File Ref: LM (1/08) in CP/T 135/6

LEGISLATIVE COUNCIL BRIEF

Road Traffic Ordinance (Chapter 374)

Road Traffic (Breath Analysing Instruments and Screening Devices) (Amendment) Notice 2008

INTRODUCTION

The Commissioner of Police ("the Commissioner") has approved a type of instrument as an approved pre-screening device for indicating whether or not the proportion of alcohol in a person's breath reaches such a level that it would be reasonable to suspect that such proportion is likely to exceed the prescribed limit. Under section 39F(1) of the Road Traffic Ordinance (Cap. 374), the Commissioner will publish a notice in the Gazette for the approved pre-screening device (at **Annex A**).

JUSTIFICATIONS

A

Random breath test and pre-screening device

2. The Road Traffic Legislation (Amendment) Ordinance 2008 (Ord. No. 23 of 2008) was enacted and gazetted on 4 July 2008. Among other proposals, Ord. No. 23 of 2008 empowers the Police to conduct random breath test (RBT) to deter drink driving. With a view to reducing delay and inconvenience to motorists during RBT operations, the Police will introduce a pre-screening test by using an approved pre-screening device (PSD) to indicate whether or not the proportion of alcohol in a person's breath reaches such a level that it is reasonable to suspect such proportion is likely to exceed the prescribed limit, and therefore should be required to conduct the screening breath test.

Procedures for approving the type of Pre-Screening Device

3. According to the newly added subsection (c) in section 39F(1) of Cap. 374 (Ord. No. 23 of 2008)¹, "the Commissioner of Police may by notice in the Gazette approve types of instruments as an approved pre-screening device for indicating whether or not the proportion of alcohol in a person's

¹ The provision will come into operation on 9 February 2009.

breath reaches such a level that it would be reasonable to suspect that such proportion is likely to exceed the prescribed limit."

4. The procedures adopted for gazetting the approved type of PSD used for RBT operations is at **Annex B**.

The Pre-Screening Device - Lion Alcolmeter 500

Features

В

- 5. The Police conducted a tender exercise for the selection of PSD to be the approved instrument under section 39F(1)(c) of the amended Cap. 374. The tender for the PSD was awarded to the Best Engineering Co. Ltd for the offer of Alcolmeter 500 manufactured by Lion Laboratories Limited, United Kingdom.
- 6. Salient features and specifications of the Lion Alcolmeter 500 are highlighted below:
 - (a) It was approved by the Home Office in the United Kingdom in January 2004 for the purpose of breath tests for the use of police forces in England, Wales and Scotland.
 - (b) It has acquired the European Commission certification (CE Marking²) that the product and the associated sample collection devices conform to the requirements of the "Medical Devices Directive 93/42/EEC" and the "Electromagnetic Compatibility Directive 89/336/EEC".
 - (c) It uses fuel cell sensor for alcohol analysis, which is unaffected by acetone, hydrocarbons, non-alcoholic food and drug vapours, and all other likely breath contaminants.
 - (d) The factory setting of the device is such that the word "positive" will appear when the preset alcohol level is reached (that is, 20 micrograms in 100 millilitres of breath³). For clarity sake, however, we have asked the supplier to adjust the

² "CE Marking" is a marking which indicates a product has fulfilled the minimum requirements of all the related Directives of the European Union. It is a mandatory mark for many products to be sold on the European Union market.

³ The reason for setting the calibration at this level is that it is close to the prescribed limit and does form a basis for the Police to establish reasonable suspicion that the person's alcohol concentration in his body is likely to exceed the prescribed limit, and the driver should then be required to conduct an SBT. The Bills Committee supports the Police to use this calibration level for triggering the 'positive' signal of the pre-screening device for RBT.

⁽The existing "prescribed limit" is 22 micrograms of alcohol in 100 millilitres of breath, as defined in Section 2 of Cap. 374. It is an offence for a person to drive or attempting to drive a motor vehicle on a road with the proportion of alcohol in his breath exceeding the prescribed limit.)

 \mathbf{C}

display of the device, such that it will display the results in LCD graphics in the form of "PASS" or "FAIL":

- it will display the "PASS" signal if the alcohol level is 19 micrograms in 100 millilitres of breath or below.
- it will display the "FAIL" signal if the alcohol level is 20 micrograms in 100 millilitres of breath or above.
- (e) The accuracy level of the instrument is within $\pm 10\%$. (See paragraph 8 below.)

