For discussion on 14 July 2009

## LegCo Panel on Food Safety and Environmental Hygiene

# **Reprovisioning of Cape Collinson Crematorium**

## **PURPOSE**

This paper briefs Members on the Administration's plan to reprovision the Cape Collinson Crematorium by replacing the old cremators with new technologically advanced cremators, and invites their views on the proposed project.

## **BACKGROUND**

- 2. The Cape Collinson Crematorium, with 12 cremators and three service halls, was commissioned in 1962. Of these cremators, ten were replaced in 1995 and two in 2001. The crematorium at present provides about 10 300 cremation sessions a year.
- 3. With a growing and aging population in Hong Kong, the number of deaths and the corresponding number of cremations have been rising gradually year on year. We projected that the number of deaths will increase steadily from 43 700 in 2010 to 52 800 in 2020. The number of cremations will also rise from 39 200 in 2010 to 49 600 in 2020 correspondingly. In view of the increasing demand for cremation service, the Administration has embarked on a reprovisioning and modernisation programme for cremators since 2003. objectives are to enhance the efficiency of the cremators, improve the control of emissions from cremators to meet the latest environmental standards, and fulfil our performance pledge of arranging a cremation session within the next 15 days from the date of application. To date, we have replaced old cremators at Kwai Chung, Fu Shan and Diamond Hill Crematoria and have put in operation a total of 14 new cremators at the above three venues. Meanwhile, works for reprovisioning the Wo Hop Shek Crematorium will soon commence. It is envisaged that by its scheduled completion in late 2011 / early 2012, six new

technologically advanced cremators will be in place. The reprovisioning of the Cape Collinson Crematorium is the next project at hand.

#### JUSTIFICATIONS FOR THE PROJECT

- 4. The existing cremators at the Cape Collinson Crematorium were replaced in early years. Their design is no longer compatible with modern day standards in terms of operational efficiency and technical competency. Furthermore, the cremators are approaching the end of their service life and need to be replaced.
- 5. If the reprovisioning project is supported, it is envisaged that by its scheduled completion in late 2014, the Cape Collinson Crematorium and the other crematoria will together provide a total cremation capacity of 52 800 sessions a year. This will sufficiently meet the cremation demand up to the early 2020s.
- 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). environmental performance of the new cremators will also be regulated by the Specified Process Licence of the Air Pollution Control Ordinance (Cap. 311). The design and operation of these new cremators will be fully computerized, using advanced technologies. They will be installed with an advanced flue gas filtering system to process and filter out waste gases and particles generated during the combustion process, and will also be fitted with a high temperature secondary combustion chamber to ensure complete combustion during the cremation process. 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 as well as meeting the statutory environmental standards. The reprovisioned crematorium will be equipped with a computer system to record the emissions from the cremators. The system is connected to EPD for comprehensive monitoring to ensure that waste gas emissions are in full compliance with the department's air quality standards.

#### PROJECT SCOPE

- 7. The reprovisioning will take place in situ at the Cape Collinson Crematorium. We propose to demolish the existing 12 cremators and three service halls and construct in situ ten new cremators, three service halls and other ancillary facilities. Like cremators in other crematoria which have been reprovisioned (e.g. the Kwai Chung Crematorium, the Fu Shan Crematorium and the Diamond Hill Crematorium), the new cremators adopt a more advanced design and are therefore more efficient. The cremation capacity of the Cape Collinson Crematorium will increase from about 10 300 sessions a year to about 16 600 sessions a year after reprovisioning. Owing to site constraint, the reprovisioning works will be carried out in two phases. Under Phase 1, four cremators and two service halls will first be built at the existing car park site of the crematorium. During this time, the existing cremators will remain in operation to provide cremation service to the public. Upon completion of Phase 1 and the commissioning of the four new cremators, all the existing cremators will be shut down and demolished to make way for the Phase 2 works, i.e. the construction of six cremators, one service hall and other ancillary facilities. The total estimated cost for the project is about \$660 million. The location plan and artist's impression of the development are at Annexes A and **B** respectively.
- 8. Major facilities of the new crematorium include:
  - Basement lower level of the cremator plant and store rooms
  - 1/F cremator plant and control room, service halls, reception area, office accommodation, waiting room, toilets
  - 2/F plant room, landscaped podium and water features
  - 3/F plant room

Design-wise, the reprovisioned crematorium will blend in as much as possible with the topography and the surrounding area. The outlook of the building will feature a soft and warm colour scheme. Facilities to be provided in the outdoor area will include a landscaped podium and water features, environmental friendly joss paper burners and parking spaces. To enhance the greening effect, about 60 trees will be planted around the reprovisioned

crematorium.

