Maritime Environmental Law Update (June 2019 Edition)

June 28, 2019

We are providing this update on significant developments in international environmental maritime law and regulation. Our prior update was issued in November 2018, and can be found here. As the deadline to comply with the reduced limit of 0.5 percent sulfur content in fuel looms, shippers and suppliers are taking steps to prepare for this significant change. Reducing emissions remains a crucial goal for the industry, and shipping and cruise lines continue to invest in new technologies, including alternative energy power sources, in their efforts to reduce emissions.

International Developments

January 2020 Deadline for 0.5 Percent Sulfur Content Looms

Many shippers and suppliers are behind pace for meeting the 2020 deadline to reduce the sulfur content in marine fuel from its current level of 3.5 percent to 0.5 percent. The International Maritime Organization (“IMO”) shows no signs of delaying implementation, with the regulations set to come into effect on January 1, 2020.

The new sulfur regulations are expected to increase the costs of shipping fuel by approximately $250 per ton, increasing aggregate industry costs by an estimated $100 billion annually. While larger ports appear to have enough low-sulfur fuel on hand to meet demand, it is less clear if smaller, regional ports are similarly prepared.

The reduction in the sulfur content of fuel is expected to improve air quality and reduce human health impacts; however, experts warn that the new fuel
alerts & publications

Maritime Environmental Law Update
(June 2019 Edition)
June 28, 2019

We are providing this update on significant developments in international maritime law and policy. Over the past year, the International Maritime Organization (IMO) has been making progress on numerous environmental and safety initiatives. In fact, the IMO’s efforts are expected to significantly reduce the world’s carbon footprints by 2050. Despite these achievements, the shipping industry continues to face challenges, including high fuel costs and rising piracy in the Gulf of Guinea.

**Shippers Urge IMO to Institute Top Speed Limits to Reduce Carbon Emissions**

One hundred shipping companies signed an open letter to the IMO asking to implement maximum speed limits. The measure, supported by both the shipping industry as well as environmental groups such as Greenpeace and the World Wildlife Fund, is a way to reduce fuel use and emissions. No container shipping lines were represented among the 100 signatories. Container ship operators are concerned that reducing speed limits will require adding more ships to remain on schedule.

**IMO Sets More Stringent Efficiency Goals for Some Ships**

While the IMO has had a long-term goal of cutting emissions by 50 percent by 2050, it recently proposed even more stringent regulations at its last meeting. The IMO’s Energy Efficiency Design Index sets higher standards for certain types of ships: the Phase III stage, which required that ships reduce their carbon emissions by 30 percent by 2025, has been moved up to 2022 for several classes of ships. The proposed draft amendments require up to a 50 percent reduction in carbon emissions for new containerships 200,000 deadweight tons and above, and set standards for ships running on liquefied natural gas (“LNG”). The draft amendments were introduced at the IMO’s Environment Protection Committee meeting in May, and are expected to be finalized at the next meeting in spring of 2020.

**IMO Seeks to Reduce the Spread of Invasive Species**

In March, the IMO kicked off a five-year project to reduce the spread of invasive species that hitch rides around the globe by attaching themselves to ship hulls. The GloFouling Partnership is a collaboration between the IMO, Global Environment Facility (“GEF”), and the United Nations Development Program (“UNDP”). The goal of the project is to reduce the introduction of invasive species among developing and island countries, including Brazil, Ecuador, Fiji, Indonesia, Jordan, Madagascar, Mauritius, Mexico, Peru, the Philippines, Sri Lanka and Tonga. The GloFouling Partnership is the first global partnership to address the risks of biofouling, and is unique in that it addresses biofouling relating to all marine sectors, not just shipping.

**Risk Increases for Oil Tankers Sailing Through Persian Gulf**

The Joint War Committee of London’s Lloyd’s Market Association announced it would expand its “listed areas” to include the Persian Gulf. The Joint War Committee represents underwriters who insure vessels against damage sustained during acts of war. The listed areas are regions that are considered the most dangerous for shippers, and could mean
potentially higher insurance costs. These areas include the Persian Gulf and the Strait of Hormuz, which connects the Persian Gulf and the Gulf of Oman and is considered the world’s biggest chokepoint for oil. Up to 40 percent of the world’s oil passes through the Persian Gulf. Increased tension between Iran and Saudi Arabia, as well as the prospect of war between the United States and Iran, are to blame for the risk increase. The area was last listed in 2005, during the height of the Iraq War. A rise in insurance premiums could lead to oil price increases.

