



THE HONG KONG INSTITUTE OF
SURVEYORS



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Secretary for the Environment, Transport and Works
Environment, Transport and Works Bureau
Government Secretariat
10/F., Citibank Tower
3 Garden Road
Hong Kong

Attn: Mr Raistlin Lau

Dear Mr Lau

Harbour Area Treatment Scheme (HATS) Stage 2

Thank you for the invitation for submission of comments on Harbour Area Treatment Scheme (HATS) Stage 2.

We would submit herewith our comments on the HATS Stage 2 for your kind consideration.

I apologize to our late return and for any inconvenience caused.

Yours sincerely

Tony Tse
President

Encl.

香港測量師學會

Harbour Area Treatment Scheme (Stage 2)

1. Introduction

HKIS generally supports the idea of implementing the Harbour Area Treatment Scheme (HATS) Stage 2 and welcomes the 4-month public consultation period. Yet, we do not see that there is sufficient justification or pre-launch investigation for Government to implement HATS Stage 2 regarding the following areas.

2. Public Private Partnership

HKIS supports in principle the idea of engaging the private sector in the implementation of HATS Stage 2 by adopting a "Design and Build" arrangement for the construction of deep tunnels under Stage 2A and a "Design, Build and Operate" contractual arrangement for the biological treatment plant under Stage 2B. By inviting private-sector proponents, Government will benefit from a pool of innovations and expertise which may not be readily available from Government organizations. It is particularly true when the performance required from the treatment plant instead of the treatment technology for Stage 2B is specified, which could generate more different technologies for the Government to choose from.

Yet, regarding the performance requirement, it is somehow vague that the Government does not yet stipulate clearly in the consultation document what the "performance based specification" is. Though it is understandable that the general performance requirement must be greatly related to harbour cleaning, it would be much more appealing and accountable if some more detailed performance requirements are laid down in the document for public consultation, especially when the proposed biological treatment plant is such a brand and costly benchmark in Hong Kong. Otherwise, it conveys few concrete meaning if the performance requirements are not specific enough.

While the selection criteria of "Performance Based Specification" are set up in a broad sense for the biological treatment plant of HATS Stage 2, few criteria or principles for the selection of contractors for the construction of the deep tunnels under HATS Stage 2A can be traced in the consultation document. Though it is just an expansion of existing treatment plant, in order to make the document literally-sound and more comprehensive, it is better to lay down the selection criteria in a broad sense at least. Otherwise, an image of uncertainty and recklessness would probably be projected for the policy makers.

3. Implementation Timetable

It is generally appreciated that the implementation schedule for HATS Stage 2A is briefly outlined, with the commencement and the completion dates of the projects designated, though such timetable seems to be over-ideal since few awareness of risk management in terms of financial, technical and social resistance which may delay the project can be traced.

However, the most fatal point lies in the high degree of uncertainty over the implementation timetable for the construction of a new biological treatment plant under the second phase of HATS. Actually, the brand new biological plant is generally recognized as the core construction of HATS Stage 2, which can be justified by its relatively higher capital cost and recurrent cost when compared with those of Stage 2A. In terms of such high costs and its great capacity of removing dissolved pollutants from the sewage, it indeed deserves thoughtful planning work from the policy makers.

However, the planning work somehow tends to be superficial and unsophisticated, as the consultation document tells, "During the implementation of HATS Stage 2A, planning work for Stage 2B, such as undertaking environmental impact assessments, site investigations and land reservation, will be carried out in parallel." (P. 12). It seems that there is little research or investigation of any aspects done for Stage 2B before the public consultation period. The general public or even the experts now in fact have few concrete assessments to base their comments on until "during the implementation of HATS Stage 2A" (P. 12). In other words, it is virtually just an incomplete consultation document for Stage 2A, excluding Stage 2B. Thus, it is highly inconceivable that while planning work of Stage 2B is put aside and its feasibility is still open to question, the authority can draw up the capital cost and the yearly recurrent cost alike. From the social point of view, such illogical practice is unlikely to convince and earn great support of society, particularly the groups of polluters who are largely liable for the sewage charges under the "Polluter Pays Principle"; from the political point of view, it shows the Government's weak sense of urgency towards such important matter and may therefore adversely affect its credibility, which finally brings no good to the implementation of the whole project indirectly.

