



# Soundings

Sulphur Series: Countdown to 2020

## Scrubbing Up: Installation, operation and maintenance of scrubbers.

**As an alternative to switching to cleaner, yet more expensive, low sulphur fuel some ship operators have chosen to achieve compliance with the MARPOL sulphur emissions regime by means of the installation of exhaust gas cleaning systems, commonly known as scrubbers, which will enable them to filter non-compliant fuel at a lower cost.**

Despite a flurry of interest in scrubbers over the past few months, the take-up has in fact been relatively low. Estimates currently sit between 2 and 10% of the global fleet. Perhaps this is not surprising since the installation of scrubbers is an expensive job. Figures of up to US\$5million

have been reported and calculating the return on investment is notoriously difficult, particularly given the uncertainty relating to availability and pricing of low sulphur “compliant” fuel in 2020. However, some operators have predicted that scrubbers will give them a sufficient return, in terms of fuel

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cost savings, to make the initial investment worthwhile. It is of course necessary to carry out the "return" exercise over a long term basis to fall into this latter category given the high initial outlay required to install a scrubber.

A number of owners have publicised plans to retro-fit scrubbers onto their existing fleets or fit them onto their newbuilds. In other cases, charterers on long-term charters may consider it financially viable to install scrubbers (more often than not on a cost sharing basis) on their chartered ships. Some charters contain an option allowing modifications to be made, though in such cases it is unlikely that the charter will adequately address all the associated issues. Where such an option is not available, this will have to be a matter for negotiation and parties should take the opportunity to address and agree the associated risks at the same time. Whatever the arrangement, there are a number of potential contractual issues and areas of uncertainty that must be considered.

### Installation

Often the installation work, which itself may take between 10-12 days, not including the voluminous preparation required prior to the installation, will take place during a

scheduled drydock, but where that is not possible clearly there is potential for chartered ships to be placed off-hire during the installation period. Where charterers have requested the installation of scrubbers, owners may be able to negotiate bespoke provisions whereby the lost time and costs of installation are borne by charterers or shared between the parties. However, where charterers have an option to request modifications, the position may be less clear and may turn on the scope of the express option.

There is potential for complex disputes to arise where a scrubber is defective or where the installation is faulty or takes longer than anticipated. In the case of ships on long-term charter, even where the fitting of a scrubber was not contemplated at the time the charterparty was concluded, it is arguable that the scrubber will fall within the definition of "vessel" for the purposes of any contractual maintenance provisions. However, this may be debatable in some cases, for example, where a scrubber is fitted at the charterer's option.

Unless owners have negotiated specific protective terms, they may bear the risk and cost of faulty or defective equipment or installation, subject to any builder or contractor warranties, as discussed below. In cases where charterers have financed



and/or have retained title or a proprietary interest in the scrubber, the division of rights and liabilities may be more difficult to define and enforce. It is imperative that parties negotiate specific provisions to address this.

In any case, there may be difficult issues relating to whether consequential losses (for example, loss of time or loss of profit) are too remote to be recovered. Where charterers have assumed responsibility for the upkeep of scrubbers, issues of causation might arise in respect of penalties imposed on owners as a result of a failure to maintain and consequent breach of the regulatory regime.

It may, of course, be possible for owners, or charterers as the case may be, to seek recourse against the manufacturer or installing yard. However, complications may arise where the manufacturer's warranty or installation contract contains jurisdiction or choice of law provisions which are inconsistent with those governing the charter. Further, the manufacturer's or yard's contractual liability is unlikely to be defined in terms corresponding exactly to the charterparty liabilities.

It is common for such contracts to contain low limits on liability, exclusions of consequential losses and short-term

