

**立法會**  
**Legislative Council**

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by the Administration)

Ref : CB4/SS/4/13

**Subcommittee on  
Air Pollution Control (Marine Light Diesel) Regulation**

**Minutes of the first meeting  
held on Wednesday, 5 February 2014, at 2:30 pm  
in Conference Room 2B of the Legislative Council Complex**

**Members present** : Hon Cyd HO Sau-lan (Chairman)  
Hon Steven HO Chun-yin  
Hon Frankie YICK Chi-ming  
Dr Hon Kenneth CHAN Ka-lok  
Ir Dr Hon LO Wai-kwok, BBS, MH, JP

**Member absent** : Hon CHAN Han-pan

**Public officers attending** : Agenda item II

Mr Andrew LAI Chi-wah, JP  
Deputy Director of Environmental Protection (3)  
Environmental Protection Department

Mr MOK Wai-chuen, JP  
Assistant Director (Air Policy)  
Environmental Protection Department

Mr Tony LEE Yu-tao  
Senior Environmental Protection Officer (Air Policy)  
Environmental Protection Department

Mr Peter SZE Chun-fai  
Senior Government Counsel  
Department of Justice

**Clerk in attendance** : Miss Mary SO  
Chief Council Secretary (4)2

**Staff in attendance** : Miss Evelyn LEE  
Assistant Legal Adviser 10

Ms Rebecca LEE  
Council Secretary (4)2

Ms Mandy WAN  
Administrative Assistant (4)1

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## **I. Election of Chairman**

Ms Cyd HO, the member who had the highest precedence in the Council amongst those who were present at the meeting, presided over the election of the Chairman.

2. Ms Cyd HO invited nominations for the chairmanship of the Subcommittee. Ms Cyd HO was nominated by Dr Kenneth CHAN and the nomination was seconded by Mr Steven HO. Ms HO accepted the nomination. As there was no other nomination, Ms Cyd HO was elected Chairman of the Subcommittee.

## **II. Meeting with the Administration**

L.N. 2 of 2014	-- Air Pollution Control (Marine Light Diesel) Regulation
File Ref: Annex 4 to EP150/NV/24	-- Legislative Council ("LegCo") Brief
LC Paper No. LS 24/13-14	-- Legal Service Division Report
LC Paper No. CB(4)360/13-14(01)	-- Background brief prepared by the LegCo Secretariat

3. The Subcommittee deliberated (index of proceedings at **Annex**).

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Discussion

*Price of light diesel oil with a sulphur content of not more than 0.05%*

4. Whilst noting that the import price differential between 0.5% and 0.05% sulphur diesels was within HK\$0.07/litre, or around 1% of the current retail price of about HK\$7/litre, Mr Steven HO asked how the Administration could ensure that oil companies would not increase the price of light diesel oil with a sulphur content of not more than 0.05% ("LSD") after the introduction of the Air Pollution Control (Marine Light Diesel) Regulation ("the Regulation") which stipulated that locally supplied marine light diesel ("MLD") must contain not more than 0.05% sulphur by weight.

5. The Administration responded that the Administration would allow the market to work on its own and could not dictate how oil companies determined the price of oil products, including that of LSD. To enhance the transparency of the market, the Administration would provide the Panel on Economic Development of the Legislative Council ("LegCo") with monthly import prices of LSD for publication in the LegCo's website for public monitoring. The Administration further said that according to oil companies, the import price differential of HK\$0.07/litre between 0.5% and 0.05% sulphur diesels was expected to keep narrowing because in the Asian fuel market, the supply of 0.5% sulphur diesel was declining whilst that of 0.05% sulphur diesel was growing. Moreover, as the proposed across-the-board fuel upgrade would cause no extra fuel handling cost, the actual retail price difference was expected to be essentially the same as that of the import prices.

6. Mr Frankie YICK declared that he was a director of The "Star" Ferry Company Limited. Mr YICK further expressed concern about the possibility of price fixing by oil companies after the implementation of the Regulation, as only one kind of MLD would be supplied locally then.

7. The Administration responded that it would monitor the sale price of LSD charged by local oil companies. If the increase in the price of LSD was much greater than that of the import price, the Administration would seek explanation from the oil companies. The Administration however pointed out that there was no cause for concern about price manipulation, as LSD was a standard type of MLD available in Asian market. Moreover, all oil companies had confirmed their ability to supply LSD. In fact, in the last quarter of 2013, LSD accounted for over 20% of the locally supplied MLD.

