## CIRCULAR MEMORANDUM No. 1/2007

From : Secretary for the Environment, To : Permanent Secretaries,

Transport and Works Heads of Departments

Ref : EP 87/05/73 Tel. No. : 3110 2788 Fax No. : 3110 2700

Date: 15 January 2007

# **Controlling Officer's Environmental Report**

#### Introduction

This Circular sets out the purpose of the Controlling Officer's Environmental Report, and gives guidance on preparing and publishing Environmental Reports which includes the recently endorsed Clean Air Charter in an effort to improve Hong Kong's air quality. It superseded PELB General Circular No. 2/99 dated 1 April 1999 on the captioned subject.

# **Purpose of Environmental Reports**

- 2. Environmental Reports should be published during the calendar year following the calendar year being reported on, and should be approved personally by Controlling Officers
- 3. The Government promotes the concept of sustainable development throughout the community. It is important that the Administration takes the lead in incorporating environmental concerns in the formulation and execution of its policies and programmes. It is equally important that it be seen to be doing so.

4. Environmental Reports should be prepared to demonstrate the Controlling Officer's awareness of the environmental aspects of his work, how these issues are being addressed and how it is intended to improve upon the environmental performance in future.

# The Environmental Report

- 5. There is no intention to impose unnecessary uniformity in respect of the format or contents of Environmental Reports, as it recognised that there is considerable variety in the work of Controlling Officers. This will inevitably be reflected in the Environmental Reports.
- 6. A framework of a typical environmental report is at Appendix A for guidance. More detailed descriptions and examples could be obtained from "A Guide to Environmental Reporting for Controlling Officers" published by the Environmental Protection Department. This can be download from the Hong Kong Special Administrative Region Government website at http://www.info.gov.hk/epd/english/how\_help/tools\_epr/env.html
- 7. Apart from the above general guidance, you may be aware that the Government has recently endorsed the Clean Air Charter initiative led by the business community in an effort to improve Hong Kong's air quality. Under the Charter, each department should report progress made in the Environmental Reports. Details are set out in Appendix B.

# **Publication of Environmental Reports**

8. It is for Controlling Officers to decide how and when to publish their Environmental Reports. Those departments producing Annual Reports may wish to include the Environmental Report in that document. Others may choose, for example, to incorporate it on their homepage on the internet. The important thing is that the Environmental Reports are made accessible to the public and the Controlling Officer's stakeholders. As a minimum requirement, 1 copy each should be placed at ETWB, Environmental Protection Department (EPD), the

LegCo Secretariat and each of the public reference libraries. Policy Secretaries may wish to consider whether their departments should all publish their Environmental Reports at the same time.

9. Any request for advice and enquiry on this Circular can be directed to Dr. Alain Lam, Principal Environmental Protection Officer (Corporate Affairs), EPD at telephone no. 25946231 or fax no. 21363304.

(Sarah Liao)

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Secretary for the Environment,

Transport and Works

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D/CEO

AA/CS

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AA/SJ

Director of Administration

Judiciary Administrator

## Appendix A

# Framework of the Controlling Officer's Environmental Report A Guide to Controlling Officers

A description of what might be included in the Controlling Officer's Environmental Report is as follows:

# (i) Controlling Officer's Profile of Key Responsibilities

- Programmes for which the Controlling Officer is responsible and the associated policy areas;
- Expenditure for which the Controlling Officer is responsible;
- The facilities the Controlling Officer is managing or operating;
- Number of offices occupied;
- Establishment ceiling

# (ii) Environmental Goal

Summary of the overall goal(s) of the department/bureau in relation to environmental protection.

# (iii) Brief Description of Environmental Policy

- (a) State the department/bureau's Environmental Policy and its date of introduction or last revision.
- (b) Summary of the key environmental area(s) impacted by the activities and programmes undertaken by the department/bureau.
- (c) The Environmental Policy would normally address a combination of the following issues:
  - Compliance with relevant regulatory and legislative requirements.

