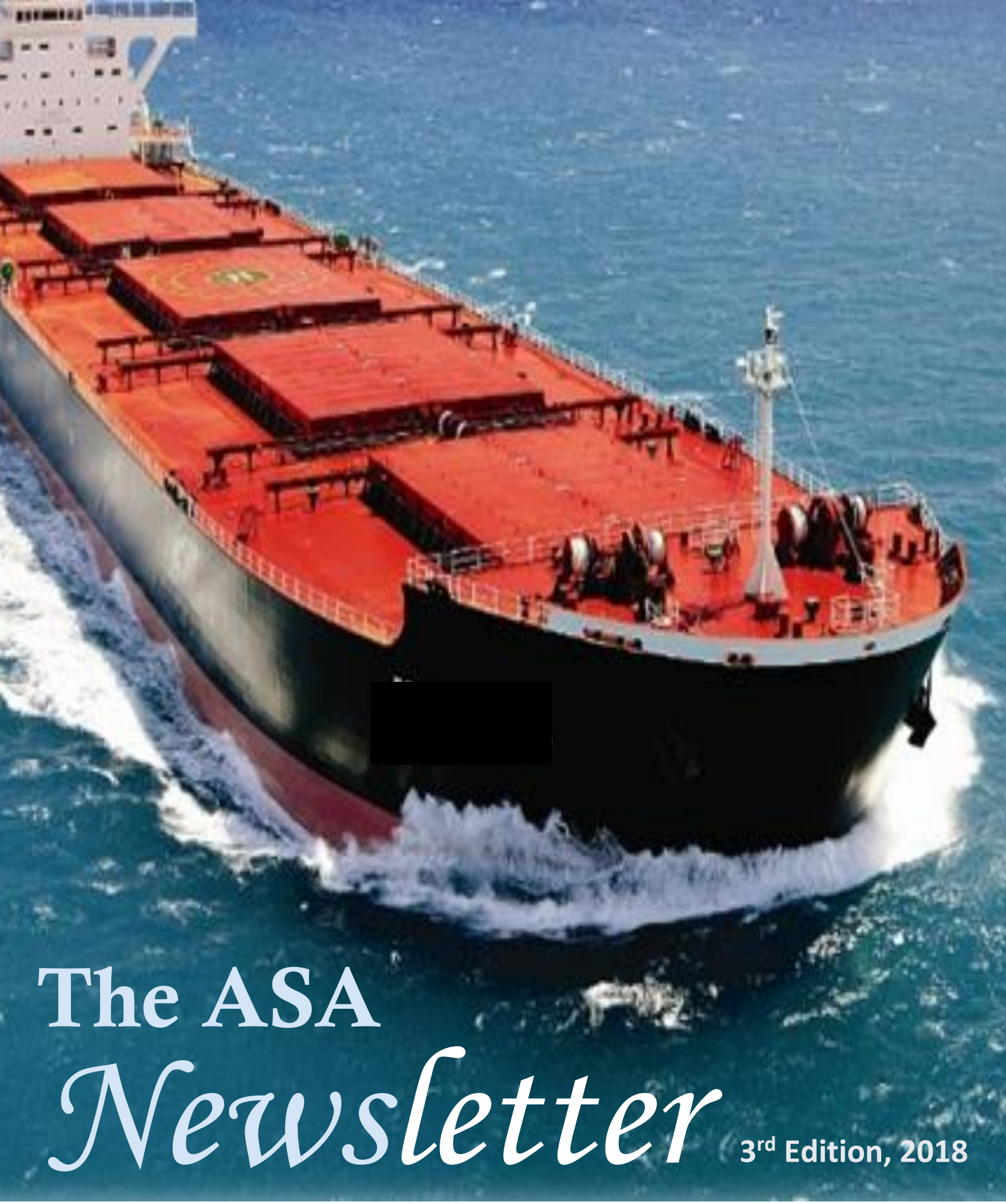


The ASA Newsletter

3rd Edition, 2018

The ASA is represented by the following member associations:

