

立法會
Legislative Council

LC Paper No. CB(1)274/07-08
(These minutes have been seen
by the Administration)

Ref : CB1/SS/6/06

**Subcommittee on Merchant Shipping
(Prevention of Air Pollution) Regulation**

**Minutes of first meeting on
Tuesday, 16 October 2007, at 8:30 am
in Conference Room B of the Legislative Council Building**

Members present : Hon Miriam LAU Kin-ye, GBS, JP (Chairman)
Hon WONG Yung-kan, SBS, JP
Hon CHOY So-yuk, JP

Member absent : Hon SIN Chung-kai, SBS, JP

**Public officers
attending** : Mr Roger TUPPER, JP
Director of Marine

Miss Winky SO
Acting Deputy Secretary for Transport and Housing
(Transport)

Mr Y M CHENG
Chief, Maritime Policy
Marine Department

Mr P C SO
General Manager/Local Vessel Safety
Marine Department

Ms Lonnie NG
Senior Government Counsel
Department of Justice

Mr Daniel FONG
Assistant Secretary for Transport and Housing
(Transport)

Clerk in attendance : Ms Connie SZETO
Chief Council Secretary (1)6

Staff in attendance : Miss Kitty CHENG
Assistant Legal Adviser 5

Ms Debbie YAU
Senior Council Secretary (1)1

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I Election of Chairman

Nominated by Mr WONG Yung-kan and seconded by Ms CHOY So-yuk,
Ms Miriam LAU was elected Chairman of the Subcommittee.

II Meeting with the Administration

(Ref: MA 90/6/1

— Legislative Council Brief issued
by the Transport and Housing
Bureau

LC Paper No. LS121/06-07

— Legal Service Division Report on
Subsidiary Legislation tabled in
the Legislative Council on 11 July
2007

LC Paper No. CB(1)57/07-08(01)

— Background brief prepared by the
Legislative Council Secretariat

LC Paper No. CB(1)57/07-08(02)

— A submission dated 24 August
2007 from Hong Kong Fishery
Alliance (HKFA) on major
conversion of diesel engines
(Chinese version only)

LC Paper No. CB(1)57/07-08(03)

— The Administration's response to
HKFA dated 17 September 2007
(Chinese version only)

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- LC Paper No. CB(1)57/07-08(04) — A summary of views expressed by HKFA at the meeting with Duty Roster Members on 25 September 2007 (Chinese version only)
- LC Paper No. CB(1)69/07-08(01) Administration's information paper on replacement of old engines with green engines
- LC Paper No. CB(1)71/07-08(01) — Annex VI to the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto, and as further amended by the Protocol of 1997 (MARPOL) (English version only)
(tabled at the meeting and issued on 16 October 2007)

2. The Subcommittee deliberated (Index of proceedings attached at **Appendix**).

Extension of scrutiny period and reporting to the House Committee

3. Members noted that the Chairman, in her capacity as the Chairman of the House Committee, would move a motion at the Council meeting to be held on 17 October 2007 to extend the scrutiny period of the Merchant Shipping (Prevention of Air Pollution) Regulation (the Regulation) to 7 November 2007. The Subcommittee would report its deliberations to the House Committee at the latter's meeting on 2 November 2007.

Follow-up actions to be taken by the Administration

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4. To facilitate members' consideration, the Administration was requested to provide a paper setting out the following:
- (a) The sulphur content of fuel oil currently used on board specified ships;
 - (b) The sulphur content of fuel oil provided by oil suppliers in the vicinity of Hong Kong to be used on board;
 - (c) The highest emission standards of sulphur oxide (SO_x) and nitrogen oxide (NO_x) that could be supported by the relevant diesel engine commonly used by local vessels;
 - (d) The anticipated improvement to air pollution in respect of the emission of the ozone depleting substances, NO_x, volatile organic compounds (VOCs) and SO_x after the implementation of the

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Regulation; and

- (e) The outcome of discussion of the meeting with the Joint Conference of Hong Kong Marine Sectors to be held in the following week.

Referral to Panel on Environmental Affairs

5. Ms CHOY So-yuk expressed concern about a number of related issues such as the need for Hong Kong to implement higher standards in emission of SO_x and the control of emissions of VOCs during ship bunkering. The Chairman remarked that such issues were related to policies and measures for improving the overall air quality in Hong Kong and suggested that they be followed up by the Panel on Environmental Affairs as appropriate.

