For discussion on 11 November 2008

# LegCo Panel on Food Safety and Environmental Hygiene

## **Re-provisioning of Wo Hop Shek Crematorium**

#### **PURPOSE**

This paper informs Members of the Administration's plan to re-provision the Wo Hop Shek Crematorium (WHSC) by replacing the old cremators in situ with technologically advanced new cremators, and invites Members' views on the proposed project.

#### **BACKGROUND**

- 2. WHSC is located in the Wo Hop Shek (WHS) Cemetery in the North District. It was commissioned in 1991 and has four coffin cremators and two service halls. The coffin cremators provide about 3 800 cremation sessions a year. There is also a skeletal cremator in the crematorium for cremation of skeletal remains from earlier burials.
- 3. Cremation service is provided by the Government for members of the public. The annual number of cremations has been on the rise in recent years, increasing steadily from 30 100 five years ago (2003) to 34 400 in 2007, i.e. 86% of the total number of deaths. We project that by 2012, the number of cremations will increase to 42 000. To fulfil our performance pledge of arranging a cremation session within 15 days of application and to reduce emissions from our cremators to meet the latest environmental standards, we have started a re-provisioning programme for cremators since 2003. To date, we have replaced old cremators in Kwai Chung, Fu Shan and Diamond Hill Crematoria and have put in operation a total of 14 new cremators at the above three

venues. In the next few years, we plan to re-provision the WHSC and Cape Collinson Crematorium.

#### JUSTIFICATIONS FOR THE PROJECT

- 4. The existing cremators in the WHSC were constructed in the early years. Their design is no longer compatible with modern day standards in terms of operational efficiency and technical competency. Furthermore, the cremators are also approaching the end of their service life and need to be replaced.
- 5. We propose to demolish the four old coffin cremators and the skeletal cremator, and construct in situ six new cremators and one skeletal cremator employing advanced cremation technology to enhance the handling capacity. If the re-provisioning project is supported, it is envisaged that by its scheduled completion in late 2011/early 2012, the new cremators and the facilities constructed under the first phase of the re-provisioning of Cape Collinson Crematorium, together with other crematoria, will increase our cremation capacity to a total of 43 000 sessions a year. This will sufficiently meet the demand for cremation service at that time.
- 6. In addition, these new cremators will be built in accordance with the latest environmental standards, fully meeting the requirements set out in the Guidance Note on the Best Practicable Means for Incinerators (Crematoria) issued by the Environmental Protection Department (EPD). The environmental performance of the new cremators will also be regulated by the Specified Process Licence of the Air Pollution Control Ordinance (Cap. 311). The new cremators will be fitted with high temperature secondary combustion chambers to ensure complete combustion during the cremation process, and a flue gas filtering system to filter out particles and waste gases in the emissions from the cremators. The above design was adopted for the new cremators at our recently commissioned crematoria, such as the Diamond Hill Crematorium, and has proven effective in reducing the emission of particles/waste gases and dark smoke and meeting the statutory environmental standards.

### PROJECT SCOPE

- 7. The re-provisioning will take place in situ at the WHS Cemetery. Due to site constraint, the existing crematorium will be closed down and demolished to make way for the construction of the new crematorium. The re-provisioned crematorium will have six coffin cremators, one skeletal cremator, three service halls and other ancillary facilities. The total estimated cost for the project is about \$700 million. The design outlook of the re-provisioned crematorium is at **Annex**.
- 8. As Hong Kong is densely populated, it is difficult to find new suitable sites for crematorium development. Significant lead time is also required in developing a new crematorium. We therefore propose to maximize land use by allowing scope and flexibility in the design layout of the proposed crematorium to further build two cremators and one service hall on site should the need arise in future, without affecting the structure and operation of the crematorium.

#### **PUBLIC CONSULTATION**

9. We consulted the North District Council (NDC) on the project on 17 March 2008. Members generally supported the replacement of the existing crematorium facilities. However, individual members and local resident organizations were not supportive of the proposed construction of additional cremators. They were concerned about the possible adverse impact on air quality arising from the operation of the additional cremators. They hoped that more information on the Environmental Impact Assessment (EIA) could be provided and consultation conducted. To address their concern, the Food and Environmental Hygiene Department and the Architectural Services Department arranged technical briefing sessions for NDC members on 29 April 2008 to explain the findings of the EIA (see We assured members of the NDC that air paragraph 10 below). emissions from all new cremators would be kept under close monitoring and emission samples taken regularly for testing to ensure they meet the stringent and most up-to-date requirements as approved. provided NDC members with the air emission data collected from one of the recently re-provisioned crematoria for reference. In order to enable local residents to have a better understanding of the operation of the re-provisioned cremators, we will regularly provide the NDC with information on air emissions when the re-provisioned crematorium comes into operation.

#### ENVIRONMENTAL IMPACT ASSESSMENT

10. In accordance with the requirements under the EIA Ordinance (Cap. 499), an EIA study was conducted on the project proposal. The study concluded that all predicted air pollutant concentrations at all relevant air sensitive receivers (ASRs) were found to be in compliance with the stipulated assessment criteria and there would be no adverse impact on the ASRs arising from chimney emissions. Other environmental impacts can be mitigated to an acceptable level through various means. The study also recommended an environmental monitoring and audit programme to ensure continued implementation of the mitigation measures. The EIA report was approved by EPD in June 2008 after the statutory public inspection process.

#### IMPLEMENTATION PROGRAMME

- 11. We plan to make a submission to the Public Works Subcommittee to upgrade the proposed project to Category A of the Public Works Programme in January 2009 and to seek funding approval from the Finance Committee in February 2009. Demolition of the existing crematorium and construction of its replacement are expected to commence in July 2009. We expect the new cremators can commence operation by end 2011/early 2012.
- 12. We will maintain close liaison with NDC members and local representatives through the North District Office during the construction stage as well as after the facility has been put into operation. We will listen to their views and report to them the progress of the construction works and operation position. Meanwhile, during the re-provisioning of WHSC, we will adjust the operation hours of other crematoria as and

when necessary to cope with demand.

13. We will also keep under review the demand for cremation service. Should there be a need to take forward the expansion plan, we will again consult this Panel and the District Council concerned.

## **ADVICE SOUGHT**

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

Food and Health Bureau Food and Environmental Hygiene Department November 2008

# Design outlook of the re-provisioned Wo Hop Shek Crematorium