Events : 3rd Quarter 2018

Date	***Name of Event***	***Organiser & Location***
20-21 June	International Safety @ Sea Conference	MPA, Singapore
22 June	5 Maritime Security Workshop	MPA, Singapore
10-13 July	ILO-MPA Sub-Regional Workshop on MLC, 2006	MPA, Singapore
August to October	Member of Committee Life-Time Achievement Award	RINA and IMarEST, Singapore
1 August	Writing Well : Clear and Concise Business Writing Skills	BCA / SSA, Singapore
7 August	Marine Fuels Committee Meeting	SSA, Singapore
7-8 August	ACS Seminar	ACS, Mumbai
16 August	SSA Technical Committee	SSA, Singapore
10-13 September	ICS Board and Committee Meeting	ICS, London
13 September	IMO 2020 Preparedness	Viswa, Singapore
19 September	Endorsed as Supporting Organisation : ICS Guidance of 2020 Sulphur Cap	ICS, Singapore
18-19 September	Marine Money Week	Marine Money, Singapore
19 September	Membership and Engagement Best Practices	Everbank, Singapore
24-25 September	11th Co-operation Forum	MPA, Singapore
2-5 October	Singapore International Bunkering Conference (SIBCON)	IBC, Singapore

Contaminated Marine Fuels reported in Singapore Hub

Singapore, the world's largest ship refuelling hub, has been found with contaminated marine fuel that clogs and damages ship engines. The sources and alert was sent to clients by a marine fuel surveying company. Six samples of ship fuel in Singapore had caused severe sludging at centrifuges, clogged pipelines, and overwhelmed fuel filters. The first problem sample in Asia was found on April 13 in Port Kelang in Malaysia, which led to a dead ship that had to be towed back to port from off the coast of Vietnam with all fuel pumps damaged.

The Singapore findings follow reports of more than 100 vessels that loaded similarly contaminated fuel in the U.S. Gulf Coast, Panama and the Dutch Antilles earlier this year, said the alert notice, provided to Reuters by a Singapore- based bunker fuels trader. This problematic issue has made its way to Asia.

The contaminated fuel in Singapore seems to be Estinian type oil shale and US type fracked shale oil. Contamined marine fuels can cause costly damage to ship engines, and many of the vessels with this fuel needed extensive flushing and repair before they can be back for operation again.

This type of contaminated fuel is hard to detect because it passes industry standards in all respects (ISO8217 : 2005 specifications) but contains compounds that are not usually tested. Some U.S. fuel oil products have been coming into Singapore recently, and more should be arriving in August, said a Singapore-based bunker fuel trader. In fact, the shipments presented high levels of styrene and phenols, as well as plastic related compounds not from petroleum refining.

At least two cargoes of the contaminated fuel oil of upto 270,000 tonnes each were shipped into Singapore and have contributed to a spike in bunker proces as the availabilty of on-specification fuels has tightened, the trade sources said.

How can problems arise when all fuel is tested to ISO 8217?

Testing to ISO 8217 characteristics will not necessarily show if the fuel is contaminated or not as it covers only the parameters with specified limits. However, it seems likely that the problem fuels from the US Gulf contravene Clause 5 in ISO 8217 and Regulation 18.3 of MARPOL Annex VI which broadly state that fuels shall not contain any material in a concentration that adversely affects the performance of machinery. Proving this is not straightforward and requires non-standard, forensic levels of testing, typically using the Gas Chromatography/Mass Spectrometry (GCMS) and/or Fourier Transform Infrared Spectroscopy (FTIR), which is time-consuming and processing the results can take weeks, especially when there is a spike in demand for such testing.

Another issue is that the methodology for the application of such forensic levels of testing varies from one laboratory to the next which means that the results cannot always be compared and there may be questions around the reliability of the results. The closet they are to a standard method is ASTM D7845 – 17, which has been developed to quantify chemical species at low levels in marine fuel oils and cutter stocks by multidimensional GCMS, but it has limitations.

