WAYPOINTS

WEST Magazine Issue | 06



06 10 28 36

Torrey Canyon

What are the origins of today's framework of IMO conventions? Tony Paulson, Head of Asia and Corporate Director, goes back to 1967 on the UK's Cornish coast.

Future-proof Alternative Fuels

What are the main differences in responding to spills of alternative fuels in comparison to oil? Andrew Le Masurier of ITOPF explains why traditional oil spill response methods may not apply to many alternative fuels.

Shipping Industry Should Brace for Underwater Regulation

At this point in time, there is no mandatory international regulation on ocean noise but is this about to change? Bev Mackenzie, Head of Intergovernmental Engagement, and Jeppe Skovbakke Juhl, Manager - Maritime Safety and Security from BIMCO explore more.

Interview with Roel Hoenders, Head, Climate Action and Clean Air

A key aspect we are currently working on is the development of the next set of IMO global greenhouse gas reduction measures, namely a carbon fuel intensity standard and a maritime GHG emissions pricing mechanism, states Roel.



In a nutshell

Defence Guides

Download your free Defence Guide e-book and navigate through our curated collection of guides. From regulatory compliance to risk management strategies, our comprehensive guides cover every aspect of maritime operations.

www.westpandi.com/news-and-resources/in-a-nutshell-defence-guides



Contents

Welcome Letter

Erin Walton, Assistant Corporate Director, welcomes you to the 6th issue of Waypoints.

Torrey Canyon

What are the origins of today's framework of IMO conventions? Tony Paulson, Head of Asia and Corporate Director, goes back to 1967 on the UK's Cornish coast.

Future-proof Alternative Fuels

What are the main differences in responding to spills of alternative fuels in comparison to oil? Andrew Le Masurier of ITOPF explains why traditional oil spill response methods may not apply to many alternative fuels.

Natural Resource 10 **Damages**

Explore the NRDA process in the USA with Andrew Davis & Sarah Kettenmann, Environmental Attorneys from Shipman & Goodwin LLP, and Jeffrey Wakefield & Ralph Markarian NRDA experts from SWCA Environmental Consultants.

Plastic Pollution, ∠ Big Problems

Emma Forbes-Geary discusses the source of plastics, shipping's plastic problem and the future of regulation.

Shipping Industry Should Brace for Underwater Regulation

At this point in time, there is no mandatory international regulation on ocean noise but is this about to change? Bev Mackenzie, Head of Intergovernmental Engagement, and Jeppe Skovbakke Juhl, Manager - Maritime Safety and Security from BIMCO explore more.

Briefcases

Julien Rabeux examines recent decisions clarifying the meaning of "subjects to be lifted" and when a charterparty becomes legally binding.

Interview with Roel Hoenders, Head, Climate Action and Clean Air

A key aspect we are currently working on is the development of the next set of IMO global greenhouse gas reduction measures, namely a carbon fuel intensity standard and a maritime GHG emissions pricing mechanism, states Roel.

On the Horizon

Previously, vessels were only required to carry and fill out the record book for vessels 400 GT and above; now, it has been reduced to 100GT, writes Emma Forbes-Geary.

News from the Waterfront

Delve into recent highlights and news from the West Hellas office.

Visit westpandi.com for more on the topics addressed in this issue and for information about West.

Follow us on in





Contact information

If you would like to get in touch with us, please email: waypoints@westpandi.com



Tony Paulson, Erin Walton, Julien Rabeux, Emma Forbes-Geary, Gila Lala, Sally Johnson



The West Piracy Protection product is Kidnap and Ransom insurance for shipowners, a tailored solution protecting shipowners and operators and their crew against the outcomes of piracy attacks in high-risk areas such as the Gulf of Guinea and the Gulf of Aden.

Our Piracy Protection Partners







Your West War and Piracy Protection specialists



Richard Turner

Head of Product Development T +44 20 7716 6126 M +44 7766 474 492 E Richard.Turner@westpandi.com



Mark Mathews

Deputy Head of Underwriting (London)
T +44 20 7716 6123 M +44 7788 872 065
E Mark.Mathews@westpandi.com



www.westpandi.com/piracy-protection
Follow us on (in)



Dear readers,

Welcome to the latest edition of Waypoints. It is said that prevention is better than cure. That is certainly true of maritime pollution incidents where, in the aftermath, those involved are often left trying to replace the irreplaceable. In this edition, we investigate marine pollution in all its forms.

Oil spills remain the most high profile and widely feared type of marine pollution. On page (06), Tony Paulson tells the story of the ill-fated oil tanker TORREY CANYON - the spill that focused governments on the need to both prevent future spills, and make it easier for those harmed by them to obtain compensation from a reliable source.

There are now numerous IMO Conventions addressing liability and compensation for victims by providing a direct right of recourse against financial security providers, there are still gaps that need to be addressed. Alternative fuels used as bunkers, for example, largely fall outside these existing Conventions. This needs to be addressed urgently due to the rapid shift towards alternative fuels, rather than in response to a major pollution incident. On page (10), Andrew Le Masurier of ITOPF explains the differences in risks, response and recovery during a spill of alternative fuels vs traditional oil spill response.

When repairing environmental damage in the aftermath of a pollution incident, it is vital that good science prevails over vague assumptions. This is particularly important in the USA, where a process called Natural Resource Damage Assessment is often required by law. On page (16) experts, including Andrew Davis of law firm Shipman & Goodwin, use a real life example of an oil spill in Buzzard's Bay, Massachusetts, to show how a successful repopulation

of endangered birds was achieved through early intervention by appropriate environmental experts on behalf of the vessel owner.

Oil pollution prevention and response is now heavily legislated and, as intended, both the volume of ship source oil spilled and number of spill incidents has decreased significantly since the 1970's. However, other types of pollution are now gaining notoriety, and hopefully the traction needed to facilitate legislative changes. On page (22), Emma Forbes-Geary introduces Part 1 of her series on plastic pollution at sea, and on page (28), BIMCO highlight the wide range of impacts underwater noise pollution from shipping has on highly sensitive environments and communities.

Our reoccurring 'Briefcases' article can be found on page (32). On theme, West also interviews Roel Hoenders, Head of Climate Action and Clean Air at IMO about IMO's GHG Strategy which can be read on page (36). Find highlights from the West Hellas office on page (40).

West is committed to working alongside industry partners to address the wide range of pollution related challenges facing our seas. We hope you enjoy this issue.

Best wishes,

Erin Walton
Assistant Corporate Director
West P&I



The genesis of the pollution convention system



Head of Asia & Corporate Director, West P&I



Tony Paulson is the Club's Head of Asia and Corporate Director. He joined the West of England in 1990 and having worked in the Claims Department dealing with a wide variety of Members which included a secondment to the Hong Kong office, he was appointed a Director in 2005. He was appointed Head of Asia in 2023 with responsibility for the overall management of the Club's Asian operations.



What are the origins of today's framework of IMO conventions which govern liability and compensation for oil pollution across most of the globe? The answer lies back more than 50 years in the waters off the UK's Cornish coast, writes Tony Paulson.

By any standards, the IMO pollution conventions are a success. They've provided predictable and easily accessible compensation for the victims of pollution for decades across a huge variety of spills around the world and have been widely adopted by states – there are currently 146 signatories of the 1992 Civil Liability Convention (CLC), 121 for the 1992 Fund Convention and 32 for the 2003 Supplementary Fund which cover spills of persistent oil from tankers, and 107 for the 2001 Bunkers Convention which covers spills of bunkers from all other types of ships.

