#### **APPENDIX 11**

本署檔號 ) in EP351 /A/12 Pt.2 ( OUR REF: YOUR REF: CB(4)/PAC/R59 話 雷 (852)2594 6401 TEL. NO.: 圖文傳真 (852)2827 8040 FAX NO.: 電子郵件 daveho@epd.gov.hk E-MAIL.: 網址: HOMEPAGE: http://www.epd.gov.hk

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20 December 2012 (By fax 2840 0716)

Miss Mary SO Clerk, Public Accounts Committee Legislative Council Secretariat Legislative Council Complex 1 Legislative Council Road Central, Hong Kong

Dear Miss SO

## **Public Accounts Committee Consideration of Chapter 1 of the Director of Audit's Report No. 59** Monitoring and reporting of air quality

Please find the attached information as requested in your letter dated 14 December 2012.

Yours sincerely,

for Director of Environmental Protection

Encl. (4 pages)

c.c. Secretary for Financial Services and the Treasury (fax no. 2147 5239) w/encl. Director of Audit (fax no. 2583 9063) w/encl.

## (a) Precautionary advices to the public in the event of very high or severe Air Pollution Index (API), and the various means through which the specific precautionary advices are disseminated to the public

If the API is at very high or severe level, i.e., above 100, we will disseminate the precautionary advice at Annex through the following channels:

- 1. EPD's website;
- 2. mobile applications, i.e., GovHKNotifications;
- 3. interactive voice recording system at 2827 8541;
- 4. hourly reports via Information Services Department to the media including televisions, radios and the newspapers;
- 5. emails to Education Bureau and other Government departments so that they can inform their respective stakeholders; and
- 6. press release in case of prolonged and widespread very high API incidents.

Moreover, API information is also provided at the display boards at the entrances of Mass Transit Railway stations.

#### (b) Past statistics on the number of days with API exceeding 200 from 2007 to 2011

From 2007 to 2011, there were only three days in which the API exceeded 200. Details are in the table below.

| No. of days with API exceeding 200 at any stations                     |      |             |      |       |      |  |  |
|--|------|-------------|------|-------|------|--|--|
|  | 2007 | $2008^{\#}$ | 2009 | 2010* | 2011 |  |  |
| General  | 0    | 1           | 0    | 2     | 0    |  |  |
| Roadside   | 0    | 0           | 0    | 2     | 0    |  |  |
| Overall  | 0    | 1           | 0    | 2     | 0    |  |  |
| # The incident happened in July 2008 and was caused by regional        |      |             |      |       |      |  |  |
| photochemical smog with ozone as the culprit pollutant.                |      |             |      |       |      |  |  |
| * The incident happened in March 2010 when Hong Kong was affected by a |      |             |      |       |      |  |  |
| dust plume originated from Northern China.                             |      |             |      |       |      |  |  |

#### (c) Timetable for implementing the new API reporting system, including the timing for bringing to the attention of the Legislative Council Environmental Affairs Panel the consultant report on the new API reporting system

We have posted the consultant report at our website and will send a copy to the LegCo Environmental Affairs Panel shortly.

http://www.epd.gov.hk/epd/english/environmentinhk/air/studyrpts/air\_studyrpts.html

Our plan is to report the findings and recommendations of the study on the review of API system to the LegCo's Environmental Affair Panel in early 2013 and to consult the stakeholders in parallel on the necessary preparatory work such as development of a system

for computing and disseminating the new API information, development of guidelines for schools and key stakeholders on the response to high pollution events as well as publicity of the new system.

# (d) Annual expenditure to be incurred for using a mobile device to measure concentration levels of major air pollutants

The key objectives of air quality measurements are to assess compliance with air quality objectives that comprise both short-term (i.e. hourly to daily) limits and long-term (i.e. yearly) limits and air quality trends. It is an established international practice to gather the air quality data through a network of fixed air monitoring stations which use sophisticated instruments coupled with vigorous quality assurance programmes. Due to practical difficulties and constraints, portable or mobile devices are not suitable for these long-term air quality measurements. However, they may be used for short-term ad hoc studies and the cost will depend on the types of instruments used and the duration of measurements.

## (e) What air quality information and related statistics are still not accessible to the public or not up-to-date on the website of the Department of Environmental Protection as referred to in paragraph 4.14 (a) and (b) of the Audit Report

We have already updated the following webpages in the light of the observations in paragraph 4.14(a) and (b) of the Audit Report and provided more user-friendly information via our website.