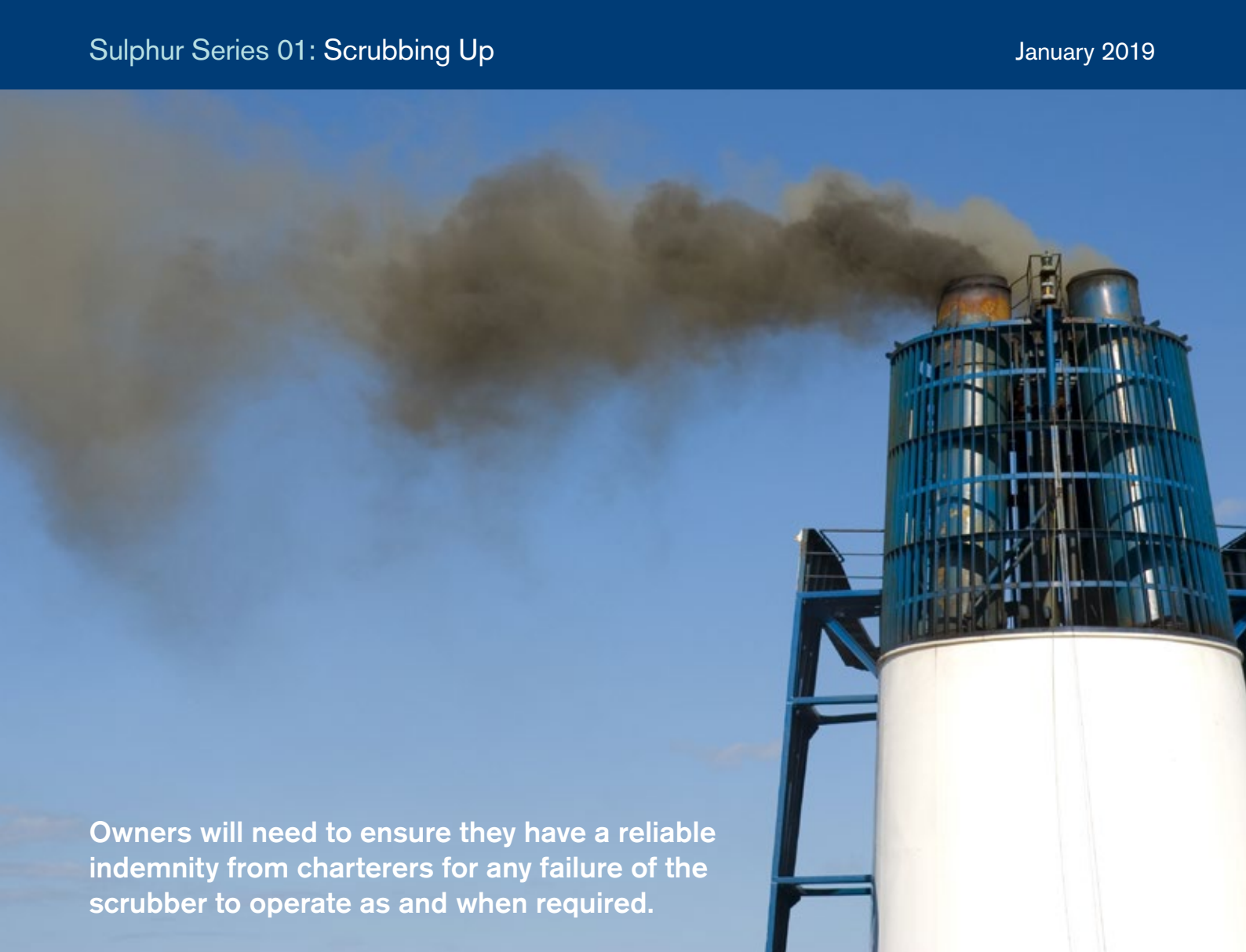
warranties. Where charterers are the contracting party, there may be questions as to whether the owners have any third party rights in the event that the contract is only between the yard and the charterer. The potential for multiplicity of proceedings and inconsistent decisions is clear.

### Operation

Similar issues can arise post-installation. An existing long-term charterparty is unlikely to address adequately, or at all, the additional costs of operating a scrubber, for example, the cost of disposing of by-products and waste substances. The crew will require training in the proper use, operation and routine maintenance of the scrubber, including its data recording device, and (unless "open loop" scrubbers are fitted) the ship will require supplies of potentially hazardous chemicals for water treatment. These matters represent potentially significant additional cost for owners, which may not (in the case of existing long-term charters) be factored into the existing time charter rate.

### Maintenance

Scrubbers will also require upkeep and (possibly) repairs in the event of breakdown or reduced performance. Typically, owners will be responsible for maintenance, in line with



Owners will need to ensure they have a reliable indemnity from charterers for any failure of the scrubber to operate as and when required.

their duties to maintain the ship and owners would need to pay due regard to updating their planned maintenance system accordingly, though other arrangements may exist or be negotiated, particularly where the charterer has financed the scrubber.

Any claims arising from poor maintenance may also throw up issues relating to causation or remoteness of loss as between owners and charterers, particularly where the failure to maintain the scrubber has resulted in penalties imposed for breach of the MARPOL rules, loss of profit or damage to other parts of the ship.

Other issues may arise as scrubbers are put into use, for example issues relating to the banning of open loop

scrubbers in certain ports. Countries which presently do not or will not allow the discharge of washwater from open loop scrubbers include Belgium, Germany, Ireland, United States (California and Connecticut), Singapore and China.

Closed loop scrubbers on the other hand will create waste and there is a requirement in place that this waste will have to be delivered to shoreside reception facilities.

We will be addressing these and other emerging issues in future editions of Soundings.

**Members are invited to contact the Managers for further information in relation to this or any other related issues.**

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