But the conventions haven't always been there to support victims, so how did they come about? History tells us – think SOLAS and the TITANIC – that major casualties drive the development of maritime legislation and pollution was no exception.

Let's go back to 1967 and the height of the Swinging Sixties. There's a growing demand for oil as car ownership and use of plastics grows in a rapidly industrialising world which is finally throwing off the remaining hangovers from the Second World War. Oil is being transported in

ever-bigger ships, but there's no dedicated liability and compensation regime for oil pollution, largely because there hasn't been any spills of significance to-date.



As this extract from the ITOPF* booklet "Liability and Compensation for Ship-source Oil Pollution in the Marine Environment"** - jointly published with the International Group of P&I Clubs and the IOPC Funds - shows, all that was about to change in March 1967 as the tanker TORREY CANYON headed to the UK laden with a cargo of crude:

TORREY CANYON ran aground on the Seven Stones Reef, off Lands End, Cornwall, UK on 18th March 1967. The tanker was one of the largest vessels afloat at the time, with a cargo of 119,000 tonnes of Kuwaiti crude oil for discharge at Milford Haven, Wales. Over the following 12 days the entire cargo was lost.

Despite efforts by the UK Government, including aerial bombardment of the tanker, oil affected many parts of the south-west of England, the Channel Islands and Brittany, France. The UK Government incurred costs in excess of £3 million and the French Government costs of FFr38.3 million during the resultant response. The oil also affected a variety of wildlife and economic activities, notably tourism and shell- fisheries, with consequent financial losses.

In order to recover costs, the UK Government issued a writ against the US-based ship and cargo owners. However, the owners stated the pollution was a result of the UK Government bombing the ship without permission and rejected liability. Negligence or unseaworthiness, required to apportion liability, could not be proven.

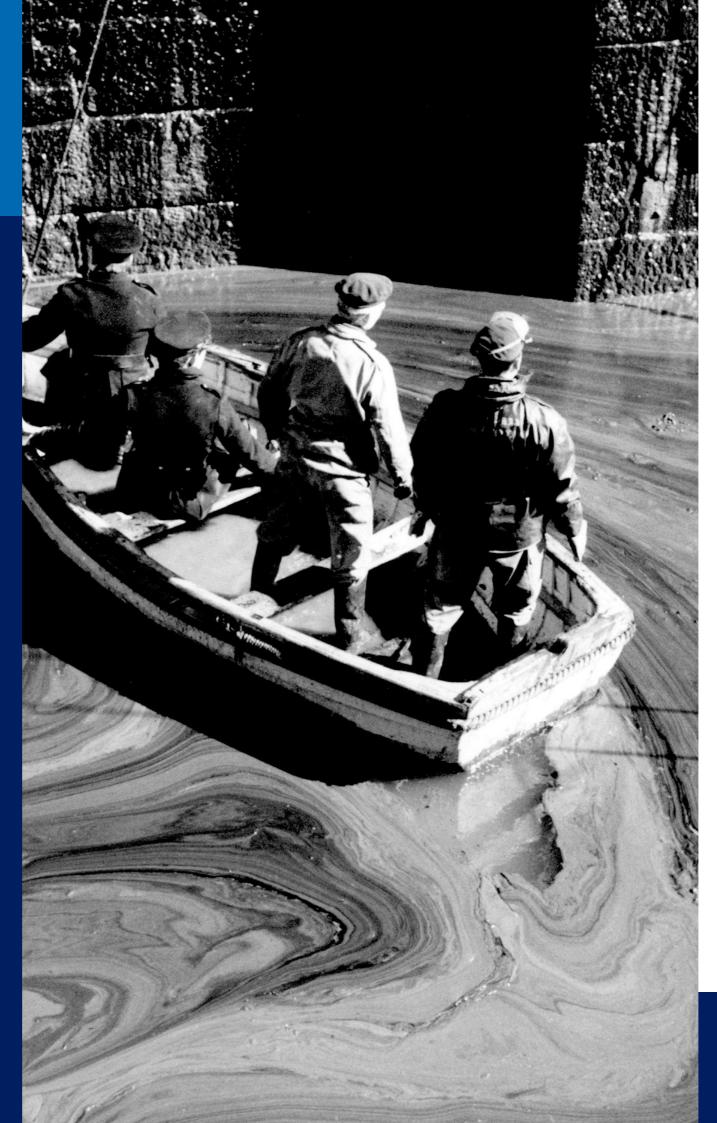
A US court awarded compensation of US\$50 – the value of a surviving lifeboat. As the owners had no assets

in the UK or France, a judgment for a greater amount would have been difficult to uphold. Costs were paid to the UK and French Governments after arresting sister-ships in Singapore and in Rotterdam respectively.

Each government settled for ~£1,500,000, considerably less than expenditure and years after the incident, following a protracted legal process.

In recognition of the difficulties of governments in obtaining compensation, the tanker shipping and oil industries established TOVALOP and CRISTAL in 1968 to provide a temporary measure pending widespread acceptance of the international conventions.

At the time, and when faced with the potential recurrence of such an incident, the incumbent UK Prime Minister Harold Wilson called on the Council of IMCO (now IMO) to meet in extraordinary circumstances to consider possible changes in maritime law and international regulations. IMCO met in May 1967 and drafted 21 "proposals for study", including requiring all vessels to carry compulsory liability insurance, and to make shipowners responsible for the damage caused by their vessel "without consideration of negligence". These proposals formed the basis of the subsequent international conventions.



* ITOPF are the world's pre-eminent experts on spill response. Started in 1968 as a direct result of the TORREY CANYON incident, their skilled international team has attended over 850 incidents in more than 100 countries to deliver impartial technical advice.

They provide a wide range of technical services to back up their role of responding to shipsourced spills. The five key services offered are spill response, claims analysis & damage assessment, contingency planning and advisory work, training and education and information.



www.itopf.org/knowledge-resources/documentsguides/compensation/

Further information can be found on their website: www.itopf.org

FUTURE-PROOF

Andrew Le Masurier of ITOPF explains why traditional oil spill response methods may not apply to many alternative fuels, and what preparations are taking place to ready the spill response industry

What are the main differences in responding LPG, hydrogen and ammonia are typically to spills of alternative fuels in comparison

Differences between spills of oil and alternative fuels arise from the difference in their properties, which dictate their fate and behaviour in the marine environment. The only alternative fuels that are closely biofuels (such as biodiesels and vegetable oils). However, fuels such as ammonia, LNG, LPG and hydrogen are gases in ambient temperature and therefore, when spilled and — as the human health risks of these exposed to ambient conditions, will transition from a cryogenic/pressurised liquid to a gas through rapid boiling before being lost to the atmosphere. Methanol is a liquid but has a very low flashpoint of 11°C, meaning that above this temperature, it will emit vapours and when spilled will fully dissolve in water. The presence of flammable vapours it is vital that the initial spill information from these substances will mean that there is an acute risk of fire or explosion if the vapour concentrations in the air are within the substances' flammability range and an ignition source is present. Other hazards arise or flammable atmospheric plume. from ammonia and methanol's toxicity and the subzero temperatures of which LNG,

mean that the risks of a spill to crew, the public are significantly greater than those from conventional fuel oils.

