Responses to the Preliminary Views on the Proposed Harbour Area Treatment Scheme (HATS) Raised by Conservancy Association on 5 July 2004

Item.1	Level of Treatment We welcome the confirmation by the Government that biological treatment is needed as a sustainable solution to our sewage problem in the metro area. This level of treatment is not only essential to improving water quality in the harbour area and beyond, but also serves a much-needed demonstration effect to our neighboring cities in the Pearl River Delta. Without a concerted regional effort our water quality will always be at risk.
Government's Response	We would like to thank the Conservancy Association's view in supporting the provision of biological treatment for HATS Stage 2. We will take into consideration the Association's view during the consultation exercise.
Item.2	Centralised or decentralised? The International Review Panel (IRP) in 2000 recommended the Government to study in detail four options, out of which three of them are distributed options with an alternative treatment plant site outside of Stonecutters Island. The Government now recommends the only centralised option of treating all sewage at Stonecutters Island. We are requesting more information from the Government regarding the risk analysis of such a centralised option.
Government's Response	A risk assessment for centralized treatment has been conducted under the Environmental and Engineering Feasibility Study (EEFS). For details, please refer to Section 5.6 of the EEFS Final Report, which is available at our website http://www.cleanharbour.gov.hk. As a matter of fact, the IRP also considered centralized versus distributed sewage treatment schemes. Please see Appendix H of the IRP Report, November 2000 which is also available at the website. The IRP considered that the risks associated with centralized treatment could be accommodated through measures such as modular design and provision of standby modules. In this connection, although the Government has a clear preference for Option A because it gives the best performance in overall terms, we are willing to take into account views from all the stakeholders before reaching a final decision.

Item.3	Design Flow Selecting an appropriate design flow for the treatment plants is very important to achieving a cost-effective scheme. In the Consultation Document the Government assumes a very large population growth in the harbour area so that total sewage discharged will increase from the current 1.85 million cubic meters per day to 2.8 million cubic meters per day. This assumption needs further justification. Moreover, the IRP recommends using a lower design peak factor (the ratio of peak design flow to average daily flow) of 1.4 instead of 2. Whether this ratio is appropriate can be confirmed from the actual operating conditions of the Stonecutters Island Plant over the last three years. We are requesting the Government to release such information. If a lower population project and/or a lower peak design factor is deemed appropriate, it will have a very significant impact on the estimates of costs for Stage 2.
Government's Response	Population and flow The HATS Stage 2 facility is planned for long-term population growth projected by the Planning Department specifically for the HATS project. It reflects the "full development" of the HATS catchment areas at an unspecified time after the year 2016. "Full development" refers to a stage where the HATS catchment holds the largest population commensurate with current planning standards and guidelines and planning scenarios. As at Year 2000, the residential population and employment within the HATS catchments were about 4.46 million and 2.55 million respectively. The planned ultimate population scenario for HATS Stage 2 is a residential population of 6.27 million and an employment of 3.85 million.
	The average design flow is estimated according to the said population projections and present guidelines for sewerage planning. It has also been verified against field data.
	More details about the flow and population can be found in Chapter 2, EEFS Final Report (which has already been uploaded to our website www.cleanharbour.gov.hk)
	Peaking factor
	The EEFS consultant conducted a peak flow analysis for the Stonecutters Island Sewage Treatment Works (SCISTW) for a full year from April 2002 to March 2003 covering both the wet and dry seasons. Taking into account the data collected, the design of the treatment process is now based on a peaking factor of 1.5. This was a bit

