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## **TECHNICAL ALERT No. 16-12 Rev.01**

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### **Sulphur Oxides Emission Regulations in China**

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#### **1. Introduction**

1.1. The People's Republic of China's Ministry of Transport published new regulations in December 2015 advising of the creation of three new Sulphur Emission Control Areas (ECAs).

1.2. The original text of the new regulations can be found at the following links (in Chinese language only):

[http://www.gov.cn/xinwen/2015-12/04/content\\_5019932.htm](http://www.gov.cn/xinwen/2015-12/04/content_5019932.htm)

[http://www.mot.gov.cn/jiaotongyaowen/201601/t20160119\\_1978652.html](http://www.mot.gov.cn/jiaotongyaowen/201601/t20160119_1978652.html)

1.3. Sulphur Oxide (SO<sub>x</sub>) emission limitations will be introduced gradually in these new SECAs, from 01 January 2016.

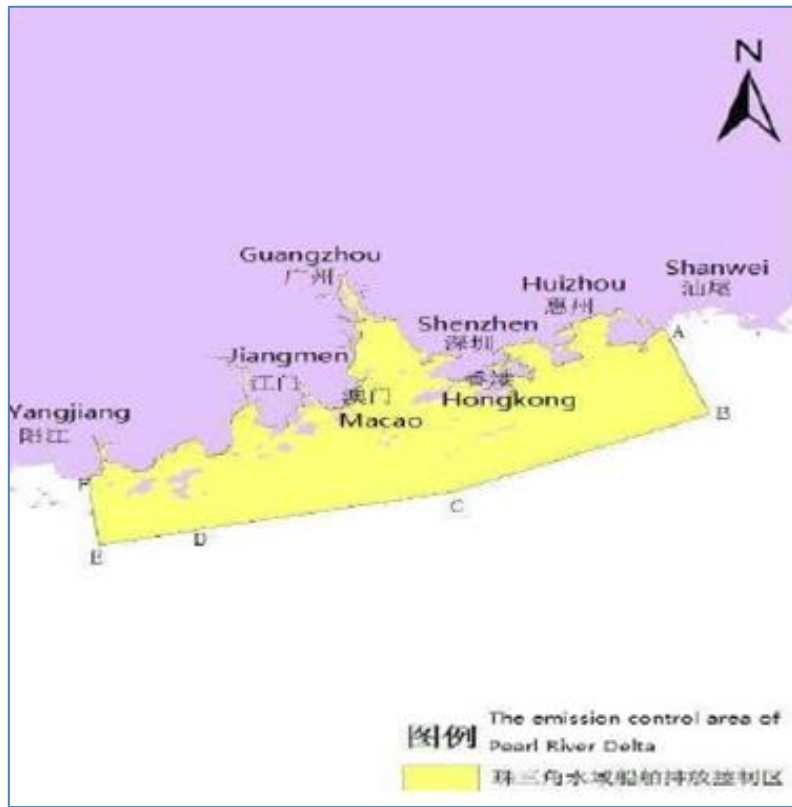
1.4. This Technical Alert aims to increase awareness of the introduction of the above Regulations and to alert Companies operating Bahamian ships to potential penalties that may be applied to ships failing to demonstrate compliance with the regulations.

1.5. Please also refer to Technical Alert 15-09.

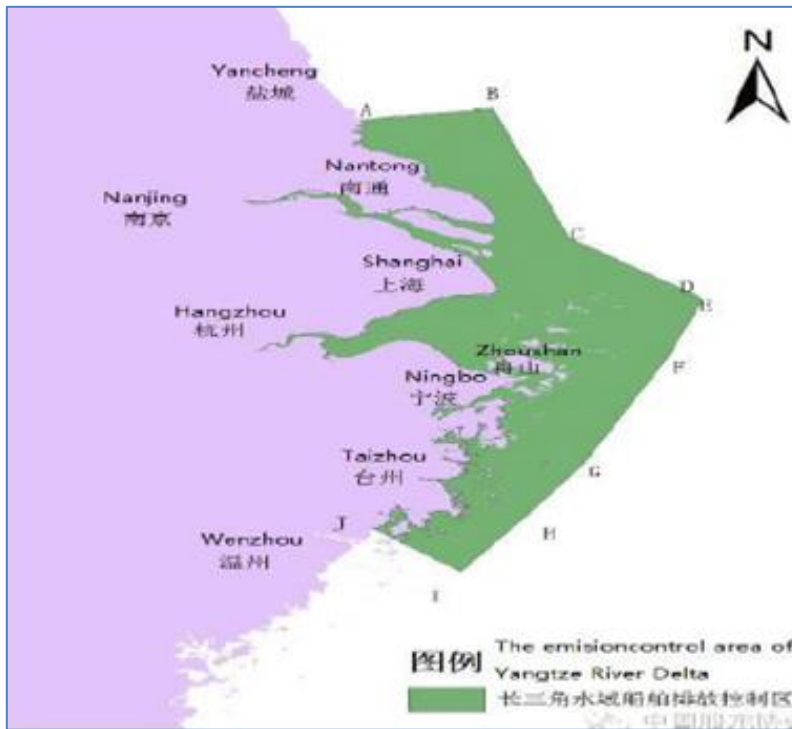
#### **2. New SO<sub>x</sub> Emission Control Areas**