The initial stages of a response are likely to be hazard-driven, in comparison to the behaviour-driven response of spills, responders are able to mobilise very rapidly with little to no information. incidents are considered to be low and the equipment onboard (eg. booms and skimmers) are generally appropriate for many circumstances. The behaviour of the oil on the water dictates the operations. However, with alternative fuel spills, the hazards dictate the operations. As a result, is transmitted rapidly such as the bunker type that has or is at risk of being spilled, the location of the release (above or below the waterline) and the presence of a toxic





The skill level of responders to these incidents will need to be high, with specialised teams leading the response.

This will inform responders' risk assessments and allow them to calculate safe distances, use appropriate personal protective equipment (PPE) / respiratory protective equipment (RPE) and will ultimately allow them to prepare a strategy for possible source control if the leak/spill is possible and safe to halt. The skill level of responders to these incidents will need to be high, with specialised teams leading the response.

The institutional experience of responding to spills of these substances is also lacking in comparison to spills of conventional oil. From the 1960s to now, there have been thousands of oil spills that have been well-documented, with significant amounts of research undertaken on all factors of response and their environmental and economic impacts. Although substances such as methanol, LNG, LPG and ammonia have been shipped as cargo for many years, the number of spills is much less, with significant knowledge and research gaps identified.

What implications do these differences have on clean-up and preventive measures?

The spill response industry is likely to see a significant shift from protracted shoreline clean-up operations spanning large areaswhich are typical for oil spills-to short-term localised events whereby the main approach may be to simply monitor and evaluate the risks to receptors.

The short-term residence of many of these substances on the water following a spill means established oil pollution clean-up measures will be inappropriate, for example the collection and recovery of using booms and skimmers. These substances, except for biofuels (such as biodiesel and vegetable oils), will not be recoverable, and therefore allowing natural attenuation to occur is the only appropriate clean-up option. The main focus following a release of these fuels is likely to be three-fold.

- Detection and monitoring, which could include the use of expert atmospheric plume model multi-gas monitors and sensors mounted possibly on UAVs to evaluate presence of flammable or toxic vapour/air mixtures and to allow for delimitation of exclusion zones;
- The safe prevention and control of release, involving stopping the leak (without posing risk to life) and mitigating against fire, preventing further releases and reducing the risks to sensitivities and
- Where possible, Bunker removal may be needed to reduce the risk to nearby receptors, perhaps via ship-to-ship transfers.

Although clean-up and preventive measures will be significantly different from oil spills, measures may still be possible to mitigate against risks associated with an alternative fuel spill.

14 # Issue 06 WAYPOINTS

What can be done to prepare for spills of these substances?

It is likely that a response to a significant incident involving these substances, in most instances, would not be solely undertaken by government agencies but would require the assistance of technical experts, private organisations and the wider response industry. As a result of this, preparedness and efficient communication between these parties will be essential in promoting an effective response, with a particular emphasis on health and safety aspects such as monitoring, PPE and decontamination.

Current regulations dealing with hazardous and noxious substances (HNS)-such as the 2000 OPRC-HNS Protocolhighlight the need for preparedness through contingency planning, prompting states and organisations to develop bottom-up, scalable spill response plans so that each emergency plan is compatible with one another from a single facility to an international response. Following requests by multiple UN Regional Activity Centres (REMPEC, Bonn Agreement and HELCOM), the Marine HNS Response Manual was developed by Cedre, ISPRA and ITOPF and can play a vital role in assisting contingency planners, government agencies, port operators and the emergency response industry to prepare for spills involving alternative fuels.

In order for ports, regions and nations to develop effective contingency plans, the plan should be based upon a robust risk assessment that is created with the cooperation of multiple relevant stakeholders. Effective contingency plans would typically include:

- A requirement for regular spill training workshops with all operators.
- A requirement for suitable PPE and HAZMAT equipment to be readily accessible.
- Fate and trajectory models showing the likely direction and distance of any vapour plume.
- A requirement for UAV/ROVs attached with sensors to be readily available to monitor vapour concentrations in the atmosphere.
- Mapping of sensitive environmental and economic receptors.

Regular training for all involved in the response is vital in order to reduce the risks posed by these fuels. For everyone to work together as a coherent unit, all responders need to understand the contingency plan in place and the roles and responsibilities of themselves and others in implementing the plan effectively. Clear communication channels during these training workshops and exercises facilitate rapid information exchange in the future.

What is ITOPF doing to be proactive for this new development in shipping?

ITOPF was founded in 1968 to administer a voluntary pollution agreement following the first major supertanker spill, the TORREY CANYON. Over the past 55 years, we have adapted with the industry as technologies have developed, expanded our services to include non-tankers, and adjusted our scope and role on-site to best serve

all parties affected by a ship-source spill. Over the past 20 years, we have established ourselves as a leader in providing technical advice to spills of cargo other than oil, such as HNS.

With the impending adoption of alternative fuels within the global fleet, this is another change to which we are in the process of adapting. To ensure we are ready to provide timely and accurate advice to members and associates, we set up an internal 'new developments' group in 2020 to research what spills of these future fuels may entail, how they interact with humans and the environment, if any clean-up methods would be suitable and what are the damage and liability implications from these spills.

Andrew Le Masurier

Technical Adviser,



Andrew Le Masurier joined ITOPF as a Technical Adviser in September 2019, where he is part of the Europe, Africa and Middle East team. He has a Bachelor's Degree in Environmental Science and a Master's Degree in Environmental Monitoring and Assessment. Before joining ITOPF, Andrew worked for four years in the contaminated land sector, dealing with the assessment and remediation of impacted soils and groundwater. His previous experience has involved designing complex ground investigations to assess the extent of contamination, working with environmental regulatory bodies on remediation projects and undertaking extensive



NATURAL RESOURCE DAMAGES

A bird in the hand is worth two in the oil spill: calculating natural resource damages under the U.S. Oil Pollution Act of 1990

Your vessel was involved in an incident in jurisdictional waters of the United States. If the incident caused – or threatened to cause – an oil spill, you may be liable for costs to not only clean up the spill, but also to compensate the public for losses of and injuries to, and costs to restore, impacted natural resources – known as natural resource damages (NRD).

Natural Resource Damages Following a Maritime Incident

Typical natural resources injured by oil spills may include: marine, aquatic and terrestrial ecosystems and their services; birds (including migratory, endangered and common species); shorelines and vegetation; marine, aquatic and terrestrial mammals, reptiles, amphibians, finfish, lobsters and shellfish; recreational use lost; and cultural resources. But how are NRD determined – and how much will this cost?

The answer will often depend on the qualifications and experience of the responsible party's (RP) NRD assessment (NRDA) team.

The U.S. federal Oil Pollution Act of 1990 (OPA 90) and its hazardous substances counterpart, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), formulate up and NRD costs. OPA 90 provides an intricate legal framework requiring federal agencies, including the National Oceanic and (NOAA) and the United States Fish & Wildlife Service (USFWS), states, federally recognised tribes and foreign governments

It is critical for an RP and its NRDA team to participate in the cooperative NRDA effort because RPs ultimately must:

- the NRD: and
- (B) compensate the public for the NRD by funding and/or conducting the necessary restoration.

Importantly, under OPA 90 and its implementing regulations, the playing field is further tilted in favour of the Trustees as they are afforded a "rebuttable presumption" for their NRD determination in any administrative or judicial proceeding. In other words, the Trustees do not have to prove their NRD determination is accurate; rather, the RP must prove it isn't.

