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Bottom Fouling: Whose head it falls on?

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Bottom fouling by marine growth is a subject of frequent dispute in time charters. Bottom fouling increases the friction and thereby affects the performance of the vessel in terms both of speed and consumption. It also necessitates cleaning. The bottom may be in a fouled condition at the time the vessel is delivered or, as it happens more frequently, the bottom may get fouled during the charter service. When the bottom is fouled during the service, often that is due to the orders given by the charterer for a long idle stay on waters, such as at or outside port or at anchorage while awaiting berth or loading. Technically, bottom fouling may also result from slow steaming that a charterer might order.

Various factors influence bottom fouling. They include the idle or near-idle period, the speed that the vessel steams at if not idle, the vessel's distance from the shore, the depth of the water, the temperature of the water, the freshness of the water, sea current, duration and intensity of sunlight, etc. The chance of attracting marine growth is more in tropical waters or near the shore. The chance is less in freshwaters (eg. Mississippi River) and in places of high current (eg. Chittagong).

It is not uncommon for vessels to perform 'paint runs' to break the idle period. 'Paint run' means steaming the vessel for a short period, usually a few hours. However, often, a paint run may not yield the desired result. The basic measure that shipowners take to mitigate the risk of bottom fouling and its intensity if that happens is suitably painting the bottom with an anti-fouling coat. Usually, the paint is unlikely to be effective if the vessel is idle or near idle for more than two weeks.

If the bottom is already fouled at the time of delivery, it is not doubted that the shipowner has to bear the loss caused by the consequent underperformance (*The Ioanna*).¹ In such a case the cost of cleaning is also the shipowner and the loss of time in cleaning are also on the shipowner by off-hire (*The Ioanna*). If it is necessary to ascertain when the bottom was fouled arises, a laboratory test of the marine growth sample to establish the age and the type of the growth might assist (*The Pamphilos*).² The type of the growth can suggest the time frame during which the growth must have been attached where it is a type that is present only in certain ports that the vessel visited.

The question is more difficult if the bottom is fouled during the charter service as a result of the charterer's orders. The shipowner's standpoint will be that the charterer must bear the consequences because the bottom was fouled as a result of how the charterer employed the vessel. The charterer's standpoint will be that the shipowner must bear it, as the charterer's employment was within the scope of the charterparty and the underperformance was the result of the owner's failure to maintain by cleaning the bottom.

First, we will consider bottom fouling from the perspective of the standard NYPE form (referring to the oft-used 1946 version), the most popular form for dry cargo time charters. Second, we will look at the common modifications made to this form that affect the bottom fouling issue. Third, we will consider the subject from the perspective of SHELLTIME 4 form – the oft-used form for time charters of tankers.

NYPE form

The NYPE form, unlike the NYPE 2015 form, does not have a specific provision dealing with bottom fouling. But a few other clauses have an impact on this issue. Lines 9-10 warrant the speed-consumption capability of the vessel at the time of delivery. Clause 1 requires the shipowner to maintain the hull, machinery and equipment in a thoroughly efficient state throughout the charter service. Clause 8, in

¹ *Ocean Glory Compania Naviera SA v A/S PV Christensen (The Ioanna)* [1985] 2 Lloyd's Rep 164 (HC).

² *Bulfracht (Cyprus) Ltd v Boneset Shipping Co Ltd (The Pamphilos)* [2002] All ER (D) 94 (Nov) (HC).

its second part, requires the shipowner to comply with the employment orders given by the charterer. It is well accepted that this comes with an implied indemnity by the charterer to compensate the shipowner for losses that the shipowner suffers as a result of the employment orders. Clause 4 requires the charterer to redeliver the vessel in the like good order and condition as delivered, ordinary wear and tear excepted. There may seem to be some conflict between one another of these clauses.

It has been held by the courts that the obligation to maintain includes the obligation to keep the bottom free from fouling throughout the charter service. Accordingly, if the bottom gets fouled during service resulting in underperformance, the shipowner will be liable for the underperformance by breach of the maintenance obligation (*The Al Bida*)³ as well as for the cost of cleaning (*The Kitsa*).⁴ The impact of this interpretation on cl 4 is that the obligation of the charterer to redeliver in the like condition as delivered does not require the charterer to clean the fouled hull before delivery (*The Kitsa*).

