



Room 2006, 20th floor, Murray Building, Garden Road, Central, Hong Kong

Tel: 848 2551 Fax: 845 3489

香港中環花園道美利大廈20樓2006室 • 電話: 848 2551 傳真機: 845 3489

ACE 1/95

(For Advice)

## Waste Disposal (Charges for Disposal of Chemical Waste) Regulation

### Introduction

This paper seeks members' endorsement of the draft Waste Disposal (Charges for Disposal of Chemical Waste) Regulation (at Annex) which provides for the introduction of a charging scheme to recover the costs of the Chemical Waste Treatment Centre (CWTC).

### Background

2. Industrial and manufacturing undertakings in Hong Kong generate around 100,000 tonnes of chemical wastes every year. Prior to the implementation of the chemical waste control scheme, the bulk of these wastes were disposed of indiscriminately down drains and sewers, causing serious environmental problems and damage to the sewerage system. Since the majority of chemical waste producers in Hong Kong are small businesses operating in multi-storied buildings, most of them have neither the financial and technical resources nor the space to install in-house treatment systems. In view of these constraints, the Government has developed a chemical waste control strategy comprising:

- (a) the introduction of legislative "Cradle-to-Grave" control over chemical waste; and
- (b) the provision of an integrated chemical waste treatment facility to assist waste producers to comply with legislative control.

3. The CWTC commenced operation in April 1993. Thus far, its service has been provided free of charge. This initial free service encourages waste producers to change their environmentally unsatisfactory method of disposal and comply with the new legislative control. However, in the long run, free service provides no economic incentive for the waste producers to minimise waste generation or to carry out technological upgrading, resources recovery or recycling activities.

4. On 16 July 1993, Members of the former Environmental Pollution Advisory Committee endorsed Governments's proposal to introduce a phased direct charging scheme to recover the costs of the CWTC. The key features of this scheme are:

- (a) a phased programme to recover eventually all variable operating cost (VOC)<sup>1</sup>;
- (b) charges to vary according to type and quantity of waste treated;
- (c) initial charges to be set at 20 per cent of VOC for each waste stream; and
- (d) a gradual increase to achieve full VOC recovery by the end of the eighth year following the implementation of charging.

5. The proposed charging scheme will have to be given legal effect through the enactment of a regulation under section 33(1)(j) of the Waste Disposal Ordinance (WDO) whereby the Governor-in-Council may by regulation provide for the charges payable to the Director of Environmental Protection (the Director) for the disposal of any waste or class of waste.

The Waste Disposal (Charges for Disposal of Chemical Waste) Regulation

6. The proposed Regulation will apply to the disposal of chemical waste at the CWTC. The disposal of MARPOL waste generated by ocean-going vessels will not be covered under this Regulation since a separate charging regulation to be made under the Merchant Shipping (Prevention and Control of Pollution) Ordinance will apply. The actual fees payable to the Director are set out in two Schedules-

(a) Schedule 1

The charge levels in Schedule 1 are based on approximately 20% VOC recovery and apply to all chemical waste other than "special chemical waste" which is defined under Clause 1 and covered under Schedule 2. Most of the chemical waste treated at the CWTC fall under this Schedule. We intend to increase the levels of charge in this Schedule to achieve full VOC recovery by 2003/04 at the latest; and

(b) Schedule 2

Full cost recovery will apply to certain types of chemical waste that are of a special nature or generated under special circumstances. These include wastes containing at least 50 parts per million polychlorinated biphenyls (PCB), expired or off-specification chemical substances, damaged chemicals, chemical wastes arising from spillage, leakage or accident and chemical wastes imported into Hong Kong for disposal purposes. The treatment of these waste will be at full cost because:

---

<sup>1</sup> The VOC represents costs relating to the processing of waste and constitutes about two-thirds of total operating cost. The remaining one-third of the operating cost is fixed recurrent overhead cost.

- (i) wastes containing PCB have been disposed of at full cost at overseas facility prior to the commissioning of the CWTC; and
- (ii) with proper management practices, the production of other types of waste can be avoided.