If an oil spill triggers a NRDA, the RP's NRDA team should quickly develop and implement procedures that capture and/ or generate contemporaneous information that, in the end, can cost-effectively reduce uncertainty related to two primary NRD questions: "What natural resources were injured?" and "What was the spill's initial impact on those resources?"

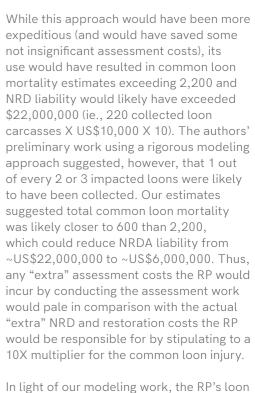
For all but the smallest U.S. maritime oil spills (and sometimes even then if significant and/or valuable natural resources are at risk), the process of answering these questions should begin as soon as the emergency response is activated, as much of the NRD data in the marine environment are ephemeral (ie., here today, gone tomorrow). This is because emergency response activation not only mobilises a small army of oilspill responders, it also mobilises state and federal scientists – frequently drawn from (or engaged by) the Trustees – whose job is to determine how much restoration will ultimately be required. Trustees' estimates are often exaggerated and/ or not fully scientifically supported and, because of the evidentiary presumption afforded Trustee NRD calculations in an OPA 90 incident as noted above, the RP is best served to participate "early and often" to appropriately influence the NRDA outcome by ensuring the data developed are grounded in good science and rational assumptions and appropriately calibrated to actual damages.

Real life example: the common loon

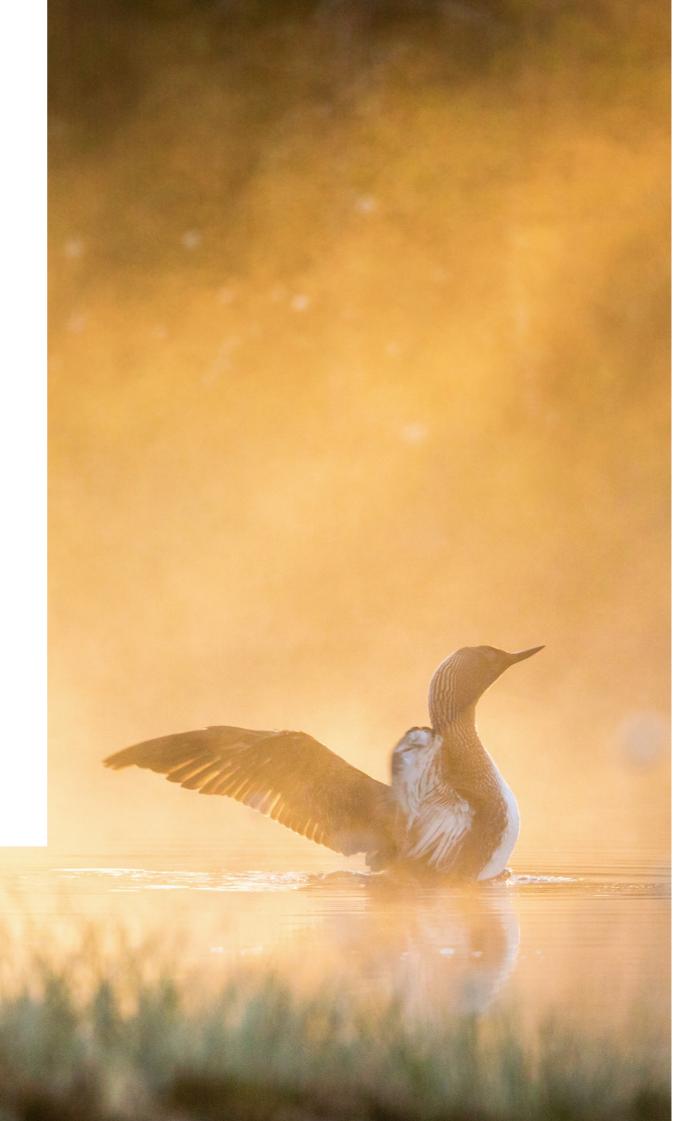
Within days of a significant 2003 oil spill that impacted coastal waters and extensive (A) pay all costs (RP and Trustees) to assess shorelines in Buzzards Bay, Massachusetts and Rhode Island, two NRD considerations became clear in the context of potential avian injuries: in addition to numerous other injured bird species, hundreds of moribund common loons were being collected and, based on a NRDA matter settled in 1999, each assumed common loon mortality would likely require approximately US\$10,000 (in 2003) in compensatory restoration.

> Given the level of NRD liability likely to be associated with the loss of common loons and their services, we worked with the Trustees to ensure that response-related information was collected in a manner that would enable the use of peer-reviewed modeling methods (as well as field experiments and literature evaluations) to estimate common loon mortality rather than rely on the Trustees' preference for more commonly used, but less exacting, alternatives.

Investment in key field data collection during the response afforded the RP options as the agreed-upon cooperative NRDA transitioned into injury quantification and determining potential restoration options. The Trustees opined that, based on their prior experience implementing assessments, only 1 in 10 loons impacted by the oil spill were likely to have been found (ie., the other 9 out of 10 loons would not be found due to, for example, sinking, scavenging, fly-aways or low search efficiency). Further, the Trustees were willing to avoid the assessment phase and offered the RP a "10X" multiplier stipulation for the loons that, the Trustees emphasized, would save the RP significant costs of assessment.



NRD estimate was significantly less than the Trustees' estimate; the RP reasoned that the Trustees' expedited approach grossly exaggerated loon injury and ultimate restoration costs. As such, the RP declined the stipulation and the authors worked with the Trustees to refine the modeling approach and conduct related field work to more accurately estimate common loon injuries. The RP and Trustees ultimately agreed that approximately 530 – and not 2,200 - common loons likely died because of the spill. The settlement for common loon injury and restoration was around US\$6,500,000 (in 2018), plus required assessment costs. A similar undertaking was conducted for piping plover (an endangered species) injuries, whereby we were able to successfully demonstrate through primary data collection, Monte Carlo analyses, and other modeling efforts that the cost of the needed restoration program was less than one third of the Trustees' initial calculation, reducing the RP's settlement obligation by almost \$2,000,000 (in 2018 US\$).



Conclusion

Don't Wait to Activate

When an experienced NRDA team is deployed early in the oil spill response phase, it can rely on the facts of the spill and their experience conducting other OPA 90 NRDAs to predict Trustee concerns, methodologies and priorities: "Which natural resources will the Trustees assume were injured?", "How much is compensatory restoration for each resource likely to cost?" and "What methods will likely be used to reach those conclusions?" With those concerns in mind, the RP's NRDA team can work with both emergency responders and their Trustee counterparts to design and implement information collection protocols intended to minimize NRD and ultimate restoration requirements/costs. This is true not only of bird impact assessments but also assessment of impacts to other wildlife, fish, shellfish, shoreline habitats and resources that support outdoor recreation. Remember, in a NRDA, data gaps are often filled by Trustees (emboldened by their statutorily afforded rebuttable presumption) with an expedited approach that contains "protective" (ie., overly conservative) assumptions that can inflate NRD settlement costs far beyond those based on reasonable scientific estimates. Early involvement of the RP's experienced NRD team is critical – injury calculation is the starting point of the NRD process and the base from which the restoration projects are scaled and ultimately translated into projects the RP must undertake and/or fund.

