Waste Disposal (Amendment) Bill 2005
Administration's Response to Members' request made at the 5th meeting of the Bills Committee held on 25 October 2005

To explain the basis for setting the application fee for a clinical waste collection licence at $ 19,270 and the licence renewal fee at $ 9,320, and how this collection licence fee compared with that of chemical waste.

Any person who provides a service for the collection of clinical waste is required to obtain a collection licence from the Director of Environmental Protection (DEP) under section 10 of the Waste Disposal Ordinance. Before a licence is granted, the applicant has to satisfy DEP that he is capable of providing safe and proper collection service. An application has to include details on the collection fleet and related equipment, operational and management staff, waste storage receptacles, waste handling procedures, and the application has to be accompanied by an Operational plan and an Emergency response plan, the detailed requirements of which are set out in the Annex.

2. Since improper collection of clinical waste may lead to public health risk and pollution to the environment, DEP has to carefully examine the information submitted by the licence applicant. In considering the licence application, the enforcement staff of the Environmental Protection Department (EPD) will meet with the licence applicant to go through the information submitted and may request supplementary information. EPD staff will also conduct inspection of the collection fleet, the vehicle maintenance depot (if any), and review the supporting documents. If DEP is convinced that the applicant is capable of providing the required collection service, EPD staff will then go through with the applicant the terms and conditions of the collection licence.

3. The processing of a licence application requires input from both professional grade and inspectorate grade staff of EPD, and the cost is calculated on the basis of full cost recovery as set out below -

Collection Licence	Licence Fee	Validity period of licence
New application	$ 19,270	2 years
Renewal application	$ 9,320	5 years

It should be noted that the licence fee does not cover enforcement cost nor is it connected to the operational cost of the CWTC.

4. The validity period of a new licence will be 2 years, as has been adopted for the licensing control on chemical waste collection in 1993. Based on our experience in enforcing the chemical waste control, the effort in processing a new application is more than double that required for processing a licence renewal application. At the same time, it is also a prudent practice for DEP to issue a licence initially for 2 years for all new licences, before extending the licence period to 5 years when the licences are renewed.

To provide information on

a) the major maintenance works carried out in the Chemical Waste Treatment Centre (CWTC) at Tsing Yi since it commenced operation in 1993 and the costs involved,

b) financial provision for major refurbishment and upgrading of facilities in CWTC in the coming 10 years, and

c) the differences between the charges based on actual amount of chemical waste treated and the fixed minimum payment payable by the Government to the CWTC operator in the past few years.

5. The CWTC was awarded under a Design, Build and Operate (DBO) contract arrangement. Under the DBO arrangement, the CWTC contractor is responsible for all aspects covering the design, construction, operation and the due performance of the CWTC. The CWTC contractor has the responsibility to operate the CWTC in accordance with the stringent emission and safety requirements. Regular and proper maintenance of the CWTC is one of the key operational tasks which the CWTC contractor has to perform in order to ensure compliance with the said requirements.

6. The CWTC contractor has adopted a preventive maintenance approach to prevent any breakdown of the facilities at the CWTC. With proper maintenance, the various mechanical and electrical facilities are operated in a safe and effective manner. The preventive maintenance programme includes close monitoring of the operation, timely and scheduled inspection and maintenance of the facilities, aided by a computer control system to ensure the schedule is strictly followed. Annual testing is also conducted to ensure the facilities can function properly at all times. On the basis of a comprehensive maintenance and testing plan, this is no need to carry out any major refurbishment work to the existing facilities in the foreseeable future in order to meet the emission and safety requirements. To complement the proposed clinical

waste control scheme, we plan to modify the CWTC to receive and treat clinical waste. The estimated design and construction cost is $ 52 million.

7. Monthly payment is made to the CWTC contractor to cover the Fixed Operating Cost (FOC) and Variable Operating Cost (VOC). The FOC covers the fixed expenses for maintaining the CWTC in a state of readiness to receive and treat the waste and does not relate to the quantity of waste received and treated at the CWTC. The VOC is paid according to the quantity and type of waste received and treated at CWTC. Both FOC and VOC include cost for maintenance of the various facilities at the CWTC. However the contract does not have separate items on the maintenance cost. For Members' reference, the average annual FOC and VOC paid to the CWTC contractor over the last 12 years are about $172 million and $248 million respectively.

To provide a substantive response to the proposal of setting up a committee to monitor the modification works and operation of CWTC.

8. The CWTC adopts the best available technology and is equipped with advanced pollution abatement and emission control systems to meet stringent environmental standards. The EIA has concluded that the incineration of clinical waste at the CWTC is environmentally sound, and the CWTC can meet stringent emission standards.

9. The operation of CWTC is closely monitored by the EPD. The average dioxin level in the stack gas of the CWTC is 0.0054 ng I-TEQ/ m^3 in 2004, which is much lower than EPD's emission standard of 0.1 ng I-TEQ/m^3. Apart from continuous monitoring of the stack emissions of the CWTC, dioxin level in the ambient air is also measured and recorded every month at the Cheung Ching Estate of Tsing Yi. The monitoring results of the CWTC and the monitoring station at the Cheung Ching Estate are submitted to the Kwai Tsing District Council (K&T DC) on a quarterly basis.

10. Between November 2004 and March 2005, a total of 78.8 tonnes of dioxin residues generated from the Penny's Bay Disneyland Project were disposed of at the CWTC in four batches. During the incineration of the dioxins residues, the stack gas of the CWTC, the ambient air in the nearby Tsing Yi and Kwai Chung, and the incinerator ash were closely monitored by an independent expert assessor (IEA) to measure the dioxin level. The results obtained by the

IEA illustrate that the concentrations of dioxins in the stack emission of the CWTC were far below the prevailing international standard for incinerator dioxin emission of 0.1 ng I-TEQ/m^3. The dioxin content of the ash was far below the most commonly acceptable soil contamination criteria of 1000 ng I-TEQ/ kg, and the dioxin level of the ambient air was also low. The IEA concluded that the use of CWTC was both a safe and effective way to dispose of dioxin-containing residues without imposing additional load to the environment.

11. We are confident that the CWTC will be as effective and safe when dealing with clinical waste. Nevertheless, in light of the suggestion to set up a committee to monitor the modification works and operation of the CWTC, we are prepared to work with the K&T DC and to attend regular meetings. We undertake to provide the emission data to the K&T DC during the commissioning and initial operational phase of the CWTC when it commences to receive and treat clinical waste. Independent assessors can be appointed to provide expert advice to the K&T DC.

Environmental Protection Department
November 2005

Annex

Waste Collection licence application – Operational Plan & Emergency Response Plan

(A) Operational plan

An Operational plan should set out the following details -

- the premises and geographical locations from which the waste is collected;
- the number and size of containers or storage receptacles employed for carrying the waste to be collected and transported;
- waste handling procedures including the loading and unloading of wastes on and off the vehicles or vessels;
- provisions made for pollution control and monitoring of possible emissions including air and noxious pollutants, dust, noise and liquid spillage during transportation;
- safety equipment and measures to be provided;
- manning levels, and qualifications and experience of operational personnel;
- availability and adequacy of maintenance depot;
- arrangements for keeping records; and
- liability insurance.

(B) Emergency response plan

An Emergency response plan has to be formulated to deal with clinical waste properly in the event of any emergency, breakdown or mechanical failure of the vehicles, vessels or other equipment. It shall cover the following areas - spill response procedures, safety and precautionary measures to protect personnel, the public and the environment during an incident, communication and reporting arrangement.