Date of next meeting

6. The Subcommittee agreed to hold another meeting on Saturday, 27 October 2007 at 8:30 am. Meanwhile, the Administration would discuss with the Joint Conference of Hong Kong Marine Sectors and report the outcome of discussion at the next Subcommittee meeting.

7. Members also agreed to reserve the meeting slot on Monday, 29 October 2007 at 10:45 am to continue discussion if necessary.

III. Any other business

8. There being no other business, the meeting ended at 10:45 am.

Council Business Division 1
Legislative Council Secretariat
27 November 2007

**Proceedings of the first meeting of
the Subcommittee on Merchant Shipping
(Prevention of Air Pollution) Regulation
on Tuesday, 16 October 2007, at 8:30 am
in Conference Room B of the Legislative Council Building**

| Time marker | Speaker | Subject(s) | Action required |
|--------------------|---|--|-----------------|
| 000240 – 000359 | Mr WONG Yung-kan Ms CHOY So-yuk Ms Miriam LAU | Election of Chairman | |
| 000400 – 000514 | Chairman Administration | Briefing by the Administration on the Merchant Shipping (Prevention of Air Pollution) Regulation (the Regulation) which was made to implement Annex VI to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, and as further amended by the Protocol of 1997 (MARPOL) (File Ref.: MA90/6/1) | |
| 000515 – 001148 | Mr WONG Yung-kan Chairman Administration | <p>(a) Mr WONG Yung-kan's reflection that the marine industry was unclear about the details of the Regulation, including the commencement date and exemption(s) available; and the industry's concern about the disposal of the old diesel engines, the availability of cleaner fuel and the compliance cost</p> <p>(b) The Administration's advice as follows:</p> <p>(i) The Administration had consulted the marine industry on the Regulation widely and received the latter's support in general;</p> <p>(ii) In response to industry's concerns, the Regulation had been modified to provide that existing marine diesel engines installed on local vessels, such as fishing vessels, constructed before the commencement date of the Regulation and the engines that had not undergone a major conversion on or after that date, were not subject to the emission requirements on nitrogen oxide (NO_x);</p> <p>(iii) The Marine Department (MD) had introduced to the industry in early 2007 the voluntary registration of existing diesel engines. A spare engine might also be registered for each engine fitted on the vessel. Registered spare engines could be used on board the concerned ship after the implementation of the Regulation; and</p> | |

| Time marker | Speaker | Subject(s) | Action required |
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| | | <p>(iv) Under the Regulation, the sulphur content of fuel oil used on board should not exceed 4.5% m/m in order to comply with MARPOL Annex VI. The sulphur content of industrial fuel oil currently used on board local vessels was usually 0.5% m/m</p> | |
| 001149 – 001429 | Mr WONG Yung-kan Administration Chairman | <p>(a) Mr WONG Yung-kan's enquiry about the deadline for local vessels to replace old diesel engines and the estimated number of such engines involved</p> <p>(b) The Administration's explanation as follows:</p> <p>(i) All registered serving and spare diesel engines of local vessels could continue to be used. The Regulation did not require replacement of diesel engines;</p> <p>(ii) Currently, there were about 2 000 local fishing vessels but not all of them were equipped with spare engines;</p> <p>(iii) Registration for existing and spare engines would cease upon the commencement of the Regulation; and</p> <p>(iv) MD would continue to liaise with the Joint Conference of Hong Kong Marine Sectors (the Joint Conference) on the details of the Regulation and further promote the registration system. Relevant parties would meet again in late October</p> | |
| 001430 – 002124 | Ms CHOY So-yuk Chairman Administration | <p>(a) Ms CHOY So-yuk's concern that the sulphur content cap of 4.5% m/m was a very low standard, and hence the effectiveness of the Regulation in enhancing improvement in air pollution in Hong Kong was in doubt. Her enquiries as follows:</p> <p>(i) The emission standards of sulphur oxide (SOx) and NOx to be adopted for non-local vessels; and</p> <p>(ii) Whether the aforesaid exemption from NOx emission applied to second-hand diesel engines</p> <p>(b) The Administration's responses as follows:</p> <p>(i) The sulphur content cap of 4.5% m/m was set by the International Maritime Organization (IMO) in 1997. According to IMO's report, the sulphur content of fuel</p> | |