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*Effectiveness of the Regulation to improve air quality*

8. Ir Dr LO Wai-kwok queried the effectiveness of the implementation of the Regulation to improve the ambient air quality of Hong Kong, as the sulphur content of heavy oil used by ocean-going vessels ("OGVs") whilst at berth in Hong Kong waters could be as high as 3.5%.

9. The Administration responded that since OGVs operated internationally, Hong Kong had adopted the international requirements prescribed under Annex VI to the International Convention for the Prevention of Pollution from Ships of the International Maritime Organisation to regulate OGV emissions and the sulphur content of heavy oil, a common fuel for OGVs. At present, the sulphur content of heavy fuel oil used by OGVs could not exceed 3.5%. To help improve air quality, particularly in the port areas, the Administration planned to mandate all OGVs to switch to the use of fuel containing not more than 0.5% sulphur when berthing in Hong Kong waters in 2015. The Administration further explained that the "fuel switch" proposal only applied to OGVs when they were at berth, and the Administration had no plan to ban the sale of heavy fuel oil, i.e. fuel oil with sulphur content not exceeding 0.35%, in Hong Kong.

10. Responding to the Chairman's enquiry as to how the Administration could ensure that OGVs did switch to cleaner fuel when berthing in Hong Kong waters, the Administration said that staff of the Environmental Protection Department ("EPD") would, when necessary, board the OGV to inspect the relevant documents, such as the ship's logbooks which recorded the time of fuel switch operation, and conduct fuel sampling whilst the OGV was at berth in accordance with the relevant provisions of the Air Pollution Control Ordinance (Cap. 311). The Administration further said that it would explore the feasibility of using remote sensing equipment to check whether the fuel switch had taken place to support the enforcement.

11. Mr Frankie YICK expressed concern that Hong Kong might lose its competitiveness to the ports in the Pearl River Delta ("PRD") if the latter did not require OGVs berthing in their waters to switch to cleaner fuel in parallel with Hong Kong, as fuel with sulphur content not exceeding 0.5% by weight was 40% more costly than heavy fuel oil on which OGVs were run.

12. The Administration responded that it was in discussion with the relevant Mainland authorities in Shenzhen and the Guangdong Province on the possibility of making the fuel switch at berth a standard practice for the ports in the PRD.

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*Technical feasibility of upgrading the quality of local MLD*

13. Mr Steven HO noted that the EPD had commissioned the University of Hong Kong to examine the technical feasibility of upgrading the quality of local MLD. Whilst the study confirmed the technical feasibility of powering local vessels with LSD, it also revealed that there was a 1.8% drop in the maximum power output of the engines and an increase of fuel consumption from 1.1% to 1.3% under constant loading conditions. In the light of this and given that the maximum power output of the engines of local vessels was capped by the Fisheries Protection Ordinance (Cap. 171), Mr HO said that the Administration should undertake technological studies to come up with innovative products which could help reduce emissions from vessels on the one hand and reduce fuel consumption by vessels on the other.

14. The Administration responded that local vessels did not often operate at maximum power. Moreover, an average of 1.8% drop in the maximum power output of the engines during the test was insignificant and unnoticeable during operation. In fact, this 1.8% change was also within the range of experimental error, which would suggest the change being insignificant. The consultancy study also revealed that no wear and tear in fuel injectors was observed in the use of LSD. The test also recorded lower engine oil consumption as well as slower deterioration of the engine oil as to decrease in total base number and increase in viscosity when the engine ran on LSD. This meant lower operating costs for LSD because the engine oil needed fewer replacement/replenishment. The Administration further said that to encourage local transport sector to test out green and innovative transport technologies for better air quality, a \$300 million Pilot Green Transport Fund ("the Fund") was launched by the EPD in March 2011. Some stakeholders in the local marine sector had expressed interest in testing new transport technologies with the aid of the Fund.

15. Mr Steven HO asked whether consideration would be given to providing training to operators of local vessels on ways to maintain and repair their vessels using the LSD and other green and innovative products. The Administration replied that it would liaise with the Vocational Training Council on providing such training to operators of local vessels as necessary.

