JULY 10, 2015

HONG KONG: NEW LOW SULFUR FUEL REGULATIONS

Members’ attention is drawn to the Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulations which entered into force in Hong Kong on July, 1 2015. These regulations are intended to better manage air quality in the Hong Kong region.

The regime applies to vessels of 500 GT or more, defined as “Ocean Going Vessels”. It requires that such vessels must burn fuel oil with a sulfur content of less than 0.5%, including at such times as they are at any berth within Hong Kong territorial waters.

The changeover to burning compliant fuel oil must take place within one hour of arriving at a berth. Furthermore, the changeover back to the use of a vessel’s ordinary fuel oil must not take place until one hour prior to departure. Under the regulation, ‘arrival’ means when the vessel is first securely moored or anchored at a berth, and ‘departure’ is when the vessel is untied from the berth.

Records need to be maintained of the times of arrival and departure, and of the fuel changeover operations. These records need to be kept on board for three years and be available for inspection upon request by Hong Kong Port State control authorities.

Exemption from the use of a compliant fuel may be obtained in regard to vessels which use technology such as scrubbers to reduce the sulfur dioxide in exhaust gases and to ensure that the 0.5% sulfur content level is achieved.

Both the masters and owners - including bareboat charterers and ship managers – of vessels which do not use compliant fuels or are not exempted from doing so, are subject to a fine of up to HK$ 200,000 and a maximum of six months in prison. Failure to maintain accurate records can lead to a fine of up to HK$ 50,000 and up to three months’ imprisonment.

Members are advised to ensure that their seagoing and shore-based personnel are familiar with these new Hong Kong fuel regulations. A brief summary of the requirements as well as full details of this regulation are attached to this Alert.
Ocean Going Vessels
Fuel Switch At Berth

Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation comes into operation on 1 July 2015
Why do we require ocean going vessels to switch fuel at berth?
Marine vessels are the largest local air emission source. The sulphur dioxide (SO₂) emissions at berth account for about 40% of the total SO₂ emissions of ocean going vessels (OGVs) when staying in Hong Kong. Burning low sulphur marine fuels while berthing can help improve air quality.

What is the Regulation about?
The Air Pollution Control (Ocean Going Vessels)(Fuel at Berth) Regulation (the Regulation) (Cap. 311AA) prohibits OGVs from using non-compliant fuel for operating any specified machinery during the prohibition period, i.e. the berthing period except the first hour and the last hour.

What is an ocean going vessel?
An ocean going vessel is a vessel that:
(a) holds a certificate in the form prescribed by the International Convention for the Safety of Life at Sea, 1974 as amended from time to time;
(b) holds a certificate other than (a) above issued by a government authority of the Mainland permitting it to sail along the coast of the Mainland; or
(c) is of 500 gross tonnage or over and holds a certificate other than (a) or (b) above issued by a government authority of a place outside Hong Kong.

What are compliant and non-compliant fuels?
Compliant fuel means any of the following:
(a) low sulphur marine fuel, i.e. marine fuel with sulphur content not exceeding 0.5% by weight;
(b) liquefied natural gas; or
(c) any other fuel approved by the Director of Environmental Protection (DEP) on the ground that its use can achieve SO₂ reduction at least as effectively as the use of low sulphur marine fuel.
Non-compliant fuel means any fuel other than compliant fuel.

What is specified machinery?
Specified machinery, in relation to a vessel, means the main engine (except when it is used for the propulsion of the vessel), the auxiliary engine, the boiler and the generator.

What is berthing period?
Berthing period, in relation to a vessel, means the period from the moment the vessel is securely anchored or moored at a berth to the moment the vessel is untied from its berth. A berth means a place in the waters of Hong Kong at which the vessel is not underway.
What documents must be kept on board a vessel?
The following documents must be kept on board a vessel for 3 years:
(a) the bunker delivery note that relates to any marine fuel delivered to the vessel;
(b) the log book(s) recording the date and time of arrival, date and time of departure, date and completion time of switching to compliant fuel, and date and commencement time of switching to non-compliant fuel; and
(c) for any unexpected event causing delay in departure of a vessel, a description of the event and the expected date and time of departure of the vessel.

Are there any non-applications?
The regulation does not apply to
(a) a vessel plying exclusively within river trade limits;
(b) a warship or any other vessel on military service;
(c) a vessel that only sails across the waters of Hong Kong without berthing; or
(d) a vessel that does not carry any compliant fuel but enters the waters of Hong Kong solely for the purpose(s) of reducing risks to the safety of the vessel concerned, sheltering from stress of weather or landing a sick or injured person, provided that the owner or master of the vessel has notified the Director of Marine of such purpose(s) before the vessel enters the waters of Hong Kong.