Maritime Singapore Green Initiative

The Maritime Singapore Green initiative seeks to reduce the environmental impact of shipping and related activities and to promote clean and green shipping in Singapore. In 2011, the Maritime and Port Authority of Singapore(MPA) pledged to invest up to S$100 million over 5 years in the Maritime Singapore Green Initiative. In 2016, following industry support, the initiative was further enhanced and extended till 31 December 2019. It is a comprehensive intiative comprising five programmes :

- Green Ship Programme
- Green Port Programme
- Green Technology Programme
- Green Awareness Programme
- Green Energry Programme

These are voluntary programmes designed to recognise and provide incentives to companies that adopt clean and green shipping practices over and above the minimum required by International Maritime Organization (IMO) Conventions. The initiative underscores Singapore's commitment as a responsible flag and port state to clean and green shipping.

For more information, you may visit the link as below :

https://www.mpa.gov.sg/web/wcm/connect/www/3ec8f455-5efb-434b-943e-92260a042d39/msgi_leaflet_and_ebrochure.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=3ec8f455-5efb-434b-943e-92260a042d39&attachment=true

ACS Seminar on Shipping and Shipbuilding 2018, Mumbai

ACS is the association of seven classification societies headquartered in Asia, namely BKI (Biro Klasifikasi Indonesia), CCS (China Classification Society), ClassNK (Nippon Kaiji Kyokai), IRS (Indian Register of Shipping), KR (Korean Register), VR (Vietnam Register) and SCM (Ships Classification Malaysia).

ACS (Association of Asian Classification Societies) organizes regular technical seminars in the Asian region. This year, the ACS Seminar on Shipping and Shipbuilding was held in Mumbai, India on 8 August 2018. The Seminar focused on safety and environmental topics and recent international regulatory developments relating to shipping and shipbuilding, which congregated members of the Asian maritime community and regional maritime professionals. ASA Sec Gen, Captain Ang was invited to give his views on the 2020 Sulphur Cap.

Ballast-free Shipping to comply IMO compliance

Following the adoption of the IMO's Ballast Water Management Convention in 2017, ship operators have come under increasing pressure to improve the efficiency of their ballast water systems. Creating ships with alternative non-ballast solution means that they are no longer bound by regulations surrounding ballast water treatment. Getting rid of pumps, pipes and valves associated with ballast water tanks could reduce costs related to maintence, free up electrial power usually required for de-ballasting, and make ballast water treatment systems redundant, making it the cheapest way to comply with IMO rules.

In the past, these concepts have often relied on the nifty design innovation to provide the same stability as ballast water, without the associated economic and environmental impacts. The ultimate goal is to increase the ship's draught – the vertical distance between the waterline and the bottom of the hull – and prevent it from rising too high out of the water when it unloads its heavy cargo.