*Application of the Regulation*

16. Members noted that the Regulation aimed to control the supply of MLD in the local market, and did not apply to MLD that was goods in transit, transshipment goods, or solely for export or re-export. In line with international practices, the restriction on supply of MLD also did not apply to MLD supplied

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to a warship or any other vessel on military service. Members further noted that the Regulation did not prohibit local vessels from acquiring MLD from outside Hong Kong, say, in the Mainland where MLD with a sulphur content of 0.035% was available.

*On-shore power supply facilities*

17. Responding to the Chairman's enquiry on the progress of installing on-shore power supply ("OPS") facilities in Hong Kong to reduce air pollution, the Administration said that whilst the complete set of international standards for OPS had yet to be released, the Government had commissioned a study to assess the technical feasibility of installing OPS facilities at the Kai Tak Cruise Terminal. The Government would seek funding from LegCo for OPS installation after completing the study. The Administration however pointed out that even if there were international standards for OPS, it would not plan to mandate OGVs to use OPS at the outset because OPS was a very new technology and had yet to be a common practice internationally for OGVs.

Clause-by-clause examination of the Regulation

*Clause 2 - Interpretation*

18. Members noted that the Administration had sought confirmation from the parties concerned on the Chinese translation of "McGraw Hill Financial", "Platts", "Methodology and Specifications Guide - Asia Pacific & Middle East Refined Oil Products", "International Organization for Standardization" and "Petroleum products - Fuels (class F) - Specifications of marine fuels" under "ISO specifications".

19. Members further noted the explanation from the Administration that the reason for specifying the December 2013 edition of the document "Methodology and Specifications Guide - Asia Pacific & Middle East Refined Oil Products" under "Platts specification" was to avoid ambiguity, which would otherwise arise if the version of specifications were not specified.

*Clause 3 - Application*

*Clause 4 - Supply of non-compliant marine light diesel prohibited*

20. At the request of members, the Administration undertook to provide responses in writing to the following:

- (a) whether section 4(1) of the Regulation would cover a person who supply, with or without consideration, any marine light diesel that

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did not comply with Schedule 1 to the Regulation, if that person did not fall within the definition of marine light diesel importer or marine light diesel supplier refers to in section 2 of the Regulation; and

- (b) what the definitions of "warship" and "any other vessel on military service" referred to in section 4(2) of the Regulation.

**II. Date of next meeting**

21. Members agreed to next meet on 18 February 2014 at 10:45 am. Members further agreed to invite views from organizations which had previously given views on the proposal to upgrade the quality of local MLD to the LegCo Panel on Environmental Affairs at its meeting held on 22 July 2013.

22. There being no other business, the meeting ended at 4:30 pm.

Council Business Division 4  
Legislative Council Secretariat  
31 March 2014

**Subcommittee on  
Air Pollution Control (Marine Light Diesel) Regulation**

**Proceedings of the first meeting  
on Wednesday, 5 February 2014, at 2:30 pm  
in Conference Room 2B of the Legislative Council Complex**

<b>Time Marker</b>	<b>Speaker(s)</b>	<b>Subject(s)</b>	<b>Action required</b>
<b>Election of Chairman</b>			
000112 - 000227	Ms Cyd HO Mr Steven HO Dr Kenneth CHAN	Election of Chairman	
<b>Meeting with the Administration</b>			
000228 000327	Chairman Clerk	To allow sufficient time for scrutiny of the Regulation, members agreed to extend the scrutiny period of the Regulation to 19 March 2014.	
000328 001629	Chairman Administration	Briefing by the Administration on the background and major provisions of the Regulation.	
001630 001914	Chairman Mr Steven HO Mr Frankie YICK Dr Kenneth CHAN Ir Dr LO Wai- kwok	Members agreed to next meet on 18 February 2014 at 10:45 am. If necessary, a third meeting with the Administration will be scheduled for 24 February 2014 at 8:30 am.  Members also agreed to invite views from organizations which had previously given views on the proposal to upgrade the quality of local marine light diesel to the Panel on Environmental Affairs at its meeting held on 22 July 2013.	