Are there any exemptions?
A vessel may be exempted from using compliant fuel if that vessel uses technology which can reduce SO₂ reduction at least as effectively as using low sulphur marine fuel or the compliance with the fuel switch at berth requirement will pose a risk to the safety of the vessel.

Application for exemption must be in writing in a specified form with supporting documents to the Environmental Protection Department at least 14 days in advance.

Arrival: the moment when the OGV is first securely moored or anchored
Departure: the moment when the OGV is untied from its berth
Berthing period: the period between arrival and departure
What are the offences and penalties?
The offences of the regulation and its maximum penalty are listed as below.

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<th>Maximum Penalty</th>
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<td>Using non-compliant fuel during the prohibition period</td>
<td>A fine of $200,000 and imprisonment for 6 months</td>
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<td>Failing to record the required particulars in the log book without reasonable excuse</td>
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<tr>
<td>Failing to comply with a notice issued by the DEP without reasonable excuse</td>
<td>A fine at level 5 (i.e. $50,000) and imprisonment for 3 months</td>
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<td>Submitting a copy of a document which is false or misleading in purported compliance with a notice issued by the DEP</td>
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<tr>
<td>Providing false or misleading information or document in an application for exemption</td>
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Are there defences for an offence of using non-compliant fuel?
The Regulation provides defences for a defendant charged with using non-compliant fuel during the prohibition period.

Enquiry
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Environmental Protection Department
33/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong
Hotline: 2838 3111
Fax: 2838 2155
Email: ogvfuelswitch@epd.gov.hk
### Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation

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Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation

(Made by the Secretary for the Environment under section 43 of the Air Pollution Control Ordinance (Cap. 311) after consultation with the Advisory Council on the Environment)

1. Commencement
   This Regulation comes into operation on 1 July 2015.

2. Interpretation
   (1) In this Regulation—
   
   agent (代理人), in relation to a vessel, means a person acting in Hong Kong as an agent for the owner of the vessel;
   
   arrival (到達), in relation to a vessel, means the moment when the vessel is first securely moored or anchored at a berth;
   
   berth (泊位) means a place in the waters of Hong Kong at which a vessel is not underway;
   
   berthing period (停泊期間), in relation to a vessel, means the period between the arrival and departure of the vessel;
   
   compliant fuel (合規格燃料) means—
   
   (a) low sulphur marine fuel;
   
   (b) liquefied natural gas; or
   
   (c) any other fuel approved by the Authority under section 11(1);
   
   departure (開出), in relation to a vessel, means the moment when the vessel is untied from its berth;

1. 生效日期
   本規例自 2015 年 7 月 1 日起實施。

2. 釋義
   (1) 在本規例中——
   
   不合規格燃料 (non-compliant fuel) 指不屬合規格燃料的任何燃料；
   
   代理人 (agent) 就某船隻而言，指以該船隻的擁有人的代理人的身分在香港行事的人；
   
   合規格燃料 (compliant fuel) 指——
   
   (a) 低硫船用燃料；
   
   (b) 液化天然氣；或
   
   (c) 監督根據第 11(1) 條認可的任何其他燃料；
   
   低硫船用燃料 (low sulphur marine fuel) 指含硫量不超過 0.5% (以重量計) 的船用燃料；
   
   到達 (arrival) 就某船隻而言，指該船隻開始穩固地繫泊或碇泊於某泊位的時刻；
   
   泊位 (berth) 指某船隻不在航時所處的香港水域內的地方；
Section 2

exempted call (獲豁免停靠), in relation to a vessel, means the period during which the vessel remains in the waters of Hong Kong if the vessel intends to rely on an exemption under section 6(1) at any time within that period;

fuel switch operation to compliant fuel (轉用合規格燃料的操作) means an operation to change the fuel used by a vessel from non-compliant fuel to compliant fuel;

fuel switch operation to non-compliant fuel (轉用不合規格燃料的操作) means an operation to change the fuel used by a vessel from compliant fuel to non-compliant fuel;

low sulphur marine fuel (低硫船用燃料) means marine fuel with sulphur content not exceeding 0.5% by weight;

marine fuel (船用燃料) means a petroleum-derived liquid fuel used, or intended for use, in a vessel;

master (船長) has the meaning given by section 2 of the Shipping and Port Control Ordinance (Cap. 313);

non-compliant fuel (不合規格燃料) means any fuel other than compliant fuel;

owner (擁有人), in relation to a vessel, means—

(a) the bareboat charterer of the vessel;
(b) the manager of the vessel; or
(c) the following person—