	different from the analysis done by the IRP in 2000 because the IRP analysis was based on the partial Stage 1 flows since HATS Stage 1 was only fully commissioned in December 2001. Detailed information about the peaking factors can be found in Chapter 2, EEFS Final Report, which can be found on our website <u>www.cleanharbour.gov.hk</u> .
Item.4	Phasing We are doubtful as to whether the current phasing of Stage 2A and Stage 2B is appropriate. Another possibility is to include in Stage 2A a smaller CEPT plant expansion as well as some modules for biological treatment, while Stage 2B should include the full-sized modules for both CEPT and biological treatment. We are requesting further information from the Government to study the viability of this different method of phasing.
Government's Response	Stage 2B of HATS required the construction of a complex biological treatment plant requiring at least 12 hectares of land and substantial investment. On the other hand, implementation of Stage 2A can be done within the existing site of SCISTW, without the need for an additional site for the biological treatment process. From the implementation angle, this is straightforward, and involves very little risk of delay to the completion of works. Moreover, there are still uncertainties with the population projections and the resulting water quality. In view of these uncertainties and constraints and the urgency to provide better treatment for the remaining flows from Hong Kong Island, we propose to implement Stage 2 in phases, such that Stage 2A can be implemented immediately to bring early improvement in the harbour water quality.
	In parallel to the implementation of Stage 2A, we will start the initial planning for Stage 2B such as the environmental impact assessment and site investigation, etc.
	The alternative suggestion of advancing the construction part of the Stage 2B facilities is likely to give rise to a lot of planning, interface, design and operation issues which have yet to be carefully considered. Therefore, going down this route can mean a substantial delay to the planned implementation timetable for Stage 2A.

Item.5	Institutional Changes As expressed in the Joint Statement by eight green groups in 2001 (see attached), a major cause to the problems arising in SSDS is the confused lines of responsibilities and the lack of accountability in government departments. Unfortunately the question of institutional defects has not been tackled in the Consultant Document. The Government must address this issue before embarking on HATS Stage 2 which involves very significant public funds.
Government's Response	There is no question of confused lines of responsibilities. Both EPD and DSD are accountable to ETWB and ETWB will assume the overall responsibility for the implementation of HATS Stage 2.
	The major cause to the delay of HATS Stage 1 was mainly due to the forfeiture of the tunnel contracts, unexpected machinery breakdowns and the unforeseen geological conditions. The experiences gained in HATS Stage I are very valuable for the planning and implementation of HATS Stage 2. We would enhance the planning, design and risk management for tunneling works by conducting more detailed ground investigation, geotechnical assessment and ground settlement control. We would also take necessary measures to improve the contractual arrangement for HATS Stage 2.
Item.6	Private sector participation We are open to the idea of private sector participation provided public interest can be safeguarded in the process. A new institutional mechanism should be set up to evaluate what are the public interest at stake in this process, to ensure that appropriate contractual terms are built in, and to monitor the progress of such scheme. This mechanism should be designed in accordance with the principles of transparency, accountability and public participation.
Government's Response	The participation of private sector in the delivery of the project will be further explored in the course of the project development. The principles highlighted by the Conservancy Association will be taken into due consideration when the detailed arrangements are to be formulated.

Item.7	Public participation in decision-making Since this is a strategic project involving significant public funds and important public interest, the public should be provided with full access to participate in the decision-making. The HATS Monitoring Group, which had been set up to monitor the progress of the scheme since 2001, was actually dissolved prior to the issue of this Consultation Document. Hence it is doubtful as to whether this Consultation Document receives the support of the experts in the Monitoring Group. This makes a mockery of the public participation process over the last three years. It is clear that a more transparent, accountable and broad-based public participation process must be installed to avoid the past mistake and to oversee the future of HATS Stage 2.
Government's Response	The HATS Monitoring Group was formed, in view of the highly technical nature of the project, to monitor the progress and advise the Government on the direction of the trials and studies following the recommendations of the 2000 IRP. As the studies and trials have been substantially completed following the guidance of the Monitoring Group and the Government's recommendations on the way forward for HATS Stage 2 have received the Monitoring Group's endorsement in principle, the most important task at present is to forge a consensus within the community on the way forward for HATS. Once a consensus on the way forward is agreed, the Government will implement the scheme with full steam. We will also maintain a high level of transparency during the implementation period and report progress to the Legislative Council and the Advisory Committee on Environment on a regular basis. We welcome the public to present suggestions on how the transparency of the implementation period.