For discussion on 19 March 2004

LegCo Panel on Food Safety and Environmental Hygiene Reprovisioning of Cremators at the Diamond Hill Crematorium

PURPOSE

This paper invites Members' views on the proposed project to replace the existing cremators at the Diamond Hill Crematorium (DHC), which have been in operation for over 20 years on average, by new ones with the latest cremation technology.

BACKGROUND

- Cremation instead of burial has now become the principal choice for disposal of dead bodies in Hong Kong, with the percentage of cremations to the total number of deaths registered rising from 47% in 1979 to 83% in 2003. The number of cremations has been rising steadily at about 1% per year in the past decade. The Government has to ensure that there are adequate cremators to meet the increasing public demand for cremation service. The Food and Environmental Hygiene Department (FEHD) currently operates six public crematoria across the territory (namely at Cape Collinson, Cheung Chau, Diamond Hill, Fu Shan, Kwai Chung and Wo Hop Shek). Some of our cremators including the ones at Diamond Hill were built a long time ago and are reaching the end of their serviceable life. FEHD has embarked on a programme to upgrade the cremators and expand their handling capacity so as to meet the increasing demand for cremation service and the latest environmental standards.
- 3. DHC is located at the Diamond Hill Urn Cemetery site on Po Kong Village Road in Wong Tai Sin. A location plan is at Annex. It comprises a crematorium building with six cremators and two service halls, a columbarium with 43 310 niches, a sitting-out area, and a garden of remembrance. The DHC had four cremators when it was commissioned in August 1979 and two more cremators were added in 1985 to meet the increasing demand for cremation service. In 2003, the

DHC cremators handled 6 706 dead bodies, amounting to about 22% of total cremations in Hong Kong of 30 161.

JUSTIFICATIONS FOR THE PROJECT

4. We have strong operational need to implement the project because -

(a) To avoid disruptions to the provision of cremation service

The existing cremators in the DHC have been in use for about 18 to 24 years and are now at the end of their serviceable life. Due to their deteriorating performance, frequent repairs are required, causing disruptions to our provision of cremation service to the public.

(b) To minimize pollution to the surroundings

Since the DHC cremators have been in operation for a long time, their performance is likely to deteriorate further and may possibly cause air pollution problems like dark smoke and odour if replacement cremators are not put in place in time. The new cremators will be built in accordance with the latest environmental standards and would afford better protection to the environment.

(c) To meet the increasing demand for cremation service

Almost all bereaved families would like to have cremation performed as soon as possible, but sometimes we could not meet public expectation due to the limited handling capacity of our cremators. Unlike existing cremators at the DHC, the new cremators could significantly reduce the output time from the present $2\frac{1}{2}$ hours to $1\frac{1}{4}$ hours. After the replacement works, we would be able to expand the capacity of the DHC cremators by 100% and thus shorten the waiting time although the number of new cremators will remain unchanged at six. The environmental performance of the

new cremators will be controlled under the Specified Process Licence of the Air Pollution Control Ordinance (Cap. 311). The enhanced handling capacity of the DHC will not jeopardize the environment of the surrounding area.

PROJECT SCOPE

- 5. The scope of the reprovisioning project covers the installation of six new cremators, the provision of a full range of ancillary facilities (including four service halls, gardens of remembrance, toilets for the public, vehicular loading bay, etc.), and the demolition of the existing crematorium building after satisfactory commissioning of the new cremators. The total cost of the project including the environmental protection features will be about \$239 million.
- 6. To avoid disruption to the current provision of cremation service, a phased development will be adopted. Phase I will provide six new cremators and major ancillary facilities including two service halls. Phase II will cover the demolition of the existing crematorium building and the construction of the remaining ancillary facilities including another two service halls. Throughout the commissioning stage, the total number of cremators (old and new) in operation will not be more than six at any one time.
- 7. In designing the replacement cremators at the DHC, we will adopt the latest cremation technology to ensure that they will fully meet all relevant environmental protection criteria during their operation, including the Guidance Notes on the Best Practical Means for Incinerators (Crematoria) issued by the Environmental Protection Department (EPD). The replacement cremators will be equipped with high temperature secondary combustion chambers to ensure complete combustion during the cremation process, and a flue gas filtering system to filter away particles and waste gases in the emission from the cremators. These advanced features have been adopted in our replacement cremators at the Kwai Chung Crematorium commissioned in 2003 and have proven effective in preventing the emission of particles/waste gases and dark smoke and meeting the statutory environmental standards.

PUBLIC CONSULTATION

- 8. The original scope of the project was to build 12 cremators (including six replacement cremators and six additional cremators) at the DHC site to meet increasing demand for cremation service. When we consulted the Environment Committee of the former Wong Tai Sin Provisional District Board in November 1997, the Committee only supported the early replacement of the six existing cremators at the DHC but objected to the installation of six additional cremators due to concerns about possible additional air pollution they might bring to the area. FEHD subsequently conducted a review and concluded that the increasing demand for cremation service could be met by the installation of new cremators with greater cremation capacity than that of traditional cremators. We have therefore revised the scope of the project to include only the replacement of six cremators and reprovisioning of the full range of ancillary facilities.
- 9. In January 2003, in response to the requests from a group of parents of students studying in the school village near the DHC to expedite the reprovisioning project and make improvements to the existing cremators in the interim, a Legislative Council case conference was held and Members urged the Government to implement the reprovisioning project as soon as possible so as to improve the local environmental quality.
- 10. The Wong Tai Sin District Council (WTSDC) has been very concerned about the progress of the project. In March 2003, the DC Chairman wrote to the Director of Food and Environmental Hygiene to enquire about the progress of the project and urged for early replacement of the existing cremators.

ENVIRONMENTAL IMPACT ASSESSMENT

11. As this proposal is a "designated project" under the Environmental Impact Assessment (EIA) Ordinance (Cap. 499), we are required to conduct an EIA study before commencement of construction works. In this connection, the Architectural Services Department (ArchSD) commissioned a consultant to conduct the EIA study. The study concluded that the environmental impact arising from this proposed

project can be mitigated to an acceptable level. To ensure that the required mitigation measures would be properly implemented, the study has also recommended an environmental monitoring and audit programme as well as an environmental management plan for FEHD and ArchSD to follow.

12. At the public inspection stage of the EIA process, there were views against in-situ reprovisioning of the DHC. Having considered all the views received, the Advisory Council on the Environment endorsed the EIA report in March 2004 and EPD's decision on the approval of the EIA report should be available within the next few weeks.

IMPLEMENTATION PROGRAMME

13. Subject to EPD's approval of the EIA report, we plan to make a submission to the Public Works Subcommittee to upgrade the proposed project to Category A of the Public Works Programme and to seek funding approval from the Finance Committee in around May 2004 with a view to inviting tender in June 2004. Construction works are expected to commence in October 2004 for completion of Phase I (commissioning of new cremators) and Phase II by June 2006 and April 2008 respectively.

ADVICE SOUGHT

14. Members are invited to comment on the proposed project.

Health, Welfare and Food Bureau Food and Environmental Hygiene Department March 2004