(i) if the vessel is owned by a state and operated by a person registered in that state as the operator of the vessel—that person; or
(ii) in a case not falling within subparagraph (i)—any person registered as the owner of the vessel or, if no person is registered as the owner of the vessel, any person who owns the vessel;
prohibition period (禁制期間), in relation to a vessel, means the berthing period of the vessel excluding—
(a) the first hour of the berthing period; and
(b) the last hour of the berthing period;

specified machinery (指明機械), in relation to a vessel, means the following machinery of the vessel—
(a) the main engine (except when it is used for the propulsion of the vessel);
(b) the auxiliary engine;
(c) the boiler; and
(d) the generator;

vessel (船隻) has the meaning given by section 2 of the Shipping and Port Control Ordinance (Cap. 313).

(2) For the purposes of this Regulation—
(a) a fuel switch operation to compliant fuel is completed when the fuel pipes leading to all of the specified machinery of the vessel are filled only with compliant fuel; and
(b) a fuel switch operation to non-compliant fuel commences when a fuel pipe leading to any of the specified machinery of the vessel begins to be filled with non-compliant fuel.

3. Application

(1) Subject to subsections (2) and (3), this Regulation applies to—
(a) a vessel that holds an accepted Convention certificate;
(b) a vessel that holds a certificate, other than an accepted Convention certificate, that—
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(i) is issued by a government authority of the Mainland; and
(ii) permits the vessel to sail along the coast of the Mainland; and
(c) a vessel that—
(i) is of 500 gross tonnage or over; and
(ii) holds a certificate, other than an accepted Convention certificate or a certificate referred to in paragraph (b), issued by a government authority of a place outside Hong Kong.

(2) This Regulation does not apply to—
(a) a vessel plying exclusively within river trade limits; or
(b) a warship or any other vessel on military service.

(3) This Regulation also does not apply to a vessel during the period that the vessel remains in the waters of Hong Kong—
(a) if the vessel is not moored or anchored at any berth during that period; or
(b) if—
(i) the vessel enters those waters solely for one or more of the following purposes—
(A) reducing risks to the safety of the vessel;
(B) sheltering from stress of weather;
(C) landing a sick or injured person;
(ii) the owner or the master of the vessel has notified the Director of Marine of the purpose referred to in subparagraph (i) before the vessel enters those waters; and

(i) 由內地政府當局發出的；及
(ii) 准許該船隻沿內地的海岸航行；及
(c) 符合以下說明的船隻——
(i) 總噸位為 500 噸或以上；及
(ii) 持有由香港以外的地方的政府當局發出的證明書 (獲認可的公約證明書或 (b) 段所述的證明書除外)。

(2) 本規例不適用於——
(a) 僅在內河航線內往來航行的船隻；或
(b) 軍艦或其他作軍事服務的船隻。

(3) 凡某船隻停留在香港水域——
(a) 如在該船隻停留在該水域的期間內，該船隻沒有繫泊或碇泊於任何泊位；或
(b) 如——
(i) 該船隻純粹為以下一個或多於一個目的而進入該水域——
(A) 減低危及該船隻安全的危險；
(B) 避過惡劣天氣；
(C) 將病人或傷者送上岸；
(ii) 在該船隻進入該水域前，其擁有人或船長已將第 (i) 節所述的目的，通知海事處處長；及
Section 4

Use of non-compliant fuel prohibited

(1) During the prohibition period, a vessel must not use non-compliant fuel for combustion purposes for operating any of the specified machinery.

(2) If subsection (1) is contravened, the owner and the master of the vessel each commits an offence.

(3) A person who commits an offence under subsection (2) is liable on conviction to a fine of $200,000 and to imprisonment for 6 months.

