# 立法會 Legislative Council

LC Paper No. CB(1)743/12-13 (These minutes have been seen by the Administration)

Ref: CB1/PS/2/12/1

#### **Panel on Environmental Affairs**

## Subcommittee on Issues Relating to Air, Noise and Light Pollution

# Minutes of the meeting held on Tuesday, 29 January 2013, at 4:30 pm in Conference Room 3 of the Legislative Council Complex

**Members present**: Hon Cyd HO Sau-lan(Chairman)

Hon WU Chi-wai, MH Hon Gary FAN Kwok-wai

Hon CHAN Han-pan

Dr Hon Kenneth CHAN Ka-lok

Hon KWOK Wai-keung Hon Dennis KWOK

Dr Hon Helena WONG Pik-wan Dr Hon Elizabeth QUAT, JP

Hon Christopher CHUNG Shu-kun, BBS, MH, JP

Hon Tony TSE Wai-chuen

**Members absent**: Hon SIN Chung-kai, SBS, JP

Hon Claudia MO

Public Officers attending

For item I

Ms Christine LOH

Under Secretary for the Environment

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

Mr PANG Sik-wing Principal Environmental Protection Officer (Air Policy) Environmental Protection Department

Mr Jimmy LEUNG Chief, Maritime Policy Marine Department

Mr Tony CHAN General Manager/Operations Marine Department

**Clerk in attendance:** Ms Miranda HON

Chief Council Secretary (1)1

**Staff in attendance**: Miss Evelyn LEE

Assistant Legal Adviser 10

Miss Lilian MOK Council Secretary (1)1

Miss Mandy POON Legislative Assistant (1)1

Action

<u>The Subcommittee</u> agreed to accept the late application for membership from Ms Claudia MO.

I. Current legislation and administrative measures on the control of air pollution and the associated public expenditure

(LC Paper No. CB(1)474/12-13(01) — Administration's paper on "Current legislation and administrative measures on the control of air pollution and the associated public expenditure")

- 2. <u>The Subcommittee</u> deliberated (index of proceedings attached at the **Annex**).
- 3. <u>The Subcommittee</u> requested the Administration to provide the following for member's reference
  - (a) the process involved in designating Pearl River Delta ("PRD") waters as an Emission Control Area ("ECA") under the International Maritime Organization, and the current progress made by the Administration in pursuing the proposal of designating PRD waters as an ECA with the Central People's Government;
  - (b) a paper to explain the adoption of a "direct reference approach" in introducing legislative amendments for incorporating the latest International Maritime Organization standards into the relevant local legislation;
  - (c) a paper to explain the application of the Ringelmann Chart in conducting dark-smoke visual surveys of vessels navigating in Hong Kong waters, and the progress made by the Administration in setting an objective standard for determining dark-smoke emissions from vessels by making reference to the Ringelmann Chart; and
  - (d) the feasibility of installing on-shore power facilities in other existing cruise terminals, apart from the new cruise terminal in Kai Tak.
- 4. <u>Members</u> also requested the Administration to consult the Subcommittee on the policy objectives of the legislative proposals to mandate ocean-going vessels to switch to cleaner fuels while berthing in Hong Kong waters.

#### II. Date of next meeting and item(s) for discussion

5. <u>The Chairman</u> proposed and members agreed that the next meeting be held on Friday, 8 February 2013, at 10:45 am to discuss the item on "Interface between the Environmental Impact Assessment Ordinance (Cap. 499) and the Air Pollution Control Ordinance (Cap. 311)".

(*Post-meeting note*: As directed by the Chairman, the meeting on 8 February 2013 was cancelled and discussion on the above item was deferred to the meeting scheduled for 22 February 2013. Members were informed of the arrangements vide LC Paper No. CB(1)505/12-13 circulated on 31 January 2013.)

