Friends of the Earth (HK)'s Response to the Harbor Area Treatment Scheme (HATS) Consultation

October 13, 2004

Friends of the Earth (Hong Kong) has been lobbying for government action to tackle Hong Kong's water pollution and campaigning for the clean up of the Victoria Harbor in the past 20 years.

1.1 Although long over-due, we welcome the recent public consultation on the Harbour Area Treatment Scheme (HATS) that outlines the options to collect and treat remaining sewage effluence generated from the Hong Kong Island.

Harness Community Wisdom

1.2 Harnessing community professional knowledge, wisdom and viewpoints is an important process to win full understanding and acceptance of the objective of a significant public spending to ensure good water quality as well as conserving Hong Kong's most important natural asset, the Victoria Harbor.

Put Consultation in Context

2.1 It is important to view the present consultation on the clean up of the Victoria Harbor in context.

2.2 The Colonial Government has failed to formally consult the public. It has gone ahead with Phase I of the Strategic Sewage Disposal Scheme (SSDS) now renamed as the Harbor Area Treatment Scheme (HATS) despite of criticism from academics and environmental groups. "Transporting" sewage was not a sustainable solution to pollution. Disposing our sewage to our neighbor's backyard in the South China Sea was neither ethical nor prudent. The *fait accompli* limits the following phases of decentralized planning, treatment process and technology options.

2.3 As a result, we inherited a smelly "leftover" with partially treated sewage and "tunnel" vision lacking consensus on long term planning with respect to population growth, funding, land provision, regional impacts and responsibility.

2.4 FoE (HK) lobbied the Chief Executive, Mr. C.H. Tung, who pledged in his Policy Address in 1999 for a review of the Strategic Sewage Disposal Strategy (SSDS) later renamed as the HATS. Today, we welcome the present administration, the Hong Kong SAR Government's initiative to conduct public consultation on the way forward and engage the public on the

decision making process to spend an estimated amount of $19 billion dollars to clean up the harbour sewage.

Context of Uncertainties

3.1 It is important to view the present consultation in view of the changing factors including: population growth on both sides of the harbor, the advancement of technology, the cost benefit of a huge public spending and the sustainability of the regional water quality.

3.2 In another words, we need to see a full picture and consider long-term sustainable development of not just for Hong Kong but also for the Pearl River Delta. Saving natural asset such as our Victoria Harbour, coastlines, beaches, protecting mariculture zones and our food chain is not just solely for meeting water quality objectives, it is about our environmental responsibility for the future generation.

Phased Approach

4.1 The reason to advocate a Phased Approach (2a to expand and upgrade existing sewage treatment works at Stonecutters Island to provide centralized chemical treatment for sewage from the whole HATS catchment, and 2b to build a new biological treatment plant, which allow for nutrient removal in the long term) based on uncertainty of population growth, high cost and additional land requirement for 2b is not justified.

4.2 Compare to Hong Kong's transport planning and infrastructure development, expediency in funding and land provision were "jump-started" based on pure town planning projections and economical benefits. Examples include the Cyber Port, Disney Theme Park, Logistics Port, Western Corridor, and Hong Kong-Macau-Zhuhai Bridge Link etc. Why are we not ready to commit resource including funding and land to improve water quality for long term social, environmental benefits?

Investment vs. Expenditure

4.3 Hong Kong's commitment to a holistic sewage treatment process is NOT a public spending; it is an INVESTMENT for quality of life improvement, food chain protection, marine ecology conservation, natural asset preservation as well as tourism value. Go as We Clean Up? Clean up as far as we could afford it? Are we going to repeat the same mistake of the previous administration? Is it responsible to just commit to a half-hearted clean up?

4.4 Friends of the Earth (Hong Kong) urges for a holistic approach and a full commitment.

Address Uncertainties

5.1 To manage the uncertainty of the population increase on the harbor areas, we would like to urge better coordination between different government

departments. Appointed to various government advisory bodies, Friends of the Earth (HK) representatives have noted the inter-bureau-departmental competition for funding, land and public endorsement for their priority projects and programs.

5.2 The Harbour Enhancement Committee, newly set up to oversee and advice on the future planning and development of the Victoria Harbour, has just kