003. Since 2011, the IMO has recommended that ships have on-board biofouling management plans, pursuant to IMO Resolution MEPC.207(62), and some jurisdictions make this a requirement. Whilst the issue is still under consideration in many countries, some insight of what might lie ahead can be gained from New Zealand's regulations, which entered into force in May, 2018.

Ships arriving in New Zealand must either have cleaned the hull within 30 days prior to arrival; be able to demonstrate the continuing implementation of best practice hull maintenance; or else carry out hull cleaning immediately on arrival. This stringent approach might be seen to fall outside the ordinary costs of trading, potentially raising questions as to liability for the increased time and costs of hull cleaning. However, if this type of approach starts to be adopted by other countries, such an argument will likely carry less weight. Parties might seek to allocate the time and costs of additional hull cleaning requirements in specific clauses when anticipating trade to New Zealand or other such jurisdictions.

## **Technological advancements**

The technological landscape is perhaps developing as fast as the regulatory one. For example, the use of underwater remotely operated vehicles ("ROVs") or submersible drones that allow users to inspect the underwater hull is gaining popularity. ROVs can be deployed quickly to inspect the hull visually underwater. The availability of live video footage makes it possible to assess the ship's anti-fouling condition and any hull and propeller fouling at short notice without needing to dry-dock the ship and without the cost and human risk of using a professional diver.

Meanwhile, tightening environmental legislation coupled with a push for lower fuel consumption is driving innovation in anti-fouling coating technologies.

It remains to be seen what the future will hold, but it is anticipated that there is scope for further development of the law and technology in this area.

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