<b>Time Marker</b>	<b>Speaker(s)</b>	<b>Subject(s)</b>	<b>Action required</b>
001915 002431	Chairman Mr Steven HO Administration	<p>Mr Steven HO's enquiry about the measures to be taken by the Administration on monitoring the possible price increase of light diesel oil with a sulphur content of not more than 0.05% (low-sulphur diesel, "LSD") after the introduction of the Regulation.</p> <p>The Administration responded that:</p> <ul style="list-style-type: none"><li>(a) there should be no cause for concern about price manipulation as LSD was a standard type of marine light diesel (MLD) available in Asian market. Moreover, all oil companies had confirmed their ability to supply LSD. In fact, in the last quarter of 2013, LSD accounted for over 20% of the locally supplied MLD;</li><li>(b) as the proposed across-the-board fuel upgrade would cause no extra fuel handling cost, the retail price difference was expected to be essentially the same as that of the import prices; and</li><li>(c) the Administration would provide the Panel on Economic Development with monthly import prices of LSD for publication in the LegCo's website for public monitoring.</li></ul>	

<b>Time Marker</b>	<b>Speaker(s)</b>	<b>Subject(s)</b>	<b>Action required</b>
002432 003607	Chairman Ir Dr LO Wai- kwok Administration	<p>Ir Dr LO Wai-kwok's query about the effectiveness of the implementation of the Regulation to improve the ambient air quality of Hong Kong, as the sulphur content of heavy oil used by ocean-going vessels ("OGVs") whilst at berth in Hong Kong waters could be as high as 3.5%.</p> <p>The Administration responded that to help improve air quality, the Administration planned to mandate all OGVs to switch to the use of fuel containing not more than 0.5% sulphur when berthing in Hong Kong waters in 2015.</p>	
003608 003756	Chairman Administration	<p>The Chairman's enquiry about the measures to be taken by the Administration for ensuring that OGVs did switch to cleaner fuel when berthing in Hong Kong waters.</p> <p>The Administration responded that:</p> <p>(a) when necessary, staff of the Environmental Protection Department would board the OGV to inspect the relevant documents, such as the ship's logbooks which should record the time of fuel switch operation; and</p> <p>(b) explore the feasibility of using a remote sensing equipment to check whether the fuel switch had taken place to support the enforcement.</p>	
003757 004357	Chairman Mr Frankie YICK Administration	<p>Mr Frankie YICK declared that he was a director of The "Star" Ferry Company Limited.</p> <p>Mr YICK expressed concern about:</p> <p>(a) the possibility of price fixing by oil companies after the implementation of</p>	

<b>Time Marker</b>	<b>Speaker(s)</b>	<b>Subject(s)</b>	<b>Action required</b>
		<p>the Regulation, as only one kind of MLD would be supplied locally then; and</p> <p>(b) Hong Kong might lose its competitiveness to the ports in the Pearl River Delta ("PRD") if the latter did not require OGVs berthing in their waters to switch to cleaner fuel in parallel with Hong Kong, as fuel with sulphur content not exceeding 0.5% by weight was 40% more costly than heavy fuel oil on which OGVs were run.</p> <p>The Administration responded that:</p> <p>(a) it would monitor the sale price of LSD charged by local oil companies, and seek explanation from the oil companies if the increase in the price of LSD was much greater than that of the import price of LSD; and</p> <p>(b) it was in discussion with the relevant Mainland authorities in Shenzhen and the Guangdong Province on the possibility of making the fuel switch at berth a standard practice for the ports in the PRD.</p>	
004358 005113	Chairman Mr Steven HO Administration	Mr Steven HO's remarks that as there was a drop in the maximum power output of the engines and given that the maximum power output of the engines of local vessels was capped by the Fisheries Protection Ordinance (Cap. 171), the Administration should undertake technological studies to come up with innovative products which could help reduce emissions from vessels on the one hand and reduce fuel consumption by vessels on the other.	

<b>Time Marker</b>	<b>Speaker(s)</b>	<b>Subject(s)</b>	<b>Action required</b>
		<p>The Administration responded that:</p> <ul style="list-style-type: none"> <li>(a) local vessels did not often operate at maximum power;</li> <li>(b) an average of 1.8% drop in the maximum power output of the engines during the test was insignificant and unnoticeable during operation. Moreover, this 1.8% change was within the range of experimental error, which would suggest the change being insignificant; and</li> <li>(c) stakeholders could test new transport technologies with the aid of the Pilot Green Transport Fund.</li> </ul>	
005114 010317	Chairman Mr Frankie YICK Administration	<p>Mr Frankie YICK relayed the concern of the relevant trades that the use of LSD had reduced the performance efficiency of their vessels by 5%. Mr Steven HO shared the same concern.</p> <p>The Administration responded that:</p> <ul style="list-style-type: none"> <li>(a) according to the consultants, there was an average of 1.8% drop in the maximum power output of the engines during the test (ranged from -5.0% to +0.1%) and the average was more representative than individual readings because of experimental errors;</li> <li>(b) the consultancy study also revealed that no wear and tear in fuel injectors was observed in the use of LSD; and</li> <li>(c) the test recorded lower engine oil consumption as well as slower deterioration of the engine oil as to decrease in total base number and increase in viscosity when the engine</li> </ul>	