Accuracy and reliability test

- 7. The Police have engaged the PolyU Technology and Consultancy Company Limited⁴ (PTeC) of the Hong Kong Polytechnic University (PolyU) to conduct the accuracy and reliability test on Lion Alcolmeter 500.
- 8. PTeC confirmed that the instrument was functioning well within the tender specifications when the breath alcohol concentrations applied from the breathing model were within its measuring range. The accuracy levels were within $\pm 10\%$.
- 9. The Police are satisfied that the Lion Alcolmeter 500 is an accurate and reliable device suitable for use as Pre-Screening Device for RBT. The Commissioner has approved Lion Alcolmeter 500 as an approved pre-screening device. Photo of the approved PSD is at Annex C.

PUBLICITY

10. A spokesman will be available to answer media enquiries.

ENQUIRIES

11. For enquiries, please contact Mr. WONG Yiu-ming, Shylock, Superintendent of Police (Law Revision & Projects) (Traffic), at 2860 6229.

Hong Kong Police Force December 2008

⁴ A consultancy firm founded by the Hong Kong Polytechnic University which provides a wide range of consultancy services, including laboratory testing and certification.

ROAD TRAFFIC (BREATH ANALYSING INSTRUMENTS AND SCREENING DEVICES) (AMENDMENT) NOTICE 2008

(Made by the Commissioner of Police under section 39F(1) of the Road Traffic Ordinance (Cap. 374))

1. Commencement

This Notice shall come into operation on 9 February 2009.

2. Title amended

The title of the Road Traffic (Breath Analysing Instruments and Screening Devices) Notice (Cap. 374 sub. leg. S) is amended by repealing "AND SCREENING DEVICES" and substituting ", SCREENING DEVICES AND PRE-SCREENING DEVICES".

3. Section added

The following is added –

"4. Approved pre-screening devices under section 39F(1)(c) of the Ordinance

The devices described in Schedule 3 are approved as pre-screening devices for indicating whether or not the proportion of alcohol in a person's breath reaches such a level that it would be reasonable to suspect that such proportion is likely to exceed the prescribed limit.".

4. Approved screening devices

Schedule 2 is amended by repealing item 2.

5. Schedule 3 added

The following is added –

APPROVED PRE-SCREENING DEVICES

Lion Alcolmeter 500 manufactured by Lion Laboratories Limited,
 United Kingdom.".

TANG King-shing Commissioner of Police

26 November 2008

Explanatory Note

This Notice amends the Road Traffic (Breath Analysing Instruments and Screening Devices) Notice (Cap. 374 sub. leg. S) ("principal Notice").

- 2. By the new section 4, a device is approved as an approved pre-screening device for indicating whether or not the proportion of alcohol in a person's breath reaches such a level that it would be reasonable to suspect that such proportion is likely to exceed the prescribed limit. A device is removed from Schedule 2 to the principal Notice so that it will no longer be an approved screening device for the purpose of indicating whether the proportion of alcohol in a person's breath is likely to exceed the prescribed limit.
- 3. The title of the principal Notice is also amended to reflect its contents.

Procedures for approving the type of Pre-Screening Device (PSD)

According to amended section 39F(1)(c) under Ord. No. 23 of 2008, "the Commissioner of Police may by notice in the Gazette approve types of instruments as an approved pre-screening device for indicating whether or not the proportion of alcohol in a person's breath reaches such a level that it would be reasonable to suspect that such proportion is likely to exceed the prescribed limit."

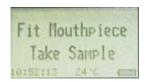
- 2. The Police adopted the following procedures to gazette the PSD:
 - (a) a tender exercise was arranged in which detailed specifications as well as performance and calibration requirements of the PSD was clearly set out in the tender document:
 - (b) tenderers were required to produce certification by an independent accredited laboratory or organisation that their devices could meet all specified requirements, as well as on the accuracy and reliability of the devices;
 - (c) samples of the devices submitted by the tenderers were sent to an independent laboratory for test on compliance with the requirements mentioned at (b) above;
 - (d) order was placed for the purchase of the product selected by the selection panel; and
 - (e) arrangements were made for the gazettal of the device to be approved PSD upon the affirmative report from the independent laboratory.

Photo of the Approved Pre-Screening Device

Lion Alcolmeter 500



(a) The following message will be displayed when the pre-screening device is ready to take a breath sample:



(b) The pre-screening device will display the following result signal:



if the alcohol level is 19 micrograms in 100 millilitres of breath or below; or



if the alcohol level is 20 micrograms in 100 millilitres of breath or above.