NOTE FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

Supplementary information on 11NB – Replacement of cremators at Fu Shan Crematorium, Sha Tin

INTRODUCTION

In considering paper referenced PWSC(2001-02)105 on project **11NB** "Replacement of cremators at Fu Shan Crematorium, Sha Tin" at the Public Works Subcommittee meeting on 27 February 2002, Members requested additional information on –

- (a) the repair and maintenance programme for the new cremators;
- (b) the expected serviceable life of the new cremators, with input from Electrical and Mechanical Services Department (EMSD); and
- (c) how the longer-term development in the Fu Shan area had been taken into account in planning for this project.

THE ADMINISTRATION'S RESPONSE

Repair and maintenance programme

- 2. Based on experience with existing cremators, EMSD has advised that the repair and maintenance programme for the new cremators would include the following
 - (a) fault call attendance and fault rectification to maintain proper operation whenever the cremators are in operation;

- (b) monthly inspection, maintenance and recalibration of the comprehensive instrumentation system, burner and fuel supply system, draught and supply air fan system and emission flue gas precipitating/cleaning system;
- (c) quarterly inspection and necessary repair and replacement to the fire brick works, functional check, test and recalibration for the central computer control system, inspection and servicing of the emission flue gas analysis system;
- (d) annual overhaul of the whole cremator system and thorough inspection, repair and replacement of the fire brick works, and flue gas emission test as per the latest statutory requirements; and
- (e) cremator restoration including replacement of all fire bricks and probes of instrumentation system at five-year or more frequent intervals to meet operational need, emission standards and rate of deterioration of the cremators.

Expected serviceable life

- 3. According to information provided by the manufacturers and Government's design requirements, the expected serviceable life of the new cremators is about 15 to 20 years. Based on past experience, the performance of cremators would deteriorate slowly over time and would need significantly more frequent maintenance after about ten years of continuous operation. It is necessary to consider replacing the cremators that have been in use for over 15 years in general because of the following reasons
 - (a) The mechanical components of the cremator would gradually deteriorate or deform under high temperature operation. Substantial replacement or repair of these components is required to bring the performance of the cremator back to a satisfactory level. These extended maintenance works would mean that the cremators would need to be taken out of service for longer periods each year, which affects the delivery of cremation service to the public. The maintenance works are also significantly more costly as the cremators get older, and such works would eventually not be cost-effective when compared with installing a new replacement cremator.

- (b) As newer models of cremators become available, the manufacturing cycle would be geared up to such models and spare parts for the older cremators would become more limited. Effective maintenance would, as a consequence, be affected by the dwindling supply of spare parts.
- (c) In view of improvements in the control of emissions and cremation technology over time, it would be appropriate to consider replacing obsolete cremators to meet the latest statutory control requirements and technological developments.

Developments in the vicinity

4. In conducting the Environmental Impact Assessment (EIA) study for the project, we have assessed the possible impact of the project on both existing and potential sensitive receivers (including planned residential/school developments) within 500 metres from the project site, having regard to the latest Sha Tin Outline Zoning Plan, relevant area layout plans and planning proposal being considered by the Town Planning Board for Sha Tin District. The study concluded that impacts arising from the project would be controlled to within the established standards. The EIA study report was approved by the Director of Environmental Protection under the EIA Ordinance in January 2002.

Environment and Food Bureau April 2002