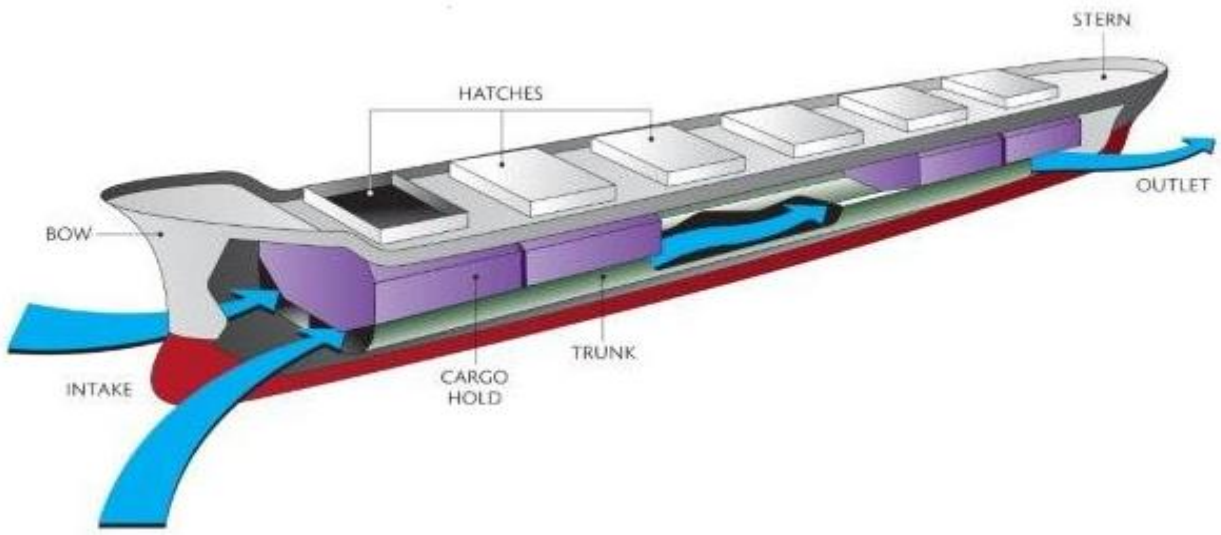
One concept has been to widen ship beams and use unique hull designs to displace water from the vessel's centreline in a bid to incraese stability.

Another concept, 'Solid Ballast Ship' which would keep its conventional displacement hull and replicate ballast water with a number of 25-tonne containers. According to an IMO report, the use of these 'solid ballest TEUs' on container ships could provide unladen stability and trim (i.e. the difference between the forward and aft draft), without the need for ballast water.

For over a decade, scentists have been exploring çontinuous flow'methods for keeping ships stable. In lieu of ballast tanks, ships could be equipped with a variable buoyancy system comprising a network of trunks running from the bow to the stern, below the waterline. Water passing through these channels would reduce the ship's buoyancy, instead of weighing it down.

Aside from the cost of regulatory benefit, ballast-free vessels could have an extended service life without the threat of corrosion caused by sediment build-up in ballast tanks. Eliminating this would also cut inspection and cleaning times, making life easier for the crew members.

However, ballast-free and continuous flow concepts have faced a number of hurdles in the past. Despite negating the costs involved with ballast water, ballast-free hull designs have resulted in higher build costs and operational costs from increased hull drag.



Source : MFAME

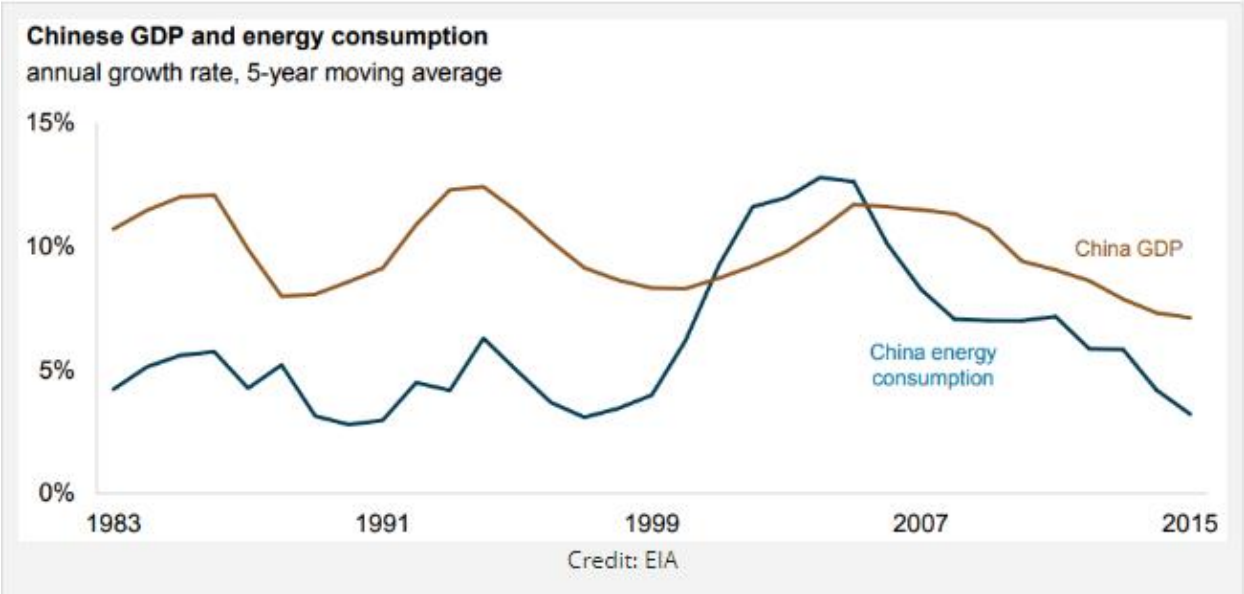
China to be largest energy-intensive goods producer in 2040