Some controversy has been seen on the question of whether the vessel will go off-hire for the time of cleaning during the service. Clause 15 reads “That in the event of the loss of time from deficiency of men or stores, fire, breakdown or damages to hull, machinery or equipment, grounding, detention by average accidents to ship or cargo, drydocking for the purpose of examination or painting bottom, or by any other cause preventing the full working of the vessel, the payment of hire shall cease for the time thereby lost ...” In one case, the court rejected an off-hire claim under cl 15 (‘any other cause preventing the full working of the vessel’) for the time used in cleaning the bottom that was fouled during service (*The Rijn*).⁵ In another, the court admitted off-hire claim for the cleaning-time, however, by reliance on a rider clause rather than cl 15 (*The Kitsa*). Sometimes, parties add the word “whatsoever” to “any other cause preventing the full working of the vessel”. This could give some scope to argue that a

³ *Arab Maritime Petroleum Transport Co v Luxor Trading Corp (The Al Bida)* [1986] 1 Lloyd's Rep 142, [1985] 10 WLUK 130 (HC).

⁴ *Action Navigation Inc v Bottiglieri di Navigation SpA (The Kitsa)* [2005] EWHC 177 (Comm), [2005] 1 Lloyd's Rep 432 (HC).

⁵ *Santa Martha Baay Scheepvaart and Handelsmaatschappij NV v Scanbulk A/S (The Rijn)* [1981] 2 Lloyd's Rep 267 (HC).

wider construction of the off-hire provision to include the time of cleaning the bottom is warranted.

A question that arises in this connection is about the indemnity by the charterer attached to cl 8. The courts have again held this not to favour the shipowner because long waiting in ports and consequent bottom fouling is something foreseeable at the time of the fixture, hence the shipowner is deemed to have taken the risk unless a clause otherwise provides (*The Kitsa*).

In mitigation of the predicament, shipowners frequently add a rider clause to shift the losses caused by bottom fouling to the charterer. That may be in the form of the BIMCO Bottom Fouling Clause for Time Charter Parties 2013 (or less often the 2019 version) with desired modification or a custom-crafted clause. The scheme of the NYPE 2015 form is that the warranty is a continuing one, unlike the one in the NYPE form. It places on the charterer the responsibility for underperformance as well as the cost of and time involved in cleaning consequent upon bottom fouling where it happened as a result of charterer's order for idling exceeding 15 days or such other periods as parties may specify. There is an option for specifying different periods for idling in tropical/seasonal tropical waters and non-tropical waters.

SHELLTIME 4 form

There is no clause to deal with bottom fouling in SHELLTIME 4 form. The performance warranty is a continuing one by cl 24. The shipowner's responsibility to maintain the vessel is stated in cll 1 and 3(a). The effect of these clauses is, among others, to park on the shipowner the liability for underperformance resulting from bottom fouling developed during service. Clause 8 provides the redelivery obligation but without any reference to the condition at the time of delivery. Following the maintenance obligation in cll 1 and 3(a), there will be no obligation on the charterer to clean the fouled bottom before redelivering.

Clause 13 obliges the shipowner to comply with the employment orders of the charterer and expressly provides for indemnity by the charterer to the owner for the consequences and liabilities suffered by the owner as a result of complying with the

orders. For reasons stated in *The Kitsa*, the indemnity will not be of avail to the shipowner in connection with bottom fouling. It was so held in one case where the performance warranty on the NYPE form was modified to a continuing one (*The Coral Seas*).⁶

Clause 21 is the principal off-hire clause. This clause is unlikely to render a vessel off-hire for reduced speed resulting from bottom fouling. However, cl 3(b) may render the vessel off-hire where speed is reduced by breach of the maintenance obligation in cl 1. Thus where speed is lost due to bottom fouling developed during service and not cleaned, cl 3(b) may render the vessel off-hire. The off-hire here is a 'net clause', meaning the hire is off only for the time actually lost by the reduced speed.

New Zealand Bio-Fouling Regulations

New Zealand has introduced, with effect from 15 May 2018, regulations⁷ prohibiting entry into its waters of vessels with a bio-fouled bottom. This will raise an additional question as to the time lost in shifting the vessel to a place where the cleaning can be performed – will the additional time be off-hire? The question will yield arguable answers, which it appears has not been addressed and resolved in any award or judgment.

Conclusion

Bottom fouling triggers the issues of underperformance by lesser speed and higher fuel consumption and of the cost of cleaning. In the absence of a charterparty provision to the contrary, ordinarily the shipowner will be liable for them. This is primarily because of the maintenance obligation of the shipowner. However, under the standard off-hire clauses, likely, the vessel will not go off-hire for the time of cleaning.

⁶ *Imperator I Maritime Company v Bunge SA; Bunge SA v C Transport Panamax Ltd (The Coral Seas)* [2016] All ER (D) 28 (Jul) (HC).

⁷ Craft Risk Management Standard (CRMS) implemented by the Ministry of Primary Industries (MPI) under the New Zealand Bio Security Act 1993.

Further Reading:

[Arun Kasi, The Law of Carriage of Goods by Sea, Singapore, Springer, 2021](#)

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