2.1. The three areas indicated below have been designated as SO<sub>x</sub> Emission Control Areas, albeit not being regarded as such by Regulation 14.3 of Annex VI of MARPOL 73/38 ("MARPOL VI").

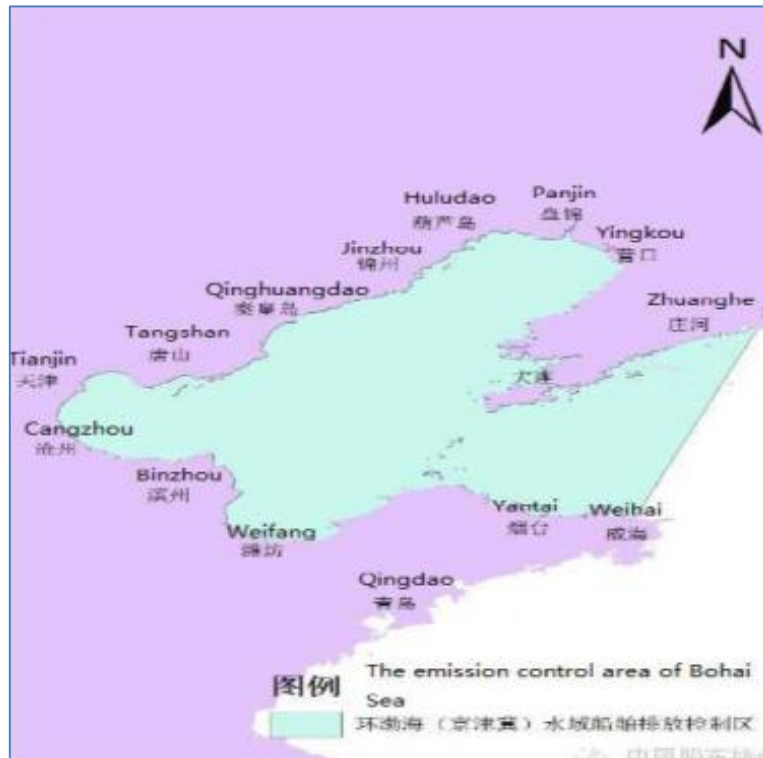
Pearl River Delta (PRD) area:



Chang Jiang – Yangtze River Delta (YRD) area:



Bohai Rim (BR) area:



2.2. Ships visiting the following ports will be affected by the new regulations (affected ports):

- Shenzhen (PRD)
- Guangzhou (PRD)
- Zhuhai (PRD)
- Shanghai (YRD)
- Ningbo-Zhoushan (YRD)
- Suzhou (YRD)
- Nantong (YRD)
- Tianjin (BR)
- Qinhuangdao(BR)
- Tangshan (BR)
- Huanghua (BR).

2.3. Hong Kong is not covered by the new regulations. However, specific local legislation on sulphur content of fuel oil used in port is in force in Hong Kong (see Technical Alert 15-17).

### 3. New Requirements

3.1. The new regulations introduce mandatory requirements for all merchant ships navigating, anchored or berthed within the ECA areas.

3.2. The requirements are to be introduced in phases as outlined below:

3.2.1. From **01 January 2016**, there will be strict enforcement of the existing international conventions and domestic laws and regulations on sulphur oxides, particulate matter and nitrogen oxides.

3.2.2. From **01 April 2016**, all ships **berthed** in affected ports within the **Chang Jiang – Yangtze River Delta (YRD) ECA** shall consume fuel oil with sulphur content of not more than 0.5% m/m. China Maritime Safety Agency (MSA) has indicated that all ships within YRD ECA will be *encouraged* to consume fuel oil with sulphur content of not more than 0.1% m/m whilst at a berth, and fuel oil with sulphur content of not more than 0.5% m/m when navigating in YRD ECA after 01 April 2016.

At this stage the ports located in the two other ECAs will not be included. Further information and guidance on implementing these requirements is expected to be published by China MSA [at a later date](#).

3.2.3. From **01 October 2016**, all ships **berthed** in the Port of Shenzhen are required to use fuel oil with sulphur content not exceeding 0.5% m/m. Exception is made for the fuel being consumed for the first hour after arrival and the last hour prior to departure<sup>1</sup>. Further details can be found [here](#) (in Chinese language only).