China's energy consumption, as well as India's and Africa's, is expected to grow faster than the rest of the world through 2040. As a result, changes in its economies have significant implications for global enery markets.

The IE02018 notes that China's economy remains by far the world's largest producer of energy-intensive goods in 2040. Faster economic growth in China also leads to higher energy consumption, but the amount it increases depends on how quickly China changes from an export, investment-led economy to a more service-oriented, personal consumption-based economy.

However, currently China is trying to implement a change in its energy consumption. To understand this, we have to go back to 1980-2005. During this period, China had double-digit real GDP growth, and energy demand more than tripled.

However, over the past seven years, its annual economic growth has slowed to single digits, and the rate of increase in energy demand has also slowed. This recent change is consistent with China's policy goal to lower growth in energy consumption.



These reductions in energy demand are partly driven by a gradual shift in the economy's structure from manufacturing towards services, as providing services is less energy intensive than manufacturing goods.

The Pelabuhan Tanjung Pelepas Sdn Bhd (PTP) has been identified as World's first port to depart a vessel with a load of over 19,000 TEUs

The ULCV *Mumbai Maersk* has broken the 19,000 TEU load mark, setting a new world record at 19,038 TEU. She achieved the new milestone at Tanjung Pelepas, Malaysia, then got under way for Europe. She is expected in Rotterdam on September 5.

Tanjung Pelepas is investing heavily to boost its capacity, and expects to be able to handle 13.5 million TEU per year by 2020. The new investments include Southeast Asia's tallest STS cranes, a set of four super-post-Panamax models with a lifting height of more than 55 meters. The port is also buying 29 new RTGs and conducting channel dredging to deepen its harbor to 18 meters.

Tanjung Pelepas is just a few kilometres from Singapore, which is building out an integrated port complex at Tuas, and regional competition for volume is stiff. In 2016, Tanjung Pelepas ranked 19th-busiest in the world with 8.28 million TEU for the year, about one third of Singapore's traffic.

Singapore's Tuas Mega-port

The Tuas mega-port, when completed in 2040, will be able to handle up to 65 million standard-sized containers, up from some 40 million today. It will house all of Singapore's container activities, running on emerging technologies, automation and data analytics.

The new port is shaping up nicely, as Singapore holds on to its position as the world's largest transshipment hub. Reclamation works for the first phase of development are on schedule, with more than 70 per cent of the 221 caissons – 28-metre high watertight concrete structures used to build the wharf – installed as of the end of April 2018, according to the Maritime and Port Authority of Singapore (MPA). The remaining caissons will be completed by 2019.

The Tuas port is designed to accommodate mega-vessels that can hold 24,000 standard-sized containers or more, with its long linear berths and deep-water capabilities. The port is also to run on the latest port technologies and systems. A fleet of 30 automated guided vehicles have already been deployed at the Pasir Panjang Terminal in a trial, along with automated yard cranes and quay cranes.

All of this comes at a time when competition between ports continues to intensify, each vying to anchor big shipping alliances, while digitalisation is driving change in big waves in the maritime industry with big data and automation.