Tensions Rise in the South China Sea

In May, Australian navy helicopter pilots were hit with lasers from fishing boats in the South China Sea. The pilots were involved in military training exercises and were believed to be followed by Chinese warships. This incident comes as tensions in the South China Sea are rising: US navy ships have been engaged in exercises in the South China Sea throughout the month of May, and Acting Secretary of Defense Patrick Shanahan has denounced China’s aggressive presence in the area.

The hotly contested region is subject to competing land and fishing claims from China, Taiwan, Vietnam, Malaysia and the Philippines, and is one of the most valuable waterways in the world. Approximately one-third of international shipping travels through the area. China currently claims almost all of the 1.3 million square mile sea as part of its sovereign territory.

US Developments

New Ballast Water Regulations Create Uniformity

The Vessel Incidental Discharge Act (“VIDA”), signed into law in December 2018, has the goal of creating more uniform ballast water discharge regulations. VIDA repeals the US Environmental Protection Agency’s (“EPA”) 2014 Small Vessel General Permit (“SVGP”), amends the Clean Water Act to establish “Uniform National Standards for Discharges Incidental to Normal Operation of Vessels,” and authorizes the EPA to promulgate new regulations to establish federal standards of performance for marine pollution control devices for each type of discharge incidental to the normal operation of covered vessels, including ballast water and graywater. EPA has two years to promulgate the new regulations, and the United States Coast Guard will administer and enforce the new regulations.

VIDA reforms the current regulation of incidental discharges by adding a new section to the Clean Water Act, section 312(p), Uniform National Standards for Discharges. Incidental discharges are discharges originating from a vessel during its normal course of operation, and encompass approximately thirty different types of discharges for ships, including ballast water.

Instead of having individual states enforce their own ballast water standards under the Clean Water Act and state versions thereof, VIDA will set nation-wide standards with the goal of bringing standards more in line
alerts & Publications
Maritime Environmental Law Update (June 2019 Edition)
June 28, 2019

The first cruise ship powered solely by LNG, the El Coqui, has joined its sister-vessel Taino. The ship is equipped with international standards set by the IMO. Currently, the US Coast Guard, the EPA, and individual states work to enforce a patchwork of standards. Prior to the passage of VIDA, vessels over 79 feet had to comply with the discharge regulations set by the 2013 Vessel General Permit (“VGP”), and commercial vessels under 79 feet had to comply with regulations set by the SVGP.

VIDA will ultimately remove ballast water discharges from the National Pollution Discharge Elimination System (“NPDES”) permitting system and repeal the VGP. VIDA will proceed in a multi-stage process, and will not replace the 2013 VGP until both the EPA and US Coast Guard set new standards. Until new standards come into effect, vessels over 79 feet must still comply with the 2013 VGP. Because VIDA repealed the SVGP, small vessels under 79 feet are now exempt from complying with SVGP discharge standards except for ballast water. Ballast water discharges by small vessels must still comply with the ballast water discharge standards of the VGP. The new VIDA standards are expected to be at least as stringent as those in place under the 2013 VGP. The standards will be technology-based, requiring vessels to use the best treatment system that is economically feasible. VIDA updates the definition of “living” for organisms found in ballast water, adopting the IMO’s definition, which defines living organisms as those capable of reproducing. VIDA will also require that any vessels travelling from international ports do a complete flush and exchange of untreated ballast water 200 miles offshore. Ships using a Coast Guard-approved ballast water treatment system would not need to flush and exchange ballast water. VIDA does allow for some regional variation for ballast water standards: stricter standards will be in place for the Pacific Region and the Great Lakes. VIDA also provides a mechanism for states to petition for new standards or request a moratorium on ballast water discharges. The ability for states to request specific changes does not come into effect until the new VIDA regulations are fully implemented.

The Jones Act Revisited

In March, Utah Senator Mike Lee proposed the Open America’s Waters Act of 2019, which would repeal the 1920 Merchant Marine Act, better known as the Jones Act. The Jones Act requires that vessels carrying cargo or passengers between US ports be US-flagged, built in the United States, and be at least 75 percent owned by US companies.