- i. A ship unable to comply with the above regulation where a modification is necessary to allow for use of low sulphur fuel oil may apply for an exemption. Such application should be submitted to Shenzhen Maritime Safety Administration accompanied by documents demonstrating that the use of low sulphur fuel oil will require a modification to the ship's engines and/or systems and the modification works can be completed prior to 01 January 2017.
- ii. A ship, upon submission of sufficient evidence to Shenzhen MSA, can be exempted from compliance to the above regulation where:
  - The low sulphur fuel oil is not available and it can be demonstrated that all efforts have been made to acquire a low sulphur fuel oil;

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<sup>1</sup> Arrival means the time when the first mooring rope is tied and departure means the time when the last mooring rope is untied.

- It can be demonstrated that using low sulphur fuel oil during berthing may cause a danger to the ship.

3.2.4. From **01 January 2017**, all ships **berthed** in any of the affected ports, except during the first hour after berthing and last hour before departure, shall use fuel oil with sulphur content of not more than 0.5% m/m.

3.2.5. From **01 January 2018**, all ships **berthed** in all ports in the ECAs, except during the first hour after berthing and last hour before departure, shall use fuel oil with sulphur content of not more than 0.5% m/m.

3.2.6. From **01 January 2019**, all ships **entering** the ECAs shall use fuel oil with sulphur content of not more than 0.5% m/m.

3.3. It is expected that by not later than **31 December 2019**, China MSA will complete an assessment of the effectiveness of the introduced measures. Based on the results of such assessment *possible* further enforcement of regulations limiting SO<sub>x</sub> emission in ECA's may be implemented as follows:

- Introduction of new maximum allowed fuel oil sulphur content of 0.1% m/m for all ships entering the ECAs;
- Extending the boundaries of the ECAs further;
- Introduction of new control measures.

#### **4. Enforcement and control measures and penalties**

4.1. The following control and enforcement steps will be undertaken by Port State Control in affected ports:

##### *4.1.1. Ships using low-sulphur fuel*

When a ship is using low-sulphur fuel to comply with the above requirements, the China MSA may carry out following verifications:

- i. Verification of bunker delivery notes;
- ii. Verification of fuel change-over procedures;
- iii. Verification of engine room logbook records (including information about each fuel change-over: start/end dates and times; ship

latitude/longitude; fuel oil sulphur content; quantity of low-sulphur fuel oil and ship operator);

- iv. Verification of fuel oil quality, including fuel oil sampling as considered necessary in accordance with IMO Resolution MEPC.96(47) and Appendix VI of MARPOL VI and analysis carried out by a laboratory recognised by Chinese State authorities.

#### 4.1.2. *Ships using alternative compliance measures*

When a ship is using alternative compliance measures, the China MSA may conduct following verifications:

##### Ships using shore power

- i. Verification of engine room logbook records, including shore power start/end dates and times, details of ship operator;

##### Ships using clean energy

- ii. Verification of the provisions listed within the International Air Pollution Prevention (IAPP) Certificate and accompanying records detailing use of clean energy;
- iii. Verification of engine room logbook records to include the information of every change-over from fuel oil to clean energy for dual-fuel powered ships: start/end dates and times; ship position and quantitative records of clean energy and fuel oil, details of ship operator.

#### 4.1.3. *Ships using emissions reduction technology*

- i. Verification of the provisions listed within the IAPP Certificate and accompanying records with details of the emissions reduction technology, details of ship operator;
- ii. Verification of the relevant approval certificate;
- iii. Verification of the engine room logbook records to include the reduction technology start/end dates and times; ship position, details of ship operator.

- 4.2. If any of the above control measures identify a suspected non-compliance, an extended on-site inspection of the shore power arrangement, clean energy fuel system, or emissions reduction technology will be carried out.

## **5. Penalties**

- 5.1. Penalties will be imposed for any identified non-compliance, including, but not limited to, warnings, directives to rectify violations, detention of ships, and/or monetary fines as per the Law of the People's Republic of China on the Prevention and Control of Air Pollution, Article 106

## **6. Ships which are unable to comply**

- 6.1. If ships are unable to comply with the ECA requirement, e.g. where compliance may endanger the safety of the ship or life at sea, or when participating in rescue activities, or in case of damage of the ship's machinery, the ship shall make the situation known immediately to the nearest MSA local authority.
- 6.2. Details of the conditions precluding effective compliance with the above requirements should be recorded in the Official Log Book.

## **7. Validity**

This alert is valid until further notice.

## **8. Revision History**

[Rev.1 \(20 September 2016\) – Early introduction of 0.5% sulphur content cap in Shenzhen from 01 October 2016 and editorial.](#)

Rev.0 (14 March 2016) – First issue