# III. Any other business

6. There being no other business, the meeting ended at 6:33 pm.

Council Business Division 1
Legislative Council Secretariat
21 March 2013

#### **Panel on Environmental Affairs**

## Subcommittee on Issues Relating to Air, Noise and Light Pollution

## Proceedings of the meeting on Tuesday, 29 January 2013, at 4:30 pm in Conference Room 3 of the Legislative Council Complex

Time marker	Speaker	Subject(s)	Action required
000429 - 000624	Chairman	Opening remarks	
		The Subcommittee agreed to accept the late application for membership from Ms Claudia MO.	
Agenda Item I - C associated public e	e e	administrative measures on the control of a	air pollution and the
000625 - 002109	Chairman Administration	Given that air pollution was a complex issue and in order to facilitate more focused discussion and exchange of views, the Chairman proposed and members agreed that the meeting would first examine emissions from vessels, while other emission sources would be discussed at future meetings.	
		Discussion on emissions from vessels	
		The Administration briefed members on the current legislation and administrative measures on the control of air pollution and the associated public expenditure (LC Paper No. CB(1)474/12-13(01)). The following new initiatives in the 2013 Policy Address to reduce marine emissions were highlighted –	
		(a) introducing legislation to mandate ocean-going vessels ("OGVs") to switch to cleaner fuels while berthing in Hong Kong waters;	
		(b) pursuing the proposal for designating Pearl River Delta (PRD) waters as an Emission Control Area ("ECA") in the longer term; and	
		(c) installing on-shore power facilities at the Kai Tak Cruise Terminal.	
		The Administration informed members that as recommended by the Director of Audit in his Report No. 59, the Marine Department ("MD") would consult the	The Administration to provide information as requested in

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		shipping industry on seeking legislative support for adopting the Ringelmann Chart as a reference in conducting ship surveys. The Ringelmann Chart was a device with four shades of gray of different intensity (Shade 1 being the lightest and Shade 4 the darkest) to measure dark smoke emissions from vessels. In the light of the industry's feedback, MD would formulate legislative proposals for consultation with the Legislative Council ("LegCo") within the 2012-13 legislative session.	paragraph 3(c) of the minutes.
		The Administration further stated that the international requirements governing maritime matters, including marine emissions, as adopted by the International Maritime Organisation ("IMO") were implemented locally by the Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413M). In addition, MD enforced the control of dark smoke emissions from vessels under the Shipping and Port Control Ordinance (Cap. 313) and the Merchant Shipping (Local Vessels) Ordinance (Cap. 548). To give legal backing to the latest IMO standards (i.e. the IMO 2010 Standards), MD would adopt a "direct reference approach" in introducing legislative amendments for incorporating the IMO 2010 Standards into local legislation so as to enable the relevant local legislation to follow the latest IMO standards automatically without delay.	
002110 - 002916	Chairman Dr Helena WONG Administration	Noting the low participation rate of shipping companies for the incentive scheme implemented by the Administration in September 2012 to encourage the use of cleaner fuels by OGVs at berth in Hong Kong waters by reducing half of their port facilities and light dues ("the incentive scheme"), Dr Helena WONG enquired whether there would be alternative ways to reduce emissions from OGVs.  The Administration responded that —  (a) it was consulting the shipping sector on its plan to mandate fuel switch at berth in Hong Kong waters by	

Time marker	Speaker	Subject(s)	Action required
		legislation. Initially, the industry was supportive of introduction of legislation and proper enforcement mechanisms in line with international practices to mandate atberth fuel switch as they were operating under financial hardship given the expensive cost of voluntarily switching to cleaner fuels. It was expected that the legislative proposals would be submitted to LegCo for scrutiny in the 2013-2014 legislative session after consulting the marine trades;	
		<ul> <li>(b) a number of leading shipping companies had signed up to the voluntary Fair Winds Charter, and committed themselves to switching to low sulphur fuel when at berth in Hong Kong. The Fair Winds Charter had been extended for a year to until December 2013; and</li> <li>(c) the proposal for designating PRD</li> </ul>	
		waters as an ECA would be examined in a longer term.	
002917 - 004136	Chairman Mr Tony TSE Administration	Mr Tony TSE expressed the following views and raised the following enquiries –	
		(a) better air quality would help attract more foreign investments in Hong Kong;	
		(b) whether it was feasible for OGVs to switch to cleaner fuels when entering Hong Kong waters;	
		(c) the reason for the late submission of the funding proposal for installing on-shore power facilities at the new Kai Tak Cruise Terminal for approval by the Finance Committee ("FC");	
		(d) whether it was possible to install on- shore power facilities at other existing cruise terminals, apart from the Kai Tak Cruise Terminal; and	
		(e) the estimated reduction in marine emissions after mandating fuel	