Defences to offence under section 4

(1) If a person is charged with an offence under section 4(2)—

(a) it is a defence for the person to prove—

(i) that at the time of the contravention there was a document containing the procedures for conducting fuel switch operations to compliant fuel on board the vessel;
(ii) that at the time of the contravention the vessel was conducting a fuel switch operation to compliant fuel (*relevant operation*);

(iii) that after the arrival of the vessel, the person had taken all practicable measures in accordance with those procedures to complete the relevant operation as soon as possible; and

(iv) that it was not reasonably practicable to complete the relevant operation within 1 hour; or

(b) it is a defence for the person to prove—

(i) that due to an unexpected event beyond the person's control the departure of the vessel was delayed from the expected time of departure to a later time (*actual time of departure*);

(ii) that the event occurred within 1 hour before the expected time of departure;

(iii) that the time of the contravention fell within the period beginning at 1 hour before the expected time of departure and ending at 1 hour before the actual time of departure; and

(iv) that the particulars referred to in subsection (2) were recorded in a log book of the vessel as soon as practicable after the delay occurred.

(2) The particulars are—

(a) the expected date and time of departure of the vessel; and

(b) a description of the event referred to in subsection (1)(b)(i).

(3) In addition, it is a defence for a person charged with an offence under section 4(2) to prove—
6. 豁免

(1) 如監督信納——

(a) 某船隻使用的科技在禁制期間內所能達到的減少排放二氧化硫的有效程度，不遜於在該期間內使用低硫船用燃料所能達到的減少排放二氧化硫的有效程度；或

(b) 遵守第 4(1) 條，會對某船隻的安全構成危險，則監督可豁免該船隻，使其免受第 4(1) 條所規限。

6. Exemptions

(1) The Authority may exempt a vessel from the application of section 4(1) if satisfied—

(a) that the vessel uses technology that can achieve the reduction of emission of sulphur dioxide during a prohibition period at least as effectively as the use of low sulphur marine fuel during that period; or

(b) that compliance with section 4(1) will pose a risk to the safety of the vessel.
Section 7

(2) An exemption may be granted subject to any conditions the Authority thinks fit.

(3) The breach of a condition renders the exemption invalid during the continuance of the breach.

(4) Under subsection (1)(a), the Authority may—
   (a) grant an exemption for a period of 3 years; and
   (b) renew an exemption, each time for a period of 3 years.

(5) Under subsection (1)(b), the Authority may grant an exemption that is valid for 1 exempted call.

(6) The Authority may, by notice in writing to the owner, the master or the agent of a vessel, revoke an exemption granted for the vessel if the Authority has reasonable grounds to believe that—
   (a) a condition of the exemption has been breached; or
   (b) any information or document provided to the Authority in support of the application for the exemption is false or misleading in a material particular.

7. Application for exemption

(1) The owner, the master or the agent of a vessel may apply to the Authority for an exemption under section 6(1) for the vessel.

(2) The application—
   (a) must be in writing and in the form specified by the Authority; and
   (b) must be accompanied by the documents specified in the form.
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Section 8

(3) The Authority may require the applicant to provide any further information or documents that the Authority considers necessary for determining the application.

(4) For an exemption under section 6(1)(a)—
(a) the application must be made at least 14 days before the date on which the vessel is intended to enter the waters of Hong Kong for the first exempted call in relation to the exemption; and
(b) an application for renewal must be made not earlier than 3 months before, and not later than 14 days before, the date on which the exemption expires.

(5) For an exemption under section 6(1)(b), the application must be made at least 14 days before the date on which the vessel is intended to enter the waters of Hong Kong for the exempted call in relation to the exemption.

(6) The Authority must notify the applicant in writing of—
(a) the grant or renewal of an exemption; or
(b) the refusal to grant or renew an exemption.

(7) A person who provides any information or document that is false or misleading in a material particular in an application under this section commits an offence and is liable on conviction to a fine at level 5 and to imprisonment for 3 months.

8. Record in log book

(1) The following particulars in respect of a vessel must be recorded in a log book of the vessel in accordance with subsection (2)—
(a) the date and time of arrival;
(b) the date and time of departure;
9. Keeping of documents

(1) The bunker delivery note that relates to any marine fuel delivered to a vessel must be kept on board the vessel and be readily available for inspection at all reasonable times for a period of 3 years after the day on which the marine fuel is delivered.

(2) The log book of a vessel in which any particulars referred to in section 5(2) are recorded must be kept on board the vessel and be readily available for inspection at all reasonable times for a period of 3 years after the day on which the particulars are recorded.

(3) The log book of a vessel in which any particulars are recorded under section 8(1) must be kept on board the vessel and be readily available for inspection at all reasonable times for a period of 3 years after the day on which the particulars are recorded.