- Promotion of waste reduction, recovery and recycling and consumption of resources (material, fuel and energy).
- Minimising the production of environmental pollutants and/or nuisance.
- Adoption of technologies and measures that minimize pollution, energy use and waste.
- Provision of environmental education and training to staff, or others.
- Contribution to sustainable development

## (iv) Environmental Objectives, Targets and Milestones

- (a) Any Environmental Objectives, Targets and Milestones used should be on a calendar year basis, for consistency's sake.
- (b) Environmental Objectives, Targets and Milestones would normally relate to the Department/Bureau's key environmental impacts recorded in Part iii(b). Typically they may cover performance on material use, energy consumption, waste minimisation and management, staff participation, publicity/education and procurement from suppliers/contractors.
- (c) You may consider setting short, medium and long term quantified targets with specific time scales for their achievement.

# (v) Description of Environmental Management and Performance

- (a) A description of Environmental Management may be provided to address the system for managing and monitoring the environmental performance.
- (b) A description of Environmental Performance may be provided to illustrate progress of environmental actions or initiatives. Where possible, suitable indicators may be adopted

(c) Performance indicators could both cover internal green housekeeping measures and the department/bureau's activities and programmes.

# (vi) Environmental Actions Requiring Special Attention

The Controlling Officer may wish to give his 'personal' views on which areas the department/bureau should focus in the coming year.

# **Enquiry**

For any enquiry on the Controlling Officer's Environmental Report, please do not hesitate to contact the following officer –

Mr. Richard Wong Senior Environmental Protection Officer (Business Facilitation) Environmental Protection Department

Telephone no.: 2835 1172

Fax no.: 2114 0139

## Appendix B

#### Clean Air Charter

# A Guide to Controlling Officers

#### Introduction

- 1. To show Government's commitment to improve air quality, the CE has signed the Clean Air Charter (the Charter) on behalf of the Government of the HKSAR on 27 November 2006.
- 2. This note advises Controlling Officers on the commitments under the Charter and provides guidance on fulfilling the commitments as well as reporting progress and achievement in the annual Environmental Performance Reports (EPRs).

#### **Preamble**

3. The Charter launched by the Hong Kong General Chamber of Commerce and the Business Coalition on Environment represents the business sector's voluntary commitment to reducing air pollution. As the Charter is designed primarily for the business sector, some commitments may not be applicable to Government operations and activities. Controlling Officers should adopt the principles and spirit of the Charter when designing and implementing measures according to the specific nature and need of their operation and activities.

#### Commitments under the Charter

4. The Clean Air Charter at Annex sets out six commitments with simple guidance on its implementation to put the commitment into effect. The six commitments are –

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- (a) operate to a recognized world class standard, or the standards established by the Hong Kong/Guangdong governments on emissions of air pollutants, even if it is not a requirement to do so here;
- (b) use continuous emissions monitors (CEMs) at significant sources, e.g. large and medium plants;
- (c) publish information on energy and fuel use, as well as total emissions of air pollutants annually and timely, if emissions are significant;
- (d) undertake to adopt energy-efficient measures in their operations;
- (e) identify and encourage business-relevant measures to be taken on days when air pollution is high; and
- (f) share air quality expertise of business with others.
- 5. Controlling Officers should, wherever relevant and applicable and according to the nature of business of their departments, implement appropriate measures to achieve the overall objectives of the commitments. Commitments (a) and (b) are applicable only to departments with sources of direct air emissions. Examples of these sources include fleets of vehicles or vessels, incineration/cremation facilities, boilers, power generators, printing as well as building and construction works.
- 6. For commitment (e), EPD publishes air pollutant indices (API) every hour through the webpage of EPD. They are also broadcast through radios and televisions. While Controlling Officers are encouraged to implement measures which can minimize energy consumption and air emission at all times, the viability of special temporary measures can be explored for implementation when API is or forecast to be high; i.e. API exceeding 100. Examples of possible measures are set out in the Annex. Controlling Officers are advised to ensure that the adoption of such measures should not affect the standard or level of services provided to the public.

# Implementation of the Commitments of the Charter

- 7. The Kong General Chamber of Commerce has published "The Clean Air Charter A Business Guidebook" to help participants to implement the commitments under the Charter. The Guidebook is available at the web page http://www.cleanair.hk/eng/business\_guideline.htm. Although the Guidebook has provided step by step guidelines, they are inevitably general advice rather than a detailed technical manual providing all the answers and solutions required.
- 8. There are many different operations and activities across the Government. For large and more complex operations, Controlling Officers may need to hire external assistance to assess the current energy consumption status and develop an action plan for implementation. As a general guide, the steps required for implementing the commitments under the Charter are summarized in the ensuing paragraphs.

# Step 1 - Establishing an Energy and Emission Management (EEM) Team

9. Controlling Officers should set up an Energy and Emission Management (EEM) Team, comprising of an EEM Manager and supported by an EEM Team with representatives from different sections/groups. The EEM team should provide support, in terms of skills, knowledge and expertise, to the implementation of the EEM programme. For large and more complex operations, external assistance and support may need to be hired. The EEM team should be responsible in the design and implementation of measures to reduce emissions and minimize energy consumption, as well as provide training to other staff.

# Step 2 - Identifying Emission Sources

10. Controlling Officers should identify the sources of air emissions before setting reduction targets and establishing an implementation programme for achieving the reduction targets.

- 11. Apart from energy consumption, i.e. use of electricity, fuels and energy, vehicles and vessels are also important sources of air emissions. Emissions from operations such as the use of boilers, backup generators, and the use of products containing Volatile Organic Compounds such as paints and solvents also contribute to emissions
- 12. To improve energy efficiency, Controlling Officers should consider conducting an initial energy audit to find out currently how much energy is consumed and how much emission is produced during daily operation.
- 13. For major sources such as large boilers and incinerators, the use of continuous emission monitors is a reliable way to quantify emissions and is encouraged under Commitment (b) of the Charter. The practicability of using such monitors, however, will require careful examination by relevant experts.

## Step 3 - Assessing Your Department's Position by Benchmarking

- 14. To help getting an idea of your department's EEM performance and identifying areas for improvement, Controlling Officers may use the findings of the initial energy audit to benchmark operations against established standards such as the Energy Indicator (EI) and Benchmarking System developed by the EMSD. The EMSD system is currently available for 11 common industry groups in Hong Kong. Details can be found at the follow web-page address (<a href="http://www.emsd.gov.hk/emsd/eng/pee/ecib.shtml">http://www.emsd.gov.hk/emsd/eng/pee/ecib.shtml</a> ).
- 15. Once areas for improvement have been identified, the Controlling Officer/EEM team can establish specific energy consumption and air emissions targets as well as an action plan to define responsibility and timelines for implementing the energy/emission reduction measures.

## Step 4 - Implementing Energy/Emissions Reduction Measures

16. To achieve energy/emission reduction targets, in addition to Guidebook, the Controlling Officers/EEM team may make reference to the readily available guidelines developed by EMSD or seek advice from Energy Efficiency Office of the EMSD if necessary on suitable energy-efficiency measures. They can also

visit EMSD's website at (http://www.emsd.gov.hk/emsd/eng/pee/index.shtml) or refer to the booklet "Energy Efficiency and Conservation for Buildings" at (<a href="http://www.emsd.gov.hk/emsd/e\_download/pee/emsd100dpi.pdf">http://www.emsd.gov.hk/emsd/e\_download/pee/emsd100dpi.pdf</a>) for information on energy-efficiency measures.

## Step 5 - Auditing and Reporting

- 17. Controlling Officers/EEM teams should conduct energy/emissions audits regularly, in order to monitor the progress of implementation of the emission reduction or energy conservation measures, identify further opportunities for improvement and assess whether or not the overall targets can be met.
- 18. In preparing the annual EPR#, Controlling Officers should include commitments, measures, progress and achievements implemented under the Clean Air Charter in the relevant sections of the annual EPRs. Suggested scope include –

#### (a) Environmental Policy

A commitment to help reducing air emissions by implementing plans and measures that are relevant to the department's operations for meeting the commitments of the Clean Air Charter.