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		switch by OGVs at berth in Hong Kong.  The Administration responded that –	
		(a) it acknowledged the importance of local air quality in attracting foreign investments;	
		(b) since the emissions from OGVs at berth accounted for about 40% of their total emissions within Hong Kong waters, the proposal for mandating fuel switch at berth would bring improvement to local air quality. It was anticipated that a 14% reduction in sulphur dioxide ("SO2") emissions in Hong Kong would be achieved after the implementation of mandatory fuel switch by OGVs at berth in Hong Kong;	
		(c) in the long run, the Administration would explore with relevant authorities in the PRD region the feasibility of setting up an ECA in PRD waters in accordance with the procedures stipulated by IMO;	
		(d) the design of the Kai Tak Cruise Terminal had already provided for the use of on-shore power supply. However, funding approval for carrying out the installation works had not been sought from FC at that time. The harmonized international standard for on-shore power supply promulgated recently would be adopted when installing the facilities at local cruise terminals; and	
		(e) it would explore the feasibility of installing on-shore power facilities in other existing cruise terminals.	The Administration to provide information as requested in paragraph 3(d) of the minutes.
004137 - 004954	Chairman Dr Elizabeth QUAT Administration	In response to Dr Elizabeth QUAT's enquiry, the Administration reiterated that it was technically feasible for major ship liners to switch their OGVs to cleaner fuels when at berth in Hong Kong	

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		waters as their OGVs were operating in overseas ECAs where even tighter emission control was put in place. However, OGVs of small shipping companies might not be equipped for fuel switch at berth. The Administration was consulting the marine industry in this respect.	
		On the suggestion of requiring all OGVs to switch to cleaner fuel when entering Hong Kong waters, the Administration advised that –	
		(a) as Hong Kong and the PRD region shared the same air shed, implementing the proposal by Hong Kong unilaterally would not help to improve the ambient air quality of Hong Kong significantly. Instead, setting up an ECA in PRD waters to require OGVs to use cleaner fuels once they entered the region would be more conducive to improving air quality continuously; and	
		(b) to pursue the designation of an ECA within PRD waters, the Administration would have to seek the agreement of the Central People's Government ("CPG") to submit a proposal to IMO in the first place. As this would involve indepth studies and extensive discussions with relevant authorities in the PRD region, the Administration's plan was to examine the feasibility of introducing mandatory fuel switch at berth in Hong Kong waters while continuing to pursue the establishment of an ECA in PRD waters.	The Administration to provide information as requested in paragraph 3(a) of the minutes.
		The Administration reiterated that the Fair Winds Charter was a voluntary act of a few ship liners which committed themselves to switching to low sulphur diesel when berthing in Hong Kong to tackle air pollution.	
004955 - 011099	Chairman Mr WU Chi-wai Administration	Mr WU Chi-wai raised the following enquiries –	

Time marker	Speaker	Subject(s)	Action required
		(a) the timetable for mandating the fuel switch for OGVs at berth in Hong Kong waters;	
		(b) whether there would be any measures to encourage and assist those shipping companies which had not participated in the incentive scheme to eventually switch to clearer fuels and make preparations for the mandatory fuel switch at berth in Hong Kong waters; and	
		(c) the types of marine fuel used by OGVs and river-trade vessels.	
		The Administration responded that –	
		(a) the timetable would be subject to the scrutiny work of the relevant legislative proposals to be submitted to LegCo;	
		(b) the primary consideration of those shipping companies which had not participated in the incentive scheme to switch to cleaner fuels voluntarily was the additional costs incurred. The Administration, together with the major ship liners signed up to the Fair Winds Charter and some green groups, would continue to proactively encourage OGV operators to switch to cleaner fuels before the implementation of the mandatory fuel switch; and	
		(c) apart from mandating OGVs to switch to cleaner fuels (with sulphur content not more than 0.5%) while at berth in Hong Kong waters, the Administration also planned to cap the sulphur content of locally supplied marine light diesel at 0.05% and was conducting a trial with the local marine sector on the technical feasibility. On the other hand, noting that overseas countries such as the European Union were requiring OGVs to use 0.1% sulphur diesel while berthing, the Administration would consult the marine trade on similar fuel switch requirement for OGVs while berthing in Hong Kong	