(4) If, without reasonable excuse, subsection (1), (2) or (3) is contravened, the owner and the master of the vessel each commits an offence.
10. 監督可要求提交文件的文本或副本
(1) 監督可藉書面通知，要求某船隻的擁有人或船長，在該通知所指明的時間內，向監督提交根據第 9(1)、(2) 或 (3) 條須備存的任何文件的文本或副本。
(2) 任何人無合理辯解而沒有遵從根據第 (1) 款向該人發出的通知，即屬犯罪。
(3) 任何人提交載有在要項上屬虛假或有誤導性的資料的文 本或副本，充作遵從根據第 (1) 款發出的通知，該人即屬犯罪。
(4) 犯第 (2) 或 (3) 款所訂罪行的人，一經定罪，可處第 5 級罰款及監禁 3 個月。

11. 認可燃料為合規格燃料
(1) 就第 2(1) 條中合規格燃料的定義 (c) 段而言，如監督信納使用某燃料所能達到的減少排放二氧化硫的有效程度，不遜於使用低硫燃料所達之效果，則監督可認可該燃料。
(2) 監督須在憲報刊登關於上述認可的公告。

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(5) A person who commits an offence under subsection (4) is liable on conviction to a fine at level 5 and to imprisonment for 3 months.

10. Authority may request copies of documents
(1) The Authority may, by notice in writing, require the owner or the master of a vessel to submit to the Authority, within the time specified in the notice, a copy of any document that is required to be kept under section 9(1), (2) or (3).
(2) A person who without reasonable excuse fails to comply with a notice under subsection (1) issued to the person commits an offence.
(3) A person who in purported compliance with a notice under subsection (1) submits a copy that contains information that is false or misleading in a material particular commits an offence.
(4) A person who commits an offence under subsection (2) or (3) is liable on conviction to a fine at level 5 and to imprisonment for 3 months.

11. Approval of fuel as compliant fuel
(1) For the purposes of paragraph (c) of the definition of compliant fuel in section 2(1), the Authority may approve any fuel if satisfied that its use can achieve the reduction of emission of sulphur dioxide at least as effectively as the use of low sulphur marine fuel.
(2) The Authority must publish in the Gazette a notice of an approval.
12. Determination of sulphur content of marine fuel

For the purposes of this Regulation, the sulphur content of marine fuel must be determined in accordance with the test method set out in the document EN ISO 14596:2007: “Petroleum products—Determination of sulfur content—Wavelength-dispersive X-ray fluorescence spectrometry” published by the European Committee for Standardization.

WONG Kam-sing
Secretary for the Environment

6 March 2015
Explanatory Note

The main object of this Regulation is to prohibit the use of certain fuels by vessels while they are at berth. It also provides for the requirement to keep records and documents in respect of the vessels.

2. Section 1 provides for the commencement of the Regulation.

3. Section 2 contains definitions, including—
   (a) compliant fuel—defined as marine fuel with sulphur content not exceeding 0.5% by weight, liquefied natural gas or any other fuel approved by the air pollution control authority (Authority); and
   (b) non-compliant fuel—defined as fuel that is not compliant fuel.

4. Section 3 sets out the vessels to which the Regulation applies and those to which it does not apply. Briefly, it applies to vessels that hold the certificates specified in that section (except those plying exclusively within river trade limits), which are generally ocean going vessels. The Regulation does not apply to—
   (a) warships or other vessels on military service;
   (b) vessels that do not arrive at any berth; or
   (c) vessels entering the waters of Hong Kong solely for certain purposes.
5. Section 4 prohibits the use of non-compliant fuel by a vessel to operate its machinery during the period that the vessel is at berth, excluding the first hour and the last hour. This allows the vessel to carry out a fuel switch operation, which means switching from using non-compliant fuel to compliant fuel (in the first hour), or from using compliant fuel to non-compliant fuel (in the last hour). If the prohibition is contravened, the owner and the master of the vessel each commits an offence.

6. Section 5 contains defences to the offence under section 4.

7. Section 6 empowers the Authority to exempt a vessel from the prohibition on using non-compliant fuel and also to revoke the exemption. Section 7 explains how to apply for an exemption and makes it an offence to provide false or misleading information or document in an application.

8. Section 8 requires certain particulars to be recorded in a log book of a vessel. Those particulars relate to the arrival and departure of the vessel and fuel switch operations.

9. Section 9 requires certain documents to be kept on board a vessel. Section 10 empowers the Authority to require the submission of copies of those documents and makes it an offence to submit false or misleading copies.

10. Section 11 empowers the Authority to approve fuel as compliant fuel.

11. Section 12 provides for the test method for determining the sulphur content of marine fuel.