## **PUBLIC CONSULTATION**

- 9. We consulted the Eastern District Council (EDC) on the proposed project in December 2008. Members generally supported the replacement of the existing crematorium facilities, and were of the view that the reprovisioning project should commence as soon as possible so as to meet the rising cremation demand.
- There were concerns from individual District Council Members 10. and residents regarding the impact on the flow of traffic around the Cape Collinson Crematorium and Columbarium during the grave-sweeping periods. The Traffic Impact Assessment completed in late 2006 concluded that additional cremation sessions provided by the reprovisioned crematorium would not have any impact on the traffic network around Cape Collinson. In fact, the crematorium will temporarily cease operation on the two days of the Ching Ming and Chung Yeung Festivals, and therefore no additional traffic flow will be generated. We will also plan the reprovisioning works carefully to avoid affecting traffic conditions during Ching Ming and Chung Yeung Festivals when the works are ongoing. This notwithstanding, works in and around the crematorium will be carried out soon to widen and enhance the access links to the columbarium. The Highways Department will also provide an additional stopping lane of about 40 metres long at Cape Collinson Road near the junction with Shek O Road to improve the traffic in the area. The improvement measures will help ease the pedestrian and vehicular flows during the Ching Ming and Chung Yeung Festivals.

#### ENVIRONMENTAL IMPACT ASSESSMENT

In accordance with the requirements under the Environmental Impact Assessment Ordinance (Cap. 499), an Environmental Impact Assessment (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 problems such as the nuisance of construction

noise and waste water during the reprovisioning works can be mitigated to an acceptable level through various means. The EIA report was approved by EPD in June 2009 after the statutory public inspection process.

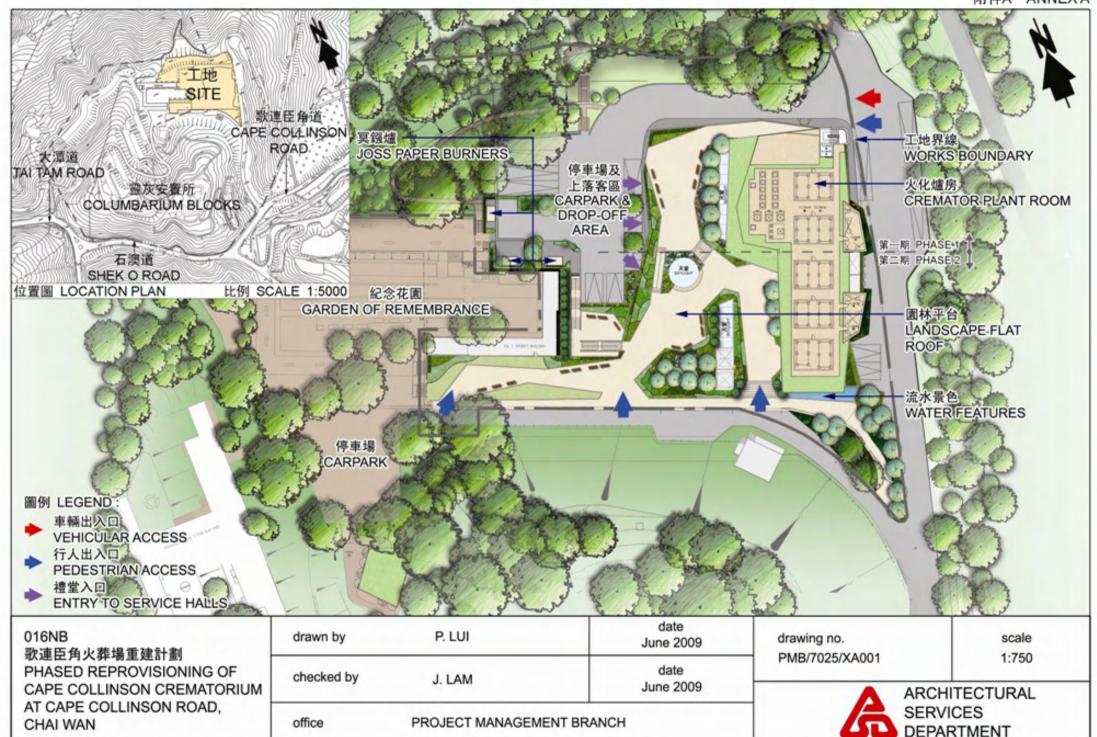
#### IMPLEMENTATION PROGRAMME

- 12. 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 seek funding approval from the Finance Committee before end this year. Construction of the new crematorium is expected to commence in mid-2010. We anticipate that the four new cremators constructed under Phase 1 will commence operation by early 2012, and the remaining six new cremators under Phase 2 will be commissioned by late 2014.
- 13. We will keep EDC informed of the progress of the reprovisioning works during the construction stage as well as the operational situation of the facilities after the new cremators have been put into operation. Meanwhile, during the reprovisioning of the Cape Collinson Crematorium, we will adjust the operation hours of other crematoria as and when necessary to cope with demand.

#### **ADVICE SOUGHT**

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

Food and Health Bureau Food and Environmental Hygiene Department July 2009





從西北方望向火葬場的構思圖 VIEW OF THE CREMATORIUM FROM NORTH-WESTERN DIRECTION (ARTIST'S IMPRESSION) 016NB 歌連臣角火葬場重建計劃 PHASED REPROVISIONING OF CAPE COLLINSON CREMATORIUM AT CAPE COLLINSON ROAD, CHAI WAN

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office PROJECT MANAGEMENT BRANCH

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