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| | | <p>oil used by ocean-going mega vessels was about 2.7% m/m in general. IMO was reviewing the sulphur content requirement and would likely bring the level down in a few years' time; and</p> <p>(ii) Local vessels and non-local vessels entering Hong Kong waters were subject to the same emission control standards under the Regulation. In respect of fuel oil quality, regulated ships were required to keep on board a bunker delivery note recording the details of fuel oil and a representative sample of the fuel oil for inspection by a Government surveyor to ensure that the quality of fuel oil complied with the requirements of MARPOL Annex VI</p> | |
| 002215 – 002939 | Ms CHOY So-yuk Chairman Administration | <p>(a) Ms CHOY So-yuk's re-iteration of her concern about the sulphur content cap and her view that Hong Kong could, with regard to its local circumstance, impose stricter requirement than that set by IMO</p> <p>(b) The Administration's explanation as follows:</p> <p>(i) The requirement of fuel oil with sulphur content not exceeding 4.5% m/m was an international standard set by IMO that Hong Kong, as an international maritime centre, should adopt. Imposing a higher standard might discourage international ships to come to Hong Kong, and as a result might bring about adverse impact to the local economy;</p> <p>(ii) The sulphur content of fuel oil in a SO_x emission control area (SECA), e.g. the Baltic Sea, was not to exceed 1.5% m/m. If Hong Kong could satisfy the relevant requirement, consideration might be given to join neighbouring ports in applying for IMO's approval to set up a SECA in the Pearl River Delta (PRD) region; and</p> <p>(iii) As announced by the Chief Executive in his 2007-2008 Policy Address, the Government would study the feasibility of requiring all vessels plying the harbour to use high-quality fuel; and such measures would help enhance the protection of environment in Hong Kong</p> | |

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| 003040 – 003704 | Ms CHOY So-yuk Chairman Administration | <p>(a) Ms CHOY So-yuk's suggestion of requiring international ships using fuel oil with sulphur content of 4.5% m/m to switch to cleaner fuel before entering Hong Kong waters</p> <p>(b) The Administration's explanation on the criteria and procedures for designation of SECAs and the bunkering requirements for Hong Kong to become part of a SECA</p> | |
| 003705 – 004532 | Mr WONG Yung-kan Chairman Administration | <p>(a) Mr WONG Yung-kan's enquiry on the types and number of diesels engines allowed to be registered and the availability of quality fuel oil for vessels</p> <p>(b) The Administration's response as follows:</p> <p>(i) Under the registration system, a ship owner might register one spare engine for each engine fitted on the vessel. It was understood that some vessels were serviced by a main and two auxiliary engines. Hence, for such vessels, three spare engines could be registered;</p> <p>(ii) In line with the Mainland, regulated ships had to obtain fuel oil from recognized suppliers and keep a copy of the bunker delivery note for Government's inspection;</p> <p>(iii) Upon the enactment of the Regulation and the Merchant Shipping (Prevention and Control of Pollution) (Fees) (Amendment) Regulation, the Government would request the Central People's Government to notify IMO of the application of MARPOL Annex VI to Hong Kong. The possible date for commencing the two regulations would be around mid 2008; and</p> <p>(iv) MD would meet with the Joint Conference shortly to further elaborate on the details of the Regulation and the registration system</p> | |
| 004533 – 005055 | Chairman Administration | <p>(a) Chairman's urge for the Administration to ensure individual vessel operators, in particular those local operators who had not joined the Joint Conference and operators of river trade vessels, were fully aware of the requirements under the Regulation and the registration system. This would prevent future argument from operators that their rights of property and to use existing diesel engines were deprived under the Regulation</p> | |