7. The draft Regulation also empowers the Director to reduce or waive, in whole or in part, any charge payable if in any particular case, he is satisfied that the charge would be unduly burdensome or inappropriate. This will facilitate non-profit making institutions, such as schools, to dispose of their chemical waste properly at the CWTC.

8. There is no penalty provision in the proposed Regulation for late or non payment. We are pursuing amendments to the WDO to enable the Director to impose a surcharge on late payment. Upon enactment of the Waste Disposal (Amendment) Bill 1994, the Regulation for the chemical waste charging scheme will be amended accordingly.

#### Implementation

9. The proposed charging scheme will be implemented by the Environmental Protection Department through issuing monthly demand note to waste producers. We intend to submit the draft Regulation to the Executive Council as soon as possible and implement the charging scheme before April 1995.

#### Public Consultation

10. The chemical industry and other interested parties were consulted and the Industry and Technology Development Council was briefed in mid 1993 on the phased direct charging scheme with initial charges at 20% of the VOC. There was general support for the polluter pays principle and the phased direct charging approach. An information paper outlining the key features of the charging scheme and the proposed charge levels, including full VOC recovery for special chemical waste, was issued to all registered waste producers in mid-December 1994.

#### Advice Sought

11. Members are requested to advise whether the draft Waste Disposal (Charges for Disposal of Chemical Waste) Regulation at Annex should be recommended to the Governor-in-Council.

Planning, Environment and Lands Branch  
January 1995

## WASTE DISPOSAL (CHARGES FOR DISPOSAL OF CHEMICAL WASTE) REGULATION

(Made by the Governor in Council under section 33 of  
the Waste Disposal Ordinance (Cap. 354))

### 1. Commencement

This Regulation shall come into operation on 16 March 1995.

### 2. Interpretation

In this Regulation, unless the context otherwise requires -

"Centre" ( ) means the land and premises -

- (a) owned by the Government;
- (b) the subject of a waste disposal licence authorizing the use thereof for the disposal of chemical waste; and
- (c) known as the Chemical Waste Treatment Centre;

"special chemical waste" means any chemical waste -

- (a) which is or contains polychlorinated biphenyls;
- (b) which is, or has become, unusable for its intended purpose, whether because -
  - (i) it does not meet the specifications for that purpose;
  - (ii) the date by which it may be used for that purpose has passed; or
  - (iii) it has been damaged or affected in a way which makes it unfit to be used for that purpose; or

- (c) imported into Hong Kong for the purpose of disposing of it in Hong Kong;

"special handling", in relation to any chemical waste, means that the waste -

- (a) is highly volatile;
- (b) is highly inflammable;
- (c) is spontaneously reactive with air or water;
- (d) gives any offensive or obnoxious odour;
- (e) may easily polymerise;
- (f) is or contains cyanide in an acidic medium;
- (g) is or contains organic compound that is highly acidic or in a highly acidic medium;
- (h) is an organic waste that contains fluoride;
- (i) is or contains any pesticide listed in the register of pesticides maintained under section 4 of the Pesticides Ordinance (Cap. 133);
- (j) is or contains more than 3% of cyanide by weight;
- (k) is or contains more than 100 parts per million of mercury by weight;
- (l) is or contains organo mercury compounds with mercury content above 50 parts per million by weight; or
- (m) contains more than 500 parts per million of polychlorinated biphenyls by weight;

"waste producer" has the same meaning as in section 2 of the Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354 sub. leg.).

### 3. Application

This Regulation shall not apply to any disposal of chemical waste occurring outside the Centre.

4. Exemption

Any chemical waste which is -

(a) discharged, or otherwise disposed of, from any vessel other than a vessel to which Part IV of the Shipping and Port Control Ordinance (Cap. 313) applies; or

(b) both -

(i) delivered to the Centre for disposal at the request of the Director; and

(ii) the subject of a notice in writing by the Director stating that he is satisfied that the waste producer of that waste is unknown,

is exempt as chemical waste for the purpose of this Regulation.