Understand the Price of Speed

Trustees may lean toward (and push) simplifying assumptions that expedite the NRDA process while inflating NRD liability. RP NRDA teams should work collaboratively with their Trustee counterparts to ensure that injury estimates (and ultimate restoration requirements) reflect what likely happened in the environment given the available information rather than assuming the worst-case scenario. This collaboration may take time and more resources upfront relative to an expedited response (eg., an RP stipulation to "assumed" injury). However the decrease in compensatory restoration costs will likely dwarf any increased assessment costs the RP is obligated to pay for the NRD. RPs and their NRDA team should work together to understand the tradeoffs associated with various NRDA approaches and identify the approach that best supports the RP's interests in a particular matter.

In our experience, in a U.S. OPA 90 maritime incident, working with the Trustees to collaboratively implement NRD information collection protocols and assessment methodologies is the best approach for an RP who wants to ensure the ultimate NRD assessment and restoration costs the RP is responsible for are grounded in good science and appropriately calibrated to actual damages.

Andrew Davis & Sarah Kettenmann

Environmental Attorneys, Shipman & Goodwin LLP

Andrew Davis and Sarah Kettenmann are environmental attorneys at Shipman & Goodwin LLP in Connecticut (USA). They can be reached at: adavis@goodwin.com or 860/251-5839 and skettenmann@goodwin.com or 203/324-8164 respectively.







NRDA Experts, SWCA Environmental Consultants







22 # Issue 06 WAYPOINTS Issue 06 # 23

PLASTIC POLLUTION,

West's Emma Forbes-Geary discusses the sources of plastic marine litter from shipping and the future of regulation





24 # Issue 06 WAYPOINTS

What are plastics?

Plastics are synthetic organic polymers crafted from raw materials such as oil, coal, and gas. They fulfil many functions with applications across diverse industries, such as packaging, electronics, automotive, construction, healthcare, agriculture, and energy storage. Initially hailed as the quintessential material for the 21st century, plastic production surged from 5 million tonnes in the 1960s to 460 million by 2019. Its resilience, adaptability and lightweight properties contributed to its widespread adoption, resulting in its presence in unwanted locations.

Shipping's plastic problem

Plastic pollution is on the rise, mainly due to increased production. The majority (80%) of marine debris originates from land-based sources like waste and litter, while the remaining 20% results from accidental ship discharges and the loss of fishing gear, affecting human health, aquatic ecosystems, and maritime industries. Lost fishing gear, often called ghost gear, adversely affects the economy and poses navigation hazards. It can disrupt the underwater manoeuvring systems of a vessel, causing operational delays, economic losses, and, in severe cases, endangering the lives of passengers and crew members.

Plastics, being largely buoyant, drift with the prevailing currents and winds, accumulating in spiralling ocean currents, leading to vast expanses of floating plastic litter like the "Great Pacific Garbage Patch", approximately 4.5 times the size of Germany. Worryingly, floating plastic is only the tip of the rubbish pile. The United Nations Environment Program estimates that approximately 15% of marine litter floats on the sea surface, 15% stays in the water column, and the rest remains on the seabed.

According to the National Oceanic and Atmospheric Administration, a plastic bottle may take about 450 years to decompose, while a fishing line could endure for up to 600 years. Most plastics are non-biodegradable and can persist for decades, undergoing gradual breakdown due to factors like ocean currents, solar UV radiation, wind, and other natural elements. Over time, these plastics fragment into tiny particles known as microplastics (less than 5mm), which are readily ingested by marine organisms. The Environmental Investigation Agency warns that by 2050, there could be more plastic than fish in our oceans.

The United Nations Environment
Programme estimates that at least 51
trillion microplastic particles could
already be in the oceans. When exposed
to environmental toxins, they can absorb
up to a million times more toxic chemicals
than the surrounding water. Research
indicates that toxic chemicals from plastics
have already entered the human food
chain, raising concerns about potential
health issues.

Is current regulation up to the task?

For almost 30 years, the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex V has prohibited rubbish disposal from all ships. Recognising that more was needed to address environmental and health problems arising from ship-sourced litter, the IMO adopted an action plan to improve the effectiveness of port reception facilities. Furthermore, guidelines for MARPOL Annex V to address single-use plastics onboard ships were also developed and adopted in 2017.

The Environmental Investigation Agency warns that by 2050, there could be more plastic than fish in our oceans.







Recent studies indicate that approximately 640,000 tonnes of fishing equipment, such as nets, pots, crates, floats, and fishing aggregation devices (FAD), are abandoned or lost annually at sea.

Despite regulations aimed at preventing the intentional disposal of plastic into the ocean, a substantial amount still finds its way into the sea. Recent studies indicate that approximately 640,000 tonnes of fishing equipment, such as nets, pots, crates, loss and mandates specific gear marking floats, and fishing aggregation devices (FAD), are abandoned or lost annually at sea. This figure is likely underestimated due to fragmented data availability.

Besides MARPOL, another significant regulatory framework is the London Dumping Convention, founded in 1972, aimed at preventing the intentional dumping of waste or other substances from ships into the sea, except for those on the "reserve list," which excludes persistent plastics. However, it doesn't govern the disposal at sea of waste or substances related to normal vessel operations; this falls under MARPOL's jurisdiction. Consequently, according to the London Dumping Convention, deliberate dumping or discarding of fishing nets and FAD is prohibited unless necessary for the safety of the vessel or human life.

While international regulations exist to control the intentional or accidental discharge of plastic from ships, a notable issue with these regulations is their enforcement, which requires improvement. Monitoring and enforcing the prohibition on plastic pollution from vessels in international waters present significant challenges. Flag states often need more motivation, and there are no compelling incentives to prompt vessels to retrieve abandoned gear encountered during fishing activities.

Nevertheless, there are promising examples of initiatives from countries and organisations addressing these concerns. For instance, Canada has enforced mandatory reporting of gear to enable traceability back to individual vessels, thus enhancing accountability. Additionally, the Thai Union, a major seafood company, enforces requirements for tuna suppliers to mark nonbiodegradable FAD components.

Plastic pollution events from cargo or fishing gear continue to pose a threat on a par with oil pollution, but regulations are yet to address the issue aggressively. However, recent developments suggest regulatory changes are coming to tackle this issue.

In March 2022, the UN Environment Assembly came together to create new international legislation that would be legally binding on plastic pollution, with sections focusing on the marine environment. The completion date for the treaty negotiations should be December 2024; details regarding the final contents are unknown.

In a separate development, the International Maritime Organisation has agreed on draft recommendations for transporting plastic pellets on ships. These considerations were submitted to the Marine Environment Protection Committee for approval in their next meeting.

Members requiring further guidance should contact the Loss Prevention Department.



28 # Issue 06 WAYPOINTS Issue 06 # 29

SHIPPING INDUSTRY SHOULD BRACE FOR UNDERWATER REGULATION

Sound in the oceans originates from many sources- naturally from fish and mammals, storms, earthquakes, and even clouds of bubbles released from the seabed. However, the anthropogenic sources, like commercial shipping, marine construction, and oil and gas exploration contributes a substantial part of the noise. This anthropogenic noise may interfere with marine life, causing disruption to communication, navigation, and feeding habits. It is estimated that the noise generated by commercial ships has increased three-fold over the last 50 years and is projected to increase even further in the coming decades.

At this point in time, there is no mandatory international regulation on ocean noisebut is this about to change?