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| | | <p>(b) The Administration's advice that it had issued MD notices promulgating the implementation of MARPOL Annex VI in Hong Kong. These notices were distributed to ship agents, which would disseminate information to all ocean-going ships, and were available at local marine offices frequented by local vessel operators. The Administration had also informed the marine authorities in PRD region about the introduction of the Regulation with a view to drawing the attention of operators of Mainland vessels to the Regulation. To enhance awareness to the Regulation, the Administration would consider sending notification to trade associations, shipowners' associations and local shipping organizations and continue to liaise with associations of river trade vessels</p> | |
| 005056 – 010805 | Ms CHOY So-yuk Chairman Administration | <p>(a) Ms CHOY So-yuk's re-iteration on the concern about the sulphur content cap of 4.5% m/m on fuel oil and her view that Hong Kong could impose stricter requirements than IMO</p> <p>(b) The Administration's response as follows:</p> <p>(i) The 4.5% m/m sulphur content requirement was set in 1997 to allow the oil industry time to adapt their refineries and introduce changes to their operations to produce cleaner fuel oil in meeting the IMO requirements. While some of the refineries were still producing fuel oil with sulphur content higher than 4.5% m/m, such fuel oil would not be used by specified ships on or after 19 May 2005. Nevertheless, the 15 recognized suppliers had confirmed that they would supply fuel oil with sulphur content of 4.5% m/m or below;</p> <p>(ii) If Hong Kong imposed requirements stricter than IMO, ocean-going vessels might not come to Hong Kong which would cause damage to the economy, in particular the cargo trade;</p> <p>(iii) If Hong Kong were to set higher emission standards than MARPOL Annex VI, consultation with relevant parties, such as IMO, would be needed. This would delay the enactment of the Regulation to bring the vessels emission standards in Hong Kong on par with international</p> | The Administration to provide information as per paragraph 4(a) & (b) of the minutes |

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| | | <p>standards; and</p> <p>(iv) The Administration was studying the feasibility of tightening the emission standards for local vessels having regard to local circumstances. There were initiatives in this regard under Chief Executive's Policy Address 2007-2008</p> | |
| 010806 – 011624 | Ms CHOY So-yuk Chairman Administration | <p>(a) Ms CHOY So-yuk's request for information on the highest emission standards of SO_x and NO_x that could be supported by the relevant diesel engines commonly used by local vessels</p> <p>(b) The Administration's advice that low-speed engines of ocean-going vessels could use residual fuel with sulphur content of 4.5% m/m or below. Local vessel engines were operated with diesel with sulphur content of about 0.5% m/m</p> | The Administration to provide information as per paragraph 4(c) of the minutes |
| 011625 – 013425 | Mr WONG Yung-kan Chairman Administration | <p>(a) Mr WONG Yung-kan's concern on the need to replace the relevant diesel engines and whether shipowners needed to modify the engines to comply with the emission standard of NO_x specified in the Regulation</p> <p>(b) The Administration's explanation as follows:</p> <p>(i) A diesel engine with a power output of more than 130kW (equivalent to about 174 hp) that was installed on a specified ship constructed on or after 1 January 2000 or that had undergone major conversion on or after that date should be subject to the emission standard of NO_x specified in the Regulation. However, the cut-off date for existing relevant engines installed on local vessels would be the commencement date of the Regulation; and</p> <p>(ii) The new engines, or MARPOL Annex VI compliance engines, could help reduce emission of NO_x by 30%</p> | |
| 013426 – 015853 | Ms CHOY So-yuk Chairman Administration | <p>(a) Ms CHOY So-yuk's enquiry about the control on emission of volatile organic compounds (VOCs) under the Regulation</p> <p>(b) The Administration's advice as follows:</p> <p>(i) Control on VOCs under MARPOL Annex VI mainly concerned with loading of oil from terminals or refineries to oil tankers.</p> | |

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| | | <p>Under MARPOL Annex VI and the Regulation, oil tankers, including those registered in Hong Kong, were subject to vapour emission control if the terminals or ports were designated in accordance with IMO. These tankers were required to provide with a vapour collection system and use such system during oil loading. However, existing tankers were exempted from the requirement for a period of three years if the terminals or ports had installed vapour emission control systems and the operators of such terminals or ports allowed the tankers to use the system;</p> <p>(ii) Unloading of oil from tankers to depots was a land activity. Such process was currently regulated by the Environmental Protection Department under relevant ordinances; and</p> <p>(iii) For bunkering of ships and possible back-loading of bunker oil from depot to oil tankers, the operation only generated very low level of VOCs</p> | |
| 015854 – 020133 | Ms CHOY So-yuk Chairman Administration | Ms CHOY So-yuk's request for more information to facilitate members' consideration | The Administration to provide information as per paragraph 4(d) of the minutes |
| 020134 – 020216 | Chairman Ms CHOY So-yuk Mr WONG Yung-kan Clerk | <p>(a) Date of next meeting</p> <p>(b) The Administration undertook to meet with the Joint Conference and report the outcome of discussion of the meeting at the next Subcommittee meeting</p> | The Administration to provide information as per paragraph 4(e) of the minutes |