Consolidation of the container port activities at Tuas will achieve greater economies of scale. The new port at Tuas will also be able to provide additional capacity to meet the needs of the industry

Australia to Ban Transhipment in Great Barrier Reef

Australia's Queensland State government is preparing to ban transhipping in the Great Barrier Reef. Queensland Minister for Environment Leeanne Enoch said the new policy will protect the Great Barrier Reef and the tens of thousands of jobs that rely on the Reef.

The policy was developed after 97 percent of over 2,200 submissions made during a period of public consultation called for transhipping in the Great Barrier Reef region to be limited in the World Heritage Area and banned in the Marine Park.

The policy is not expected to affect shipping of cargo loaded in Queensland's declared ports, as the policy will not apply to the supply of essential services to remote communities, marine emergency response practices, the movement of cargo between vessels while docked in a port, and refuelling activities

Additionally, the policy does not apply to packaged or containerized goods at any volume or to bulk materials where the quantity handled is under 100 tons per day. The Government is currently developing the necessary regulations.

Feature Article

Port State Control Focus on Ship Emissions

The agreement by major PSC regimes to conduct concentrated inspection campaigns in compliance with MARPOL Annex VI on the prevention of air pollution from ships serves a timely reminder ahead of the entry into force of the global 2020 global sulphur cap.

The Paris MOU, Tokyo MOU, Indian Ocean MOU and Black Sea MOU port state control (PSC) regimes have agreed to focus on the prevention of air pollution by ships during their forthcoming concentrated inspection campaigns (CICs). The CICs will be carried out between 1 September, 2018 and 30 November, 2018 and the PSC officers will pay particular attention to visiting ships' in compliance with MARPOL Annex VI during regular PSC inspections. The stated aims of the CIC are :

- Establish the level of compliance with the requirements of MARPOL Annex VI.
- Create awareness among ships' crew and shipowners regarding the importance of compliance.
- Prevention of air pollution.
- Underline the responsibility of the PSC regime with regards to harmonised enforcement of compliance with the requirements of MARPOL Annex VI, thus improving the level of compliance and ensuring a level playing field.

Many PSC regimes have recently announced that they will take enforcement of the new 2020 global 0.5% sulphur cap seriously from "day one". Ship operators should therefore not be surprised if verification of the sulphur content of the onbaord fuel is requested as part of the CIC. This could include a review of the documents, such as

1. Bunker delivery notes
2. Oil record books
3. Fuel logs and fuel changeover procedures
4. Fuel samples taking and analysis at short notice

Sulphur oxides (SOx) contained in ships' exhaust gas is not the only gas pollutant regulated by MARPOL Annex VI. The convention also emphasizes

- Limiting emissions of nitrous oxides (NOx)
- Prohibiting the deliberate emission of ozone depleting substances (ODS)
- Regulating shipboard incineration of waste material and
- Emissions of volatile organic compounds (VOC) from tankers

Shipowners are encouraged to get familiarised with the relevant MARPOL Annex VI regulations and CIC criteria well before 1 September 2018. Based on previous CICs, it is assumed that the questionnaire will mainly contain operational questions aimed at verifying the crews' familiarity with the ship-specific

equipment and procedures apart from maintenance and working condition of relevant equipment, such as the incinerator.

Questions 1 to 10 (below) answered with a *"No"* must be accompanied by a relevant deficiency on the report of inspection. Certain questions (2, 4, 9 below) answered *"No"* triggers detention:

1. Are bunker delivery notes, with details of fuel oil for combustion purposes, kept available on board for the required period of 3 years?
    - Annex VI, regulation 18.5 and 18.6
2. Do bunker delivery notes indicate that fuel oils delivered and used on board is not exceeding the maximum allowed sulphur content, as appropriate?
    - Annex VI, regulation 14.1.2 and 14.4.
    - *"No"* = Detention
3. Do ships which are using separate fuel oils to comply with the maximum sulphur content of 0.1% m/m in fuel oil while operating in SOx emission control areas, have a written procedure showing how fuel oil changeover is to be done for achieving compliance with the above requirements when entering SOx emission control areas?
    - Annex VI, regulation 14.6
4. Are alternative arrangements, (eg scrubbers) installed on board according to regulation 4.1 approved by the flag state?
    - Annex VI, regulation 4.
    - *"No"* = Detention
5. Do ships which are using separate fuel oils to comply with the maximum sulphur content of 0.10% m/m in fuel oil and entering or leaving SOx emission control areas, record detailed information showing that the ship has completed/initiated the changeover in the logbook prescribed by the Administration?
    - Annex VI, regulation 14.
6. Do ships which have rechargeable systems containing ozone-depleting substances (refer to the supplement to the IAPP Certificate, item 2.1), have the ozone-depleting substances record book maintained?
    - Annex VI, regulation 12.6
7. Where an approved method in accordance with Annex VI, regulations 13.7.1-13.7.5 (refer to the supplement to the IAPP Certificate, item 2.2.1) is installed, has such an installation been confirmed by a survey using the verification procedure specified in the approved method file, including appropriate notation on the ship's International Air Pollution Prevention Certificate of the presence of the approved method?
    - Annex VI, regulation 13.7.1.1
8. For ships equipped with a shipboard incinerator or thermal waste treatment device installed as an alternative arrangement, is the ship's crew responsible for the operation of the equipment familiar with, properly trained in, and capable of implementing the guidance provided in the manufacturer's operating manual?
    - Annex VI, regulation 16.8

9. Are the master and crew familiar with essential shipboard procedures in the approved VOC Management Plan relating to the prevention of air pollution from ships?
    - Annex VI, regulation 15. 6
    - *"No"* = Detention
10. Does the ship keep on board a Ship Energy Efficiency Management Plan (SEEMP)?
    - Annex VI, regulation 22 paragraph 1

As much of the compliance with MARPOL Annex VI is documented by significant recordkeeping, it will be important to ensure that all documentation is complete and up-to-date prior to entry into any port.

The ASA Newsletter is published by the ASA Secretariat.

The Asian Shipowners' Forum (ASF) was founded in April 1992 when its first meeting was held at the Japan Shipping Club in Tokyo. One of the most important shipping organizations in the world, the ASF consists of eight members from the Shipowners' associations of Asia Pacific nations, i.e. Australia, China, Hong Kong, India, Japan, Korea, Chinese Taipei and Federation of ASEAN Shipowners' Associations (FASA), consisting of Indonesia, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. Collectively, the ASF membership is estimated to control about 50% of the world merchant fleet.

Following the principle agreed at the first ASF meeting, the venues for the annual meetings of the ASF have been conducted on a rotational basis by the members from the North to South in geographical order.

Five Standing Committees are formed in the ASF and each is headed by a nominated chairman. They are the Seafarers Committee (SC), Shipping Economics Review Committee (SERC), Ship Insurance & Liability Committee (SILC), Safe Navigation & Environment Committee (SNEC) and Ship Recycling Committee (SRC). The work is basically done between the annual ASF meetings, with each committee being committed to convene at least one meeting a year.

The SERC was renamed Shipping Policy Committee (SPC) after the 22nd ASA Chairmen's meeting held in Hong Kong on 24th November 2017. This committee will continue to focus on Regulation, Taxation, Trade Policy, Customs, Canals, Infrastructure, the Macro Economy and Public Relations at the same time remain compliant with applicable legal requirements.

To better reflect the work and progress of its members and committees, it was proposed at the 18th ASF Chairmen's meeting held in Beijing, China, on 19th October 2015 to have its name changed to Asian Shipowners' Association (ASA). Subsequently at the 25th ASF AGM, it was officially declared the change of name from ASF to ASA. The name change does not alter the values and objectives that it delivers but will continue to further enhance the work done by the Association. The Association will continue to use the abbreviated name of "ASA".