4. Lifespan of HATS Stage 2

Considering the implementation schedule of HATS Stage 2 as a whole, it is suggested to outline the lifespan of the whole project. Though the treatment system will be brought under maintenance, it is understandable that the plants will still be worn out in terms of its technical efficiency and capacity with the increase in the loads of sewage resulting from the anticipated population growth and subsequent economic activities in the future, which would then lead to the need of expansion and enhancement of the original treatment works to maintain standard water quality. This is exactly the same

case for the implementation of HATS Stage 2. It is truly inspiring for the Government to review existing chemically enhanced primary treatment works on Stonecutters Island and upgrade the treatment system with the experience gained so far.

Yet, to make the whole project sound much more well-planned for better operation in the long term, it is highly suggested to brief the lifespan of the treatment system, like specifying the estimated period of time when the whole treatment system can be put into effect to maintain standard water quality, without any expansion works or even another new treatment system constructed in the following decades. By doing so, it can probably earn greater support from the territory since a higher degree of certainty, clarity and transparency from the Government is shown for the project. Besides, while a better planning for HATS Stage 2 is outlined in next decades, it would be much more cost-effective and easier for the Government to divert its attention from HATS to the other major biological sewage treatment works, particularly to those scattered in the New Territories. It is because with the full commissioning of West Rail and the proposed East Rail in the New Territories, an increase in residential intensity and more economic activities like catering services are anticipated, which inevitably puts the existing sewage treatment works under great pressure and thus probably requires Government's review on the treatment services and corresponding remedial measures in the near future.

5. Environmental Impact

While the benefits of purifying the water bodies of Victoria Harbour of HATS Stage 2 are always highlighted, in order to portray a more comprehensive and authentic picture for our society and to raise the degree of transparency of the policy enforcement, it is essential for the authority to address in a liberal manner the impacts of the construction works and subsequent operation on the environment, especially on the marine ecology, though this may provoke social disagreement towards the Scheme. With the identifications of environmental impacts, alleviative actions are expected to take in order to minimize the disturbances against the marine life in the times of deep tunnel construction. Otherwise, it would be quite irresponsible and ridiculous for the Government to hide away unpleasant but important green issues from the general public for the sake of earning greater social support, and then start the construction works with good intentions of environmental betterment but it all ends up in bringing avoidable harmful effects to the environment. While there is still a long period of time for the benefits of HATS Stage 2 to be visible, it is hoped that harmful effects exerted on the environment can be minimized with proper and sophisticated planning and assessment beforehand.

6. Sludge Treatment

Other than the impacts on marine ecology, the ways of handling the dewatered sludge deserves our concern as well. Under the current practice, tones of dewatered sludge are transported to landfill sites

everyday. With the commissioning of HATS Stage 2, it is expected that much more dewatered sludge will be produced. Yet, the existing landfills in Hong Kong are already under great pressure. Researches on the lifespan of existing landfills, exploration of potential landfill sites and even innovative ways of re-using the dewatered sludge have to be conducted. Otherwise, it would probably generate other problem of land and visual pollution and make the sewage treatment system a vain attempt when there is no landfill site to work with.

7 Conclusion

We support the Government's plan against water pollution and welcome the opportunity to comment on the viability of such an impressive project which is believed to have a huge impact on the aesthetic, cultural and economic values of the future of our Victoria Harbour. Although our comments are focused around broad principles, we strongly believe that they are the fundamentals governing the success or otherwise of the Scheme. As the project is still in its consultation phase, we believe that all our comments, if acceptable to Government, can be easily incorporated into the subsequent phases of procurement.

For a simple answer to the questions asked in the consultation,

- We have no strong views on the preferred option A –centralized treatment at Stonecutters Island given the information provided. It is however, always worth considering of building a second one somewhere just in case.
- We have doubts that Stage 2 be implemented in two phases as argued in paragraph 6 and 7 above.
- Protecting the water quality of Victoria Harbour is of our aims in line of most people in Hong Kong and we agree the "Polluter Pays Principle".

HKIS are always at Government's disposal to provide professional advice, as well as to tap local and international talent/expertise on a wide range of subjects, such as risk management, affordability benchmarking, financial appraisal, output specification, tender assessment, due diligence audit, facilities management, life-cycle costing, etc.

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