# (b) Emission Reduction Targets

For departments with significant direct air emissions in their operations, information on identified emission sources, methods to quantify emissions and quantity of air emissions, energy and fuel used, plans and measures for reducing air emissions, and the emission reduction targets set for the year and the coming years.

<sup>\*</sup>For preparation of EPRs, a Guide to Environmental Reporting for Controlling Officers" is available at ( <a href="http://www.epd.gov.hk/epd/english/how\_help/tools\_epr/env.html">http://www.epd.gov.hk/epd/english/how\_help/tools\_epr/env.html</a>)

#### (c) Energy Saving Targets

Energy efficiency plans and measures, targets set for the year and the coming years, as appropriate. Plans and measures to reduce the use of electricity consumption for air-conditioning, building services and office equipment, and electricity saving targets set for the year and the coming years.

#### (d) Environmental Management Analysis

The management system for monitoring performance of the measures developed for improving energy efficiency and reduction of air emissions. The technologies, methods, standards, monitoring equipment (such as the use of CEMs), programmes, procedures and training implemented for meeting the energy efficiency and air emission reduction targets. Methods used for checking progress of achieving the targets, such as auditing and regular reviews of progress against the targets set.

# (e) Environmental Performance Analysis

The programmes of energy audit and emission reduction audit, the audit findings as compared with the action plans and targets, details of performance against each target, and an action plan for following year and the years to come. For departments that are working towards a better emission standard, the difference between the performance today and the better standard, as well as the plans and schedule for meeting it

# Step 6 - Experience Sharing

19. Plans of the Controlling Officers/EEM team to organize experience sharing seminars regularly to provide a platform for the experience sharing with their colleagues, counterparts of other departments and private sectors.

# **Enquiry**

20. For any enquiry on reporting relating to the Clean Air Charter, please do not hesitate to contact the following officer –

Mr. SHIU Lik-king Senior Administrative Officer (Air Policy Division) Environmental Protection Department

Telephone no. : 2594 6228

Fax no.: 2136 3304

**Environmental Protection Department January 2007** 

# **Annex**

# **Clean Air Charter**

We recognize that improving air quality will require emissions reductions in the business community, and many of these reductions will result in additional business capital and/or operating costs. We support the development of fair, practical and cost-effective air quality management policy, and in addition:

Statement of commitment		Implementation
	We will voluntarily:	Signatories to this Charter undertake to implement appropriate measures to put their commitment into effect.
1.	Operate by a recognized world class standard, or the standards established by the Hong Kong / Guangdong governments on emissions of air pollutants, even if it is not a requirement to do so here.	Each participant can identify the relevant standard, and if not meeting it today, make plans to meet it. Participants with significant emissions should state which standard they are operating by, and how they are performing relative to that standard. Participants that are working towards a better standard can also disclose the difference between their performance today and the better standard, as well as their plans and schedule for meeting it.
2.	Use continuous emissions monitors (CEMs) at significant sources, e.g. large and medium plants.	Each participant can identify its own significant sources, and if not monitoring today, make plans to do so. These participants should state their intentions.

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3.	Publish information on energy and fuel use, as well as total emissions of air pollutants emissions are significant.	Each participant can determine whether it has significant emissions, and if so, determine how
		to quantify them. They should publish information on their energy and fuel use, as well as air environmental reporting, or as a special environmental report on air quality.
4.	Undertake to adopt energy-efficient measures in their operations.	Each participant can identify energy-efficient measures and formulate a plan to effect these measures in their business operations.
5.	Identify and encourage business-relevant measures to be taken on days when air pollution is high.	Each participant can determine how it can contribute emissions reductions on high pollution day, such as by promoting public transportation for commuting workers, by working with their customers or vendors to reduce emissions elsewhere in the value chain, by substituting a different process, material or equipment at their own facilities, or by rescheduling things that could be done at another time.
6.	Share air quality expertise of business with others.	Participants that have expertise, particularly on any of the above items, can host visits or make other arrangements for their staff to share what is relevant to others.