- Overview of Air Programme (http://www.epd.gov.hk/epd/english/environmentinhk/air/air\_maincontent.html
- AQO sub-section
   (<u>http://www.epd.gov.hk/epd/english/environmentinhk/air/air\_quality\_objectives/air\_quality\_objectives.html</u>)
- Clean the air at roadside (<u>http://www.epd.gov.hk/epd/english/environmentinhk/air/prob\_solutions/cleaning\_air\_atroad.html</u>)
- Past API records (<u>http://www.epd-asg.gov.hk/english/pastapi/pastapie.html</u>)
- Emission Inventory (http://www.epd.gov.hk/epd/english/environmentinhk/air/data/emission\_inve.html)

| Air<br>Pollution | API     | Advice to General Public   |   | Additional Advice to Children and<br>the Elderly   |   | Additional Advice to Outdoor<br>Workers  |  |
|------------------|---------|--|---|--|---|--|--|
| Level            |         | General API  | Roadside API  | General API  | Roadside API  | General and<br>Roadside API  |  |
| Severe           | 201-500 | Persons with existing<br>heart or respiratory<br>illness are advised to<br>avoid physical exertion<br>and outdoor activities.<br>The general public is<br>advised to reduce<br>physical exertion and<br>outdoor activities. They<br>are also advised to seek<br>advice from a medical<br>doctor before<br>participating in sport<br>activities and take more<br>breaks during the<br>activities. | Persons with existing heart<br>or respiratory illness are<br>advised to avoid staying at<br>roadsides with heavy<br>traffic and surrounded by<br>tall buildings in urban<br>areas and new towns.<br>The general public is<br>advised to avoid prolonged<br>stay at roadsides with<br>heavy traffic and<br>surrounded by tall<br>buildings in urban areas<br>and new towns, and reduce<br>physical exertion in such<br>areas as far as possible. | Children and the<br>elderly are advised to<br>avoid physical<br>exertion and outdoor<br>activities.  | Children and the<br>elderly are advised<br>to avoid staying at<br>roadsides with<br>heavy traffic and<br>surrounded by tall<br>buildings in urban<br>areas and new<br>towns.  | Employers are advised to assess the risk of<br>outdoor work and take appropriate<br>preventive measures to protect the health<br>of their employees, e.g. reducing physical<br>exertion with the use of mechanical aids<br>and scheduling suitable rest breaks.<br>Outdoor workers are advised to seek<br>advice from a medical doctor if they are in<br>doubt of their health condition or suffer<br>discomfort, and inform their employers of<br>the medical advice for suitable work<br>arrangements to be worked out.  |  |
| Very High        | 101-200 | Persons with existing<br>heart or respiratory<br>illnesses are advised to<br>reduce physical exertion<br>and outdoor activities.<br>They are also advised to<br>seek advice from a<br>medical doctor before<br>participating in sport<br>activities and take more<br>breaks during the<br>activities.  | Persons with existing heart<br>or respiratory illnesses are<br>advised to avoid prolonged<br>stay at roadsides with<br>heavy traffic and<br>surrounded by tall<br>buildings in urban areas<br>and new towns, and reduce<br>physical exertion in such<br>areas as far as possible.   | Children and the<br>elderly are advised to<br>reduce physical<br>exertion and outdoor<br>activities. | Children and the<br>elderly are advised<br>to avoid prolonged<br>stay at roadsides<br>with heavy traffic<br>and surrounded by<br>tall buildings in<br>urban areas and new<br>towns, and reduce<br>physical exertion in<br>such areas as far as<br>possible. | Employers are advised to assess the risk of<br>outdoor work involving heavy manual<br>work and take appropriate preventive<br>measures to protect the health of their<br>employees, e.g. reducing physical exertion<br>with the use of mechanical aids and<br>scheduling suitable rest breaks.<br>Outdoor workers with existing heart or<br>respiratory illnesses are advised to seek<br>advice from a medical doctor if they are in<br>doubt of their health condition or suffer<br>discomfort, and inform their employers of<br>the medical advice for suitable work<br>arrangements to be worked out. |  |

# Annex : Health Advice for API

| Air<br>Pollution<br>Level    | API           | Advice to General Public   |                            | Additional Advice to Children and<br>the Elderly |                          | Additional Advice to Outdoor<br>Workers   |  |
|------------------------------|---------------|--|----------------------------|--|--------------------------|---|--|
|                              |               | General API  | Roadside API               | General API                                      | Roadside API             | General and<br>Roadside API               |  |
| High                         | 51-100        | No immediate response action is suggested.<br>Long-term effects may, however, be observed if<br>exposed at such level persistently for months or<br>years. |                            | Nil  |                          | Nil                                       |  |
| Medium                       | 26-50         | No response action is required.  |                            | Nil  |                          | Nil                                       |  |
| Low                          | 0-25          | No response action is required.  |                            | Nil  |                          | Nil                                       |  |
| As the health<br>smoking now | effects on in | ndividuals may vary, you sho   | ould seek advice from a me | edical doctor if you are in c                    | doubt or suffer discomfo | ort. If you are a smoker, you should quit |  |