

(Translation)

**Bills Committee on Shipping Legislation  
(Control of Smoke Emission) (Amendment) Bill 2014**

**Follow-up actions arising from the discussion  
at the meeting on 3 June 2014**

## **BACKGROUND**

At the last meeting held on 3 June 2014, the Administration was requested to provide the following information –

- (a) as the Administration has indicated that the Ringelmann Chart will not be distributed to the public at large, alternative means which may facilitate the general public to identify, for the purpose of making a report to the relevant enforcement unit, whether any dark smoke emitted by a vessel has passed the proposed threshold level of intensity with reference to the chart;
- (b) the number of dark-smoke visual surveys of vessels conducted by the Marine Department from 2007 to 2013 annually;
- (c) the responses from the Environmental Protection Department about the regulation and control of emission of sulphur dioxide and nitrogen oxides from vessels and information on the enforcement of the relevant legislation in Hong Kong; and
- (d) information regarding any latest technologies/methodologies/tools which have been adopted/used by major overseas ports to measure the emission of sulphur dioxide and nitrogen oxides from vessels.

## **RESPONSES**

### **Means to facilitate the general public to make a report to the relevant enforcement unit**

2. In order to help the general public understand the new legal requirements and delineate, for the purpose of making a report, whether any dark smoke emitted by a vessel has exceeded the proposed threshold level of intensity, the Marine Department (“MD”) will produce publicity leaflets containing the new legal requirements as well as the photographs of smoke of various shades shown in the Ringelmann Chart for distribution to the trade and the general public for reference. The MD will also implement the following

measures to introduce the new legal requirements to the general public and port users:

- (a) Uploading the photographs of smoke of various shades as shown in the Ringelmann Chart and the publicity leaflets on the website of the MD;
- (b) Making the publicity leaflets available at various district offices of the Home Affairs Department for public distribution;
- (c) Issuing an MD Notice to help the general public and port users understand the new legal requirements;
- (d) Co-organising seminars with district organisations, relevant trades and various business associations to brief members of the public, vessel owners, vessel masters/coxswains and vessel operators on the new legal requirements; and
- (e) Distributing the publicity leaflets to the persons on board during routine patrol to remind them not to let vessels emit dark smoke.

### **Dark-smoke visual surveys of vessels conducted by the MD**

3. From 2007 to May 2014, the MD conducted 10 visual surveys of dark smoke emission. Each visual survey lasted for 5 days. During each operation, the MD deployed patrol launches and law enforcement officers in Hong Kong waters to conduct visual survey of vessels in navigation or at berth. If dark smoke was found emitting from the vessels, they would compare the smoke against the Ringelmann Chart, take photographs, keep records and take follow-up actions accordingly.

4. In the above 10 dark-smoke visual surveys, the MD had observed a total of 11 881 vessels. Twenty-four warning letters and 223 advisory letters in total were issued to vessels with visible smoke emissions. Five vessels were successfully prosecuted for breaching emission regulations.

### **The regulation and control of emission of sulphur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) from vessels by the Environmental Protection Department (“EPD”)**

5. The EPD has advised that the reduction of vessel emissions is currently controlled at source at international ports through the implementation of Annex VI to the International Convention for the Prevention of Pollution from Ships

("Annex VI"). Annex VI caps the sulphur content of marine fuel and imposes standards for NO<sub>x</sub> emission from engines of newly built vessels, which help reduce the emissions of SO<sub>2</sub> and NO<sub>x</sub>.

6. The requirements of Annex VI are implemented through the Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413M) in Hong Kong. To step up control of vessel emissions in Hong Kong waters, the EPD has implemented new regulations since April 2014 to tighten the sulphur content across the board from 0.5% to 0.05% for marine light diesel supplied locally. It also launched in September 2012 a 3-year incentive scheme which reduces by half the port facilities and light dues charged on ocean-going vessels ("OGVs") using cleaner fuel voluntarily when at berth in Hong Kong waters. The EPD intends to further introduce the switching to cleaner fuel while at berth as a statutory requirement for OGVs, and is drafting legislation expected to become effective within 2015.

**Information about any latest technologies/methodologies/tools which have been adopted by major overseas ports to measure the emission of sulphur dioxide and nitrogen oxides from vessels**

7. According to EPD's understanding, international ports do not exercise emission control through the collection of samples of emission from vessels. Emissions are currently controlled at source as mentioned above.

**Transport and Housing Bureau  
Marine Department  
June 2014**