5. Charges payable to the Director for the disposal of chemical waste

(1) The charge payable to the Director for the disposal of chemical waste (other than special chemical waste) specified in column 1 of Schedule 1 shall be the charge specified opposite thereto in column 2 of that Schedule.

(2) The charge payable to the Director for the disposal of special chemical waste specified in column 1 of Schedule 2 shall be the charge specified thereto in column 2 of that Schedule.

(3) For the avoidance of doubt, it is hereby declared that any disposal of chemical waste may involve two or more of the disposals of chemical waste specified in column 1 of Schedule 1 or column 1 of Schedule 2, as the case may be.

6. Reduction, waiver and refund of charges

(1) The Director may reduce or waive, in whole or in part, any charge payable under this Regulation if in any particular case he is

satisfied that the charge would, if imposed, be unduly burdensome or inappropriate in the circumstances of that case.

(2) The Director may refund, in whole or in part, any charge paid under this Regulation if the person who paid the charge -

- (a) lodges with the Director, not later than 1 month after the charge was paid, an application in writing for refund of the charge; and
- (b) satisfies the Director that the imposition of the charge was unduly burdensome or inappropriate in his case.

## SCHEDULE 1

[s. 5(1) &amp; (3)]

DISPOSAL OF CHEMICAL WASTE OTHER THAN  
SPECIAL CHEMICAL WASTE

Disposal of chemical waste	\$ per thousand kilograms of chemical waste
1. Incineration of chemical waste -	
basic charge	1,589
plus	
if any chemical waste contains a calorific value of 15 Gigajoule/tonne or below	97
plus	
if any chemical waste contains a halogen concentration of -	
(a) above 0% and below or equal to 30% by weight	30
(b) above 30% and below or equal to 50% by weight	500
(c) above 50% by weight	773
plus	

if any chemical waste contains  
a sulphur concentration of -

(a) above 0% and below or equal to 20% by weight	26
(b) above 20% and below or equal to 40% by weight	389
(c) above 40% by weight	779

plus

any special handling 1,391

2. Physical or chemical treatment  
of chemical waste -

basic charge 573

plus

if any chemical waste contains  
a chromium concentration of -

(a) above 0% and below or equal to 20% by weight	194
(b) above 20% and below or equal to 40% by weight	4,051
(c) above 40% by weight	11,344

plus

if any chemical waste contains  
an ammonia concentration of -

(a) above 0% and below or equal to 20% by weight	581
(b) above 20% and below or equal to 40% by weight	4,862
(c) above 40% by weight	11,344

plus

any special handling 1,391

3. Oil/Water separation of chemical  
waste 430



## SCHEDULE 2

[s. 5(2) &amp; (3)]

## DISPOSAL OF SPECIAL CHEMICAL WASTE

Disposal of chemical waste	\$ per thousand kilograms of chemical waste
1. Incineration of chemical waste -	
basic charge	7,946
plus	
if any chemical waste contains a calorific value of 15 Gigajoule/tonne or below	486
plus	
if any chemical waste contains a halogen concentration of -	
(a) above 0% and below or equal to 30% by weight	151
(b) above 30% and below or equal to 50% by weight	2,502
(c) above 50% by weight	3,864
plus	
if any chemical waste contains a sulphur concentration of -	
(a) above 0% and below or equal to 20% by weight	130
(b) above 20% and below or equal to 40% by weight	1,946
(c) above 40% by weight	3,893
plus	
any special handling	6,953
2. Physical or chemical treatment of chemical waste -	
basic charge	2,866

plus	
if any chemical waste contains a chromium concentration of -	
(a) above 0% and below or equal to 20% by weight	972
(b) above 20% and below or equal to 40% by weight	20,257
(c) above 40% by weight	56,719
plus	
if any chemical waste contains an ammonia concentration of -	
(a) above 0% and below or equal to 20% by weight	2,907
(b) above 20% and below or equal to 40% by weight	24,309
(c) above 40% by weight	56,719
plus	
any special handling	6,953
3. Oil/Water Separation of chemical waste	2,153

Clerk to the Executive Council.

COUNCIL CHAMBER,

1995.