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	•	As requested by the Chairman, the Administration agreed to consult the Subcommittee on the policy objectives of the legislative proposals to mandate OGVs to switch to cleaner fuels while berthing in Hong Kong waters.	The Administration to follow up on the request as stated in paragraph 4 of the minutes.
		In response to the Chairman's concern, the Administration explained that the adoption of a "direct reference approach" in taking forward the legislative amendment exercise would enable timely implementation of international standards and practices in Hong Kong. If any international standard or practice adopted by IMO was considered not applicable to Hong Kong, the Administration would make request for exemption to IMO via CPG.	The Administration to provide information as requested in paragraph 3(b) of the minutes.
011100 - 011223	Chairman Dr Helena WONG Administration	In reply to Dr Helena WONG's enquiry, the Administration reiterated that it would further explore the feasibility of installing on-shore power facilities at other existing cruise terminals, apart from the Kai Tak Cruise Terminal.	The Administration to provide information as requested in paragraph 3(d) of the minutes.
011224 - 011932	Chairman Mr WU Chi-wai Administration	Mr WU Chi-wai enquired whether the Administration would implement any short-term initiatives to encourage OGV operators to use cleaner fuel before the implementation of the mandatory at-berth fuel switch.	
		The Administration responded that –  (a) it was consulting the shipping sector on the mandatory fuel switch at berth and would review the difficulties being faced by the industry in complying with the requirements; and	
		it planned to lower the sulphur limit of locally supplied marine light diesel from the existing nominal value of 0.5% to 0.05%. Subject to the satisfactory outcomes of the trial being conducted with the marine sector on the use of 0.05% sulphur diesel, legislative proposals would be drawn up for submission to LegCo later in 2013.	

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011933 - 012311	Chairman Administration	The Chairman enquired about the application of the Ringelmann Chart to measure dark smoke emissions from vessels, and pointed out that it might be difficult to gather sufficient evidence to prosecute owners and masters/coxswains of vessels emitting dark smoke due to the lack of an objective standard for determining whether or not the dark smoke emissions from vessels were excessive.	
		The Administration explained that —  (a) the Ringelmann Chart was a smoke colour/shade comparison scale for determining whether a ship emitted excessive dark smoke;	
		(b) MD patrol officers would use the Ringelmann Chart as an enforcement tool for dark smoke emission by vessels, as practised in the United Kingdom. Relevant training would be provided for the patrol officers according to the code of practice on safety survey for vessels; and	
		(c) the Ringelmann Chart was accepted by the court as a reference for measuring the extent of dark smoke emission from vessels in Hong Kong waters.	
012312 - 013416	Chairman Mr WU Chi-wai Administration	Mr WU Chi-wai enquired about the emission of dark smoke from local vessels (such as ferries, pleasure boats and fishing boats) navigating in Hong Kong waters.	
		The Administration responded that –  (a) local vessels currently ran on light diesel oil with a nominal sulphur content of 0.5% and produced less emission of SO2 than OGVs which were using residual oil with high sulphur content;  (b) the emission of SO2 from OGVs accounted for 42% of the total emission of SO2 in Hong Kong, while domestic vessels accounted for around 5%;	

Time marker	Speaker	Subject(s)	Action required
	Брини	(c) it would engage the shipping industry when setting objective standard for determining dark smoke emissions from vessels by making reference to the Ringelmann Chart;	12000 1 Equitor
		(d) proper operation and maintenance of engines would reduce dark smoke emission from vessels. However, external factors, such as variation in weather conditions and engine loadings, might cause changes in fuel consumption and emission of pollutants; and	
		(e) locally licensed vessels were required to undergo periodical inspections/surveys in accordance with relevant legislation and regulations to ensure that the machinery and equipments fitted on board were efficiently maintained for operation within Hong Kong waters. They also had to go through a smoke test to ascertain whether their dark smoke emission exceeded the statutory limits of nitrogen oxide, SO2 and respirable suspended particulates. An additional inspection would be carried out if they were found to be emitting dark smoke in excess of the limits. A certificate of survey (which was required for applying for or renewing a vessel licence) would be issued to them if their dark smoke emissions did not exceed the statutory levels.	
		The Chairman stated that the Administration should give an update on the progress of the feasibility of implementing "fuel switch at berth" in the PRD waters and the setting up of an ECA in the PRD waters in due course.	
013417 - 014112	Chairman Mr Tony TSE Administration	<u>Discussion on emissions from vehicles</u> Mr Tony TSE raised the following enquiries –	
		(a) the alternative measures to be implemented if the tax concession scheme for phasing out heavily polluting diesel commercial vehicles	