The Jones Act has been heavily criticized as a protectionist measure that increases the shipping costs between US ports—in many areas, goods move via truck or even plane because complying with the Jones Act can be so expensive. Residents of Alaska, Hawaii, and Puerto Rico, who get most of their goods shipped from the continental United States, are particularly hard-hit.

The Open America’s Waters Act would also open intra-US shipping to foreign-owned vessels. Proponents claim that repealing the Jones Act
would reduce shipping costs and increase competition. Defenders of the Jones Act claim that it’s necessary to protect the dwindling US merchant marine fleet and the United States’ national security interests.

Reports Shed Light on State of the US Shipping Industry

A report issued by the Bureau of Transportation Statistics (“BTS”) shows that the number of US ports handling more than 250,000 tons of cargo per year fell between 2005 and 2015. The report also showed that the average age of US ships was creeping up, with 41 percent of US commercial vessels 21 years old or older. A report issued by the Department of Transportation’s (“DOT”) Maritime Administration (“MARAD”) found that the number of US-flagged vessels involved in international trade fell by over 50 percent since 1990, from 199 vessels down to only 82 by the end of 2017. A lack of cohesion among US maritime shipping interests could be a contributing factor, in that there is no unifying voice to advocate for the US maritime sector. The Government Accountability Office issued a report calling on the DOT to create a national strategy to sustain the US-flagged fleet, citing national security concerns.

Detecting When LED Navigation Lights No Longer Meet Standards

As LEDs replace incandescent lights for navigation, new issues arise for monitoring the performance and compliance of LED navigation lights. The Convention on the International Regulations for Preventing Collisions at Sea (“COLREGS”) are regulations published by the IMO and set out navigation rules, including governing the standards for navigation lights. COLREGS requires that navigation lights maintain a certain luminous intensity, a measure of brightness.

COLREGS Resolution MSC.253 (83) 4.3 provides two options for monitoring compliance of LED lights: ships can either install an alarm system that will alert the Officer of the Watch when intensity falls out of compliance, or LEDs can only be used for a set “lifespan” before being replaced. Due to the difficulties in monitoring intensity of LEDs compared to traditional incandescent bulbs, most manufacturers and vessel operators use the second standard, and replace LED navigation lights after 50,000 hours. However, using lifespan standards does not actually guarantee that LEDs are compliant with COLREGS, as an LED can diminish in its intensity while still within its lifespan. An LED developed by Signal Mate is able to self-monitor its intensity and set off a warning when it falls out of compliance.

This development is particularly timely in the United States, where the US Coast Guard and American Boat and Yacht Council (“ABYC”) are in the process of updating standards for navigation lights used by inspected commercial vessels in US waters and may require that LED navigation lights set off a warning when intensity drops below COLREGS standards. Further discussion of updating the American standard will continue at the next ABYC Standards Meeting in January 2020.
New Maritime Technologies

Shipping Lines Invest in Alternative Energy Sources

As the shipping industry strives to reduce emissions, shippers and cruise lines are continuing to invest in alternative energy sources to power vessels. The use of hydrogen fuel cells, which generate zero carbon emissions, is one such option: a company has explored the possibility of using ferries running on hydrogen fuel cells in the San Francisco Bay area. Norway is also considering developing fuel cell-powered high-speed ferries and short-sea freighters.

LNG-fueled ships are also on the rise. LNG-burning ships generate much lower levels of sulfur, nitrogen oxide, and particulate matter emissions compared to ships burning traditional bunker fuel. In December 2018, Carnival's AlDAnova, the first cruise ship powered solely by LNG, completed its maiden voyage. In January, maritime shipper Crowley added a second LNG-powered vessel to its fleet. The Taino joined its sister-vessel the El Coqui, which launched in 2018, and is also powered by LNG. Shipping behemoth Hapag-Lloyd is converting one of its 15,000 TEU container vessels to run on methane, also referred to as natural gas. The project is the first in the world to convert a container ship of this size to run on natural gas.

Others are thinking even more outside the box in terms of alternative energy sources. Hurtigruten, an expedition cruise company, is developing ships that will be powered by organic waste, including byproducts from rotten fish. Maersk is also experimenting with biofuels. In March, the Mette Maersk set off on a voyage from Rotterdam to Shanghai using fuel that was 20 percent biofuel generated from plant waste.