<b>Time Marker</b>	<b>Speaker(s)</b>	<b>Subject(s)</b>	<b>Action required</b>
		<p>ran on LSD. This meant lower operating costs for LSD because the engine oil needed fewer replacement/replenishment.</p>	
<p>010318 011105</p>	<p>Chairman Dr Kenneth CHAN Administration</p>	<p>On the application of the Regulation, the Administration advised that the Regulation aimed to control the supply of MLD in the local market, and did not apply to MLD that was goods in transit, transshipment goods, or solely for export or re-export. In line with international practices, the restriction on supply of MLD also did not apply to MLD supplied to a warship or any other vessel on military service. The Regulation did not prohibit local vessels from acquiring MLD from outside Hong Kong, say in the Mainland where MLD with a sulphur content of 0.035% was available.</p>	
<p>011106 011413</p>	<p>Chairman Administration</p>	<p>Responding to the Chairman's enquiry on the progress of installing on-shore power supply ("OPS") facilities in Hong Kong to reduce air pollution, the Administration said whilst the complete set of international standards for OPS had yet to be released, it had commissioned a study to assess the technical feasibility of installing OPS facilities at the Kai Tak Cruise Terminal. The Administration would seek funding from LegCo for the OPS installation after completing the study. The Administration however pointed out that even if there were international standards for OPS, it would not plan to mandate OGVs to use OPS at the outset because OPS was a very new technology and had yet to be a common practice internationally for OGVs.</p>	

<b>Time Marker</b>	<b>Speaker(s)</b>	<b>Subject(s)</b>	<b>Action required</b>
011414 011700	Chairman Mr Steven HO Administration	<p>Mr Steven HO's request for the provision of training to operators of local vessels on ways to maintain and repair their vessels using the LSD and other green and innovative products.</p> <p>The Administration responded that it would liaise with the Vocational Training Council on providing such training to operators of local vessels as necessary.</p>	
011701 020140	Chairman Mr Steven HO Mr Frankie YICK Ir Dr LO Wai- kwok Dr Kenneth CHAN Administration	<p><u>Clause-by-clause examination of the Regulation</u></p> <p><i>Clause 1 – Commencement</i></p> <p><i>Clause 2 – Interpretation</i></p> <p>Responding to the Chairman's enquiry, the Administration explained that the reason for specifying the December 2013 edition of the document "Methodology and Specifications Guide – Asia Pacific &amp; Middle East Refined Oil Products" under "Platts specification" was to avoid ambiguity, which would otherwise arise if the version of specifications were not specified.</p> <p>Members noted that the Administration had sought confirmation from the parties concerned on the Chinese translation of "McGraw Hill Financial", "Platts", "Methodology and Specifications Guide – Asia Pacific &amp; Middle East Refined Oil Products", "International Organization for Standardization" and "Petroleum products – Fuels (class F) – Specifications of marine fuels" under "ISO specifications".</p> <p><i>Clause 3 – Application</i></p>	

<b>Time Marker</b>	<b>Speaker(s)</b>	<b>Subject(s)</b>	<b>Action required</b>
		<p><i>Clause 4 – Supply of non-compliant marine light diesel prohibited</i></p> <p>The Chairman asked the Administration to provide responses in writing to the following:</p> <p>(a) whether section 4(1) of the Regulation would cover a person who supply, with or without consideration, any marine light diesel that did not comply with Schedule 1 to the Regulation, if that person did not fall within the definition of marine light diesel importer or marine light diesel supplier refers to in section 2 of the Regulation; and</p> <p>(b) what the definitions of "warship" and "any other vessel on military service" referred to in section 4(2) of the Regulation.</p>	<p>Admin to take action as per paragraph 20(a) and (b) of the minutes</p>