

For discussion on
27 May 2013

Legislative Council Panel on Economic Development

Proposals to Enhance Dark Smoke Control on Marine Vessels

INTRODUCTION

This paper briefs Members on our proposals to amend the Merchant Shipping (Local Vessels) Ordinance (Cap. 548) and the Shipping and Port Control Ordinance (Cap. 313) to strengthen enforcement against dark smoke emission from vessels in Hong Kong waters by providing an objective benchmark for taking prosecution actions.

BACKGROUND

Legislative provision

2. Excessive dark smoke emission from vessels is usually an indicator of improper engine operation or maintenance. At present, there are provisions in the legislation governing respectively local vessels (*c.f.* section 51 of Cap. 548) and ocean going vessels (OGVs) (*c.f.* section 50 of Cap. 313) that “.....*no vessel in the waters of Hong Kong shall emit smoke in such quantity as to be a nuisance.*” The law, however, does not define the extent of emission which shall constitute a “nuisance”. Without a clear or objective definition, whether the emission has caused a nuisance is more a matter of subjective judgment to be proven to the Court on a case by case basis.

Enforcement by Marine Department

3. To facilitate enforcement, Marine Department (MD) has been making reference to the Ringelmann Chart (at **Annex**) in assessing the level of dark smoke emission from vessels. The Chart is a device with four shades of gray of different intensity to measure the level of dark smoke from vessels and is used in other ports such as the United

Kingdom. The standards used by MD in this regard is that if the intensity of emission is found to be comparable to or exceeding Shade 2 on the Ringelmann Chart and such emission has lasted for three minutes or more, it will be used as supporting evidence that a nuisance has been caused.

4. Since 2005, MD has further adopted the same reference to the Ringelmann Chart (viz. Shade 2) in conducting the dark smoke test for local vessels during their applications for the issue or renewal of a certificate of survey annually or biennially. MD will ensure that the vessel's emissions do not exceed the acceptable level before a certificate of survey is issued to the vessel owner.

5. With the above measures as well as other educational and publicity efforts in place to remind ship masters / coxswains advising them of ways to prevent excessive smoke emissions, the number of vessels with visible emission as noted in the monitoring surveys conducted by MD has dropped from 40.8% in 2007 to 1.2% in 2012.

Director of Audit's observations

6. The Audit Commission noted in its Report No.59¹ that notwithstanding the MD's visual surveys in recent years having shown decreased dark smoke emissions from vessels, in order to provide an effective means to control such emissions, the Administration should expedite action to seek legislative support to give effect to adopting the Ringelmann Chart as a reference to measure dark smoke emissions from vessels.

PROPOSALS

Objective benchmarks for enforcement and prosecution

7. MD has researched into overseas practice and noted that some ports in the UK and the US have adopted a similar reference standard in the Ringelmann Chart as that adopted by the Department as the benchmark for taking prosecution actions against excessive smoke emissions from vessels.

8. In the light of experience gained locally since 2005 and in line with overseas practice, we propose that Cap.548 and Cap.313 be amended

¹ Section 3.38 in Chapter 2 "Implementation of air-quality improvement measures".

to make it an offence for a vessel, that is a local vessel in respect of Cap.548 and an OGV in respect of Cap.313, to emit dark smoke which is as dark as or darker than shade 2 on the Ringelmann Chart for 3 minutes or more continuously at any one time.

9 Under the proposal, if a local vessel is found to be emitting dark smoke in excess of the statutory limit, MD may direct its owner / coxswain to deliver the vessel for inspection to ensure that necessary repairs are made to the vessel engine to prevent recurrence of the problem. As regards OGVs, MD proposes that the law also provides them with the power to direct the owner / master to take necessary action to avoid emitting dark smoke in excess of the statutory limit.

Penalty Levels

10. At present, both local vessels and OGVs are subject to a maximum fine of \$ 10,000 for a first breach of the provision prohibiting dark smoke emission. We have taken the opportunity to review the respective penalty levels for local vessels and OGVs. Our view is that compared to local vessels, the power ratings of engines fitted on board OGVs are relatively larger and hence the amount of dark smoke emission would be proportionally more in the event of improper engine maintenance. To reflect the different extent of pollution problem caused by OGVs and to maintain proportionality in penalty levels for better deterrence effect, we propose that the maximum fines for OGVs under Cap.313 be set at a level higher than that for local vessels under Cap.548.

11. Specifically, we propose that –

- (a) for OGVs under Cap.313, the maximum fines be ***increased*** from the current \$10,000 to level 4 (viz. \$25,000) for a first offence, and from the current \$20,000 to level 5 (viz. \$50,000) for a second or subsequent offence; and
- (b) for local vessels under Cap.548, the maximum fines will remain unchanged, which is at level 3 (viz. \$10,000) for a first offence and at level 4 (viz. \$25,000) for any subsequent offence.

CONSULTATION

12. The Local Vessel Advisory Committee and the Port Operations Committee, which comprise various stakeholders in the shipping industry, were consulted and endorsed the legislative proposals.

ADVICE SOUGHT

13. Members are invited to comment on the above proposals. Subject to Members' support, we aim at introducing the relevant legislative amendment bills into LegCo in the next legislative session.

Transport and Housing Bureau
20 May 2013