We might anticipate that the recently revised voluntary IMO guidelines on the reduction of underwater radiated noise (URN) from commercial shipping (MSC.1/Circ.906) -which are intended to assist relevant stakeholders in establishing mechanisms through which noise reduction efforts can be realised -will become mandatory in the not-so-distant future. Furthermore, we will see regional regulations aiming to minimise adverse impacts coming from the EU, US and Canada. The IMO has also issued draft supplementary guidelines for underwater radiated noise reduction in Inuit Nunaat and the Arctic, recognising that there are a number of characteristics of the region and the activities within could increase the impacts from underwater radiated noise. This includes potential for icebreaking activities, presence of noise-sensitive species, and potential interference with indigenous hunting rights. The challenge of managing URN from both a technical and political standpoint should not be understated.

Given the complexities associated with ship design and construction, the Guidelines advise shipowners and designers to undertake URN management planning at the earliest design stages. Similarly, URN management planning may be carried out for existing ships to reasonable and practicable extents.

If you can't measure it, you can't manage it

Although monitoring the URN from shipping, eg. by use of a management planning tool, is non-mandatory, maritime and port authorities seem keen on establishing various incentive schemes to support the implementation of URN monitoring programmes, where considered appropriate.

The obvious incentives are to apply certain criteria to the ships. For instance, to design according to relevant URN ship class notations issued by Classification Societies, development of a URN Management Plan, or other voluntary sustainability certifications. Benchmarking by means of key performance indicators could also be

commercially attractive to the industry as design and operational options can be used to reduce noise levels and improve energy efficiency. The port fees charged will then depend on the ship's underwater noise performance; the more noise the higher the port fee.

Although ports or littoral state could consider implementing real-time measurement of ship noise whenever ships are in its territorial waters, ports in particular may be hesitant, as the level of investments into acoustic monitoring equipment could be substantial. Furthermore, monitoring a port environment is challenging due to the presence of various anthropogenic noise sources, the shallow area, and hard structures causing constant noise through not found further offshore.

from the University of Southampton which identifies energy efficiency measures as a potential factor in reducing URN levels. With nearly 28% of the global fleet now fitted with energy-saving or propulsion-improving devices, there may also be the chance to significantly reduce URN.

Despite the progress, a number of questions remain: will future measures be provided from shipyards by delivery of the ship as part of the sea trials process, or as an out-of-water maintenance facilities after dry docking? Should the noise level

The littoral state may issue incentive programmes providing priority in the allocation of berth slots for ships generating less underwater noise on-route, or reduction in ship waiting time at ports through collaboration along the entire logistical maritime chain (the "Just-In-Time" concept). Both types of programmes may require the ship to slow down with the specific goal of reducing underwater noise emissions. The ship will have to consider this aspect in their charterparties and find a balance between the noise level emitted and the degree of operational efficiency.

The rebate by the individual ports may be marginal. Hence, the only economically meaningful solution for ships will be if a larger number of ports join a specific initiative scheme. As such, coordination between ports in setting priorities, as well as the harmonisation of indexes and their widespread use by ports, will favour the adoption of the requested changes by the shipping sector.

Another positive side-effect may be that the reduced speed reduces the risk of ships colliding with whales. Although reducing the operational speed for ships may have a number of positive effects for whales, this can result in an increase in shipping times and costs, and it is therefore essential to further understand these tradeoffs and strive for a balance that ensures both efficient shipping operations and marine life protection.

There is an increasing recognition that synergies with climate policies must be considered, particularly energy efficiency improvements required to achieve the goals set down by the IMO GHG strategy. The relationship between energy efficiency and noise is one which BIMCO has raised at the IMO – highlighting results from a study from the University of Southampton which identifies energy efficiency measures as a potential factor in reducing URN levels. With nearly 28% of the global fleet now fitted with energy-saving or propulsion-improving devices, there may also be the chance to significantly reduce URN.

Despite the progress, a number of questions remain: will future measures be provided from shipyards by delivery of the ship as part of the sea trials process, or as an out-of-water maintenance facilities after dry docking? Should the noise level be monitored continuously and become part of the "noon-data" reporting? Should ports invest in real-time listening sensors outside the entry? The "experience-building" phase that is now being entered into should help us address some of these questions as the industry and member states explore practical implementation.

One thing is however certain, the URN levels from commercial shipping are currently in focus and the newly revised IMO Guidelines are a positive element ensuring that relevant parties have the best available information to inform URN reduction efforts and to take account of linkages with energy efficiency compliance measures.

Bev Mackenzie

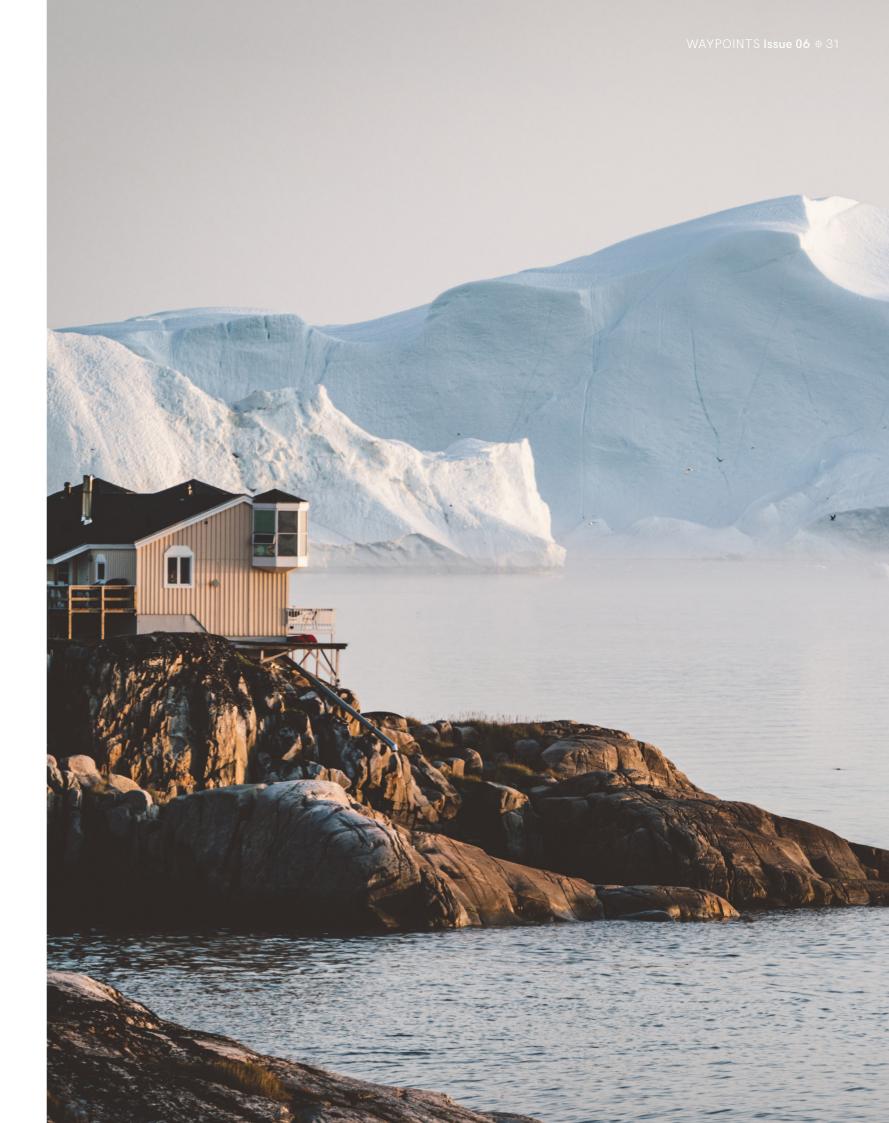
Head of Intergovernmental Engagement,



Jeppe Skovbakke Juhl

Manager - Maritime Safety and Security,





32 # Issue 06 WAYPOINTS

BRIEFCASES

In this edition of Briefcases, we will focus on recent decisions clarifying the meaning of "subjects to be lifted" and when a charterparty becomes legally binding, particularly examining the crucial question: When is a contract formed?

The effect of "subjects": pre-condition or performance condition? The Leonidas [2020]

Owners of the vessel "Leonidas" entered into negotiations to voyage charter the Vessel to carry crude oil from the Caribbean to the Far East. The recap provided among other things that: negotiations were "subject to Charterers' Stem/Suppliers/ Receivers and Management Approval, latest 17:00 on 13th January".

By 13 January the only outstanding subject was the Supplier's approval, with the deadline for lifting this of 17:00hrs. However, at 16:59hrs the Defendant emailed to advise that they were unable to lift all subjects on the Vessel. The Owner held the Charterer in repudiatory breach.

Was the "Supplier's Approval":

- a "pre-condition" to contract (which had the effect of preventing a contract coming into existence altogether), or
- (2) a "performance condition" (a condition which does not prevent a binding contract coming into existence, but which if not satisfied means that performance does not have to be rendered)?

It was held that the Suppliers' Approval Subject was a "precondition" to the contract, and therefore the contract was not formed. The Charterer was not required to take reasonable steps to obtain its suppliers' approval.

- An important factor in whether a subject is a pre-condition, or a performance condition is whether satisfaction of the subject depends on the decision of a contracting party or a third party.
- A subject is more likely to be a pre-condition than a performance condition where the subject involves the exercise of a personal or commercial judgment by one of the potential parties.
- The particular negotiating language of shipowners, charterers and brokers referring to agreements as "on subjects", and "lifting" subjects, points towards a subject in the chartering context being more likely to be a pre-condition.

Why does this decision matter?

This case is a reminder to take care in drafting or agreeing to terms in the contract and to consider the difference between pre-conditions and performance conditions before contracting. Where a 'subject' is only resolved by one or both of the parties removing or lifting the subject, rather than occurring automatically on the occurrence of some external event such as the granting of a permission or licence, the 'subject' is likely to be a pre-condition rather than a performance condition.

No binding contract unless and until "subjects" are lifted: The "Newcastle Express" [2022]

The Charterer and the owner entered into negotiations for a voyage to carry coal from Australia to China on the "Newcastle Express". A recap was circulated which provided:

"SUBJECT TO SHIPPERS/
RECEIVERS APPROVAL WITHIN
ONE WORKING DAY AFTER
FIXING MAIN TERMS & RECEIPT
OF ALL REQUIRED CORRECTED
CERTIFICATES/DOCUMENTS" and
"RIGHTSHIP INSPECTION WILL BE
CONDUCTED ON 3RD/SEPT...".

The shipper was concerned that the Rightship inspection was taking too long and on 2nd September 2020 requested the Charterer to arrange another ship. On 3rd September 2020 the Charterer advised the Owner of their intention not to take the ship.

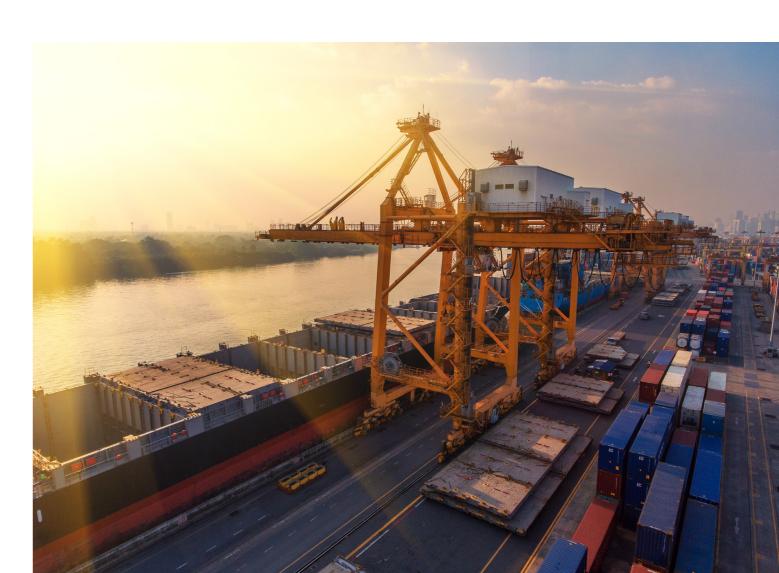
The Owner argued that there was a binding contract between the parties and that the Charterer was in repudiatory breach of the charter party.

It was agreed that the Charterer had not provided its confirmation, neither had there been approval from the shipper or the receivers, and there was not a 'clean' fixture as the relevant 'subject' had not been lifted.

The court held that the fixture was not binding unless and until the Charterer communicated that the "subject" was lifted. The court found that the 'subject' provision in this case, was shippers'/receivers' approval, and as a result the Charterer did not wish to make a binding contract until both the shipper and the receiver had approved the ship.

Lesson to be learnt

Parties need to be aware of what obligations need to be performed in order for the subjects to be 'lifted'. There will be no fixture unless all subjects are lifted.



A party cannot accept terms which it had previously rejected: The "Aquafreedom" [2024]

Owners and Charterers entered into negotiations in respect of the mv "Aquafreedom". The discussions led to a fixture recap on two subjects: "as per previously agreed terms sub review both sides" and "Charterers" management approval latest 2 working days after all terms agreed.

After that recap, the Owners proposed to Charterers a series of terms, to which the Charterer counter proposed. Owners, however, then went silent. Sensing that the Owners were pulling out of the negotiations, the Charterer revoked its counterproposals and accepted the Owners' earlier terms, to which the Charterer had counter proposed. The Owners withdrew their offer. The Charterer responded by purporting to lift its management approval subs.

The Court found in favour of the Owners:

- The court confirmed that the starting position is that the presence of even one 'subject' is sufficient to prevent a contract from arising and that while a vessel is 'on subs', either party is within its rights to simply walk away.
- The Charterer could not unilaterally accept terms which it had already rejected. Under English law, a counter-offer amounts to a rejection. A rejection 'kills' the offer, such that the offer stops being open for acceptance.

Why are these decisions important and what are the main lessons to be learnt?

When either the Owner or the Charterer decide to withdraw their offer and to walk away from negotiations is important to check whether a contract has been formed. Failure to do so could result in a party being liable in repudiatory breach.

There is a distinction between "subject" which is a "precondition" to or a "performance condition":

■ When a subject is a precondition, the presence of even one 'subject' is sufficient to prevent a contract from arising. A fixture is not binding unless and until, the relevant party communicates that the "subject" is lifted.

- A "performance condition" is a condition which does not prevent a binding contract coming into existence, but which if not satisfied means that performance does not have to be rendered. An example is where a contract for international sale is made subject to obtaining an export licence or an import licence.
- A party cannot unilaterally accept terms which it had already rejected. Under English law, a counter-offer amounts to a rejection. Practically, this means that, once a party has rejected an offer, it cannot then change its mind and unilaterally accept it. In other words, once the Charterer had counter-offered on terms, the Owners' offer stopped being open for acceptance.





Interview with Roel Hoenders, Head, Climate Action and Clean Air, IMO



MEPC80 saw a revised GHG strategy, what are the new targets?

The vision of the 2023 Greenhouse Gas (GHG) Strategy includes an ambition to reach net zero GHG emissions by or around, ie., close to, 2050, taking into account different national circumstances. Enhanced levels of ambition include to reach at least 5%, striving for 10%, of the energy used by international shipping to be zero or near-zero GHG emission technologies, fuels and/or energy sources by 2030. New indicative checkpoints to reach net-zero GHG emissions are identified as follows: reduce the total annual GHG emissions from international shipping by at least 20%, striving for 30%, by 2030, and by at least 70%, striving for 80%, by 2040, compared to 2008.

If it can be measured in numbers, if we achieve these goals, how much cleaner will the air be?

The main objective of the IMO GHG Strategy is to phase out emissions from international shipping to net zero as an effective means to tackle climate change and associated impacts, such as global warming and sea level rise. The uptake of zero and near-zero marine fuels can also substantially cut air pollution resulting from sulphur oxides and nitrogen oxides emissions'. That will improve air quality and human health, particularly for those living in coastal areas.

What are the greatest challenges in achieving this?

IMO Member States have defined the pathway towards a net zero future for international shipping in the 2023 IMO GHG Strategy, while promoting a just and equitable transition. The IMO GHG Strategy provides certainty about the low-carbon future of shipping, allowing all stakeholders to take the necessary steps to prepare for this transition already today. We have to ensure that everyone is on board to achieve IMO's ambition and need to work with stakeholders outside the maritime sector – such as energy and financial sectors - as well as large industries, such as cement, steel and aluminum producers which all heavily rely on maritime transport, to form strategic partnerships to facilitate access to investment and availability of future renewable fuels. IMO is also committed to building capacity in developing States (especially Small Islands Developing States (SIDS) and Least Developed Countries (LDCs)) to implement the IMO GHG Strategy. We also need to train the maritime workforce -particularly seafarers – to handle zero or near-zero GHG emission technologies, fuels and/ or energy sources.

Going forward, what does the IMO's vision and strategy for clean air look like?

A key aspect we are currently working on is the development of the next set of IMO global greenhouse gas reduction measures, namely a carbon fuel intensity standard and a maritime GHG emissions pricing mechanism. These measures should be adopted, taking into account the findings of the ongoing impact assessment process in 2025, and enter into force in 2027 to deliver on the climate targets laid down in IMO's GHG Strategy.

We are also enhancing IMO's framework for the assessment of the life-cycle carbon footprint of marine fuels. The 2023 GHG Strategy identifies that the IMO reduction targets should take into account the 'well-to-wake' GHG emissions of marine fuels to ensure that the full carbon footprint of alternative marine fuels is considered in their reduction potential.

These measures will provide the needed incentive, and signal to fuel producers to promote the energy transition of shipping while contributing to a global level playing field.

What is the one thing shipowners can embed in theirs ESG strategies to support this vision?

The transition is happening.
Decarbonization is happening.
The 2023 IMO GHG Strategy provides a clear and predictable pathway towards decarbonization, which everyone can and should be part of.





New MARPOL regulations coming into force in 2024/2025

Emma Forbes-Gearey

Loss Prevention Officer, West P&I



Emma, who holds an MSc in Sustainable Maritime Operations, worked as a Deck Officer for four years and gained experience on a range of vessels, such as combination carriers, passenger ships, and yachts. In 2019, she joined the Club after transitioning directly from her seagoing career and now attends to Loss Prevention matters.

The MARPOL Annex V, regarding the Garbage Record Book, was amended on 1st May 2024. Previously, vessels were only required to carry and fill out the record book for vessels 400 GT and above; now, it has been reduced to 100GT.

On 1st July 2024, Annex I will adopt new measures concerned prohibiting Heavy Fuel Oil (HFO) use and carriage by ships in Arctic waters from 2024. The ban consists of fuel oils with a kinematic viscosity at 50°C higher than 180mm2/s or a density at 15°C higher than 900 kg/m3. There are some exceptions to the regulation which are as follows:

- There is a delay in complying until 1st July 2029 for vessels trading domestically in the waters under the jurisdiction of their flag state (countries that are signatories to MARPOL);
- Vessels engaged in search and rescue operations, securing the safety of ships or vessels designated to respond to oil spills; and
- Vessels complying with regulation 12A of MARPOL Annex I concerning oil fuel tank protection or Part II-A of the Polar Code only need to comply on 1st July 2029.

It should be noted that the new requirement does not affect HFO carried as cargo on tankers.

In 2025, Annex VI will be amended to add another area to the Emission Control Areas (ECA) for sulphur oxides. Presently, the North Sea, the United States Caribbean Sea, North America and the Baltic Sea are the areas where there is a limit on sulphur oxides and particulate matter emissions. The Mediterranean is now an ECA for sulphur oxides and particulate matter. The regulation will be the same as it is for the other ECA areas. These areas mandate that fuel oil used by the vessels within the region do not have a sulphur content exceeding 0.10% unless they use an exhaust gas cleaning system. Even though the amendment will enter into force on 1st May 2024, ships must comply from 1st May 2025.



Recent recruits to the Greek office include Marius Vitas, a Senior Claims Manager, who joined from another IG Club in London and brings with him additional experience of fixed premium insurance and off-shore risks. Gina Sorial was the Club's correspondent in Egypt for many years and her Arabic skills have been widely used. Andriana Georgiou and Panos Boumpoulis have also been developing their FD&D handling abilities for a wide range of Members.

Recent high-profile P&I cases handled have been a car carrier fire, a multiple collision and dock damage in Korea, contamination of product cargoes and large fines in challenging jurisdictions. The FD&D class has been particularly active with ship construction disputes and the legacy of Covid-19 deviation cases.

West Hellas has been actively involved in attending conferences and providing training. Recently, Ian Clarke has been a prominent panellist discussing sanctions and Red Sea risks. Filina Sarri took a long trip to Manila to see how the system works on the ground for Filipino crew claims and several from the team have been on board ships to familiarise themselves with technical and practical issues. In November 2023 the Club's Loss Prevention and Claims annual seminar presented on a variety of topics to Members in Greece and Cyprus.

Greece is exceptionally sociable and the office hosts regular networking events including a pre-renewal party, a beach reception at Maritime Cyprus, and International Women's Day. A highlight is the Club's afternoon reception at Posidonia in June 2024 which everyone is looking forward to.













WEST.

Luxembourg 31 Grand-Rue L-1661 Luxembourg G.D. Luxembourg T +352 4700671

UK (London)
One Creechurch Place
Creechurch Lane
London EC3A 5AF
T +44 20 7716 6000

Greece (Piraeus)
Akti Miaouli 95
1st Floor
185 38 Piraeus
T +30 210 4531969

Hong Kong 1302 YF Life Centre 38 Gloucester Road Wanchai, Hong Kong T +852 2529 5724

Singapore 77 Robinson Road Level 15-01, Robinson 77 Singapore 068896 T +65 6416 4890

USA (New York) 777 3rd Ave Floor 19, Suite 1901 New York, NY 10017 T +1 917 733 2584