Time marker	Speaker	Subject(s)	Action required
Time marker	<b>Speaker</b>	("the tax concession scheme") was ineffective; and  (b) the enforcement of the Motor Vehicle Idling (Fixed Penalty) Ordinance (the Ordinance) (Cap. 611) and its effectiveness in prohibiting idling of motor vehicle engines to tackle air pollution.  The Administration responded that —  (a) The proposal included an ex-gratia payment to eligible vehicle owners	Action required
		and a timetable for phasing out heavily polluting diesel commercial vehicles. It was consulting the relevant transport trades on the proposal; and  (b) it would continue to promote the idling prohibition through public	
		education and enforcement actions.	
014113 - 015243	Chairman Dr Helena WONG Administration	Dr Helena WONG raised the following enquiries –  (a) the different vehicle classes and models qualified under the tax concession scheme; and  (b) whether the Administration would consider offering extra financial assistance (e.g. provision of interest-free loan) to vehicle owners who had difficulties in phasing out their polluting commercial vehicles.	
		The Administration explained that —  (a) it would review the qualifying standard for environment-friendly vehicles annually in the light of technological development and the prevailing statutory emission standards. If the emission standards were further tightened, only those environment-friendly vehicle models meeting the new qualifying standard could enjoy the reduction in the First Registration Tax. A number of the hybrid vehicles being sold in Hong Kong could meet the qualifying standard; and	

Time marker	Speaker	Subject(s)	Action required
		(b) unlike the two voluntary schemes, the latest proposal would also provide ex-gratia payment to eligible vehicle owners who scrapped their heavily polluting diesel commercial vehicles without acquiring new replacement vehicles. Vehicle owners could opt for second-hand vehicles that had yet to be phased out to continue their business if they could not afford new ones.	
		As regards the proposal to set a service life limit for newly registered diesel commercial vehicles at 15 years to deter the continued use of aged vehicles, the Chairman was of the view that vehicle age might not adequately reflect the condition of the vehicle and its emission performance.	
		In response, the Administration explained that the emission performance and conditions of the engine of a commercial vehicle would deteriorate over use and its emissions would be worse than those of new vehicles because of technological advancement. As such, the proposed statutory retirement age of 15 years would ensure timely phasing out of old diesel commercial vehicles. With a clear vehicle retirement age, vehicle owners would be able to factor the costs of phasing out their old diesel commercial vehicles in their business operations.	
015244 - 015744	Chairman Mr KWOK Wai-keung Administration	Mr KWOK Wai-keung expressed the following views –  (a) given that the early replacement of diesel commercial vehicles would incur substantial costs for vehicle owners, there should be continuity in the policy of setting a service life limit for newly registered diesel commercial vehicles at 15 years; and	
		(b) in anticipation that phasing out old polluting commercial vehicles would raise the selling prices of environment-friendly commercial vehicles at Euro V level, most of the diesel commercial vehicle owners would not be able to make such	

Time marker	Speaker	Subject(s)	Action required
Time market	Speaker	substantive investment to replace their vehicles. As a result, local transport operators would face much hardship in carrying on with their business.  The Administration responded that —  (a) LegCo would be consulted if there were any new legislative proposals put forth in future; and  (b) it noted the concerns expressed by the relevant transport trades. After consulting the industry, the Administration would work with them on the implementation details so that the government subsidies would benefit the vehicle owners rather than suppliers.	Action required
Agenda Item II - Do	 ate of next meeting and ite	em(s) for discussion	
015745 - 020220	Chairman Mr WU Chi-wai Administration	The Chairman proposed and members agreed that the next meeting would be held on Friday, 8 February 2013, at 10:45 am to discuss the item on "Interface between the Environmental Impact Assessment Ordinance (Cap. 499) and the Air Pollution Control Ordinance (Cap. 311)".	

Council Business Division 1 <u>Legislative Council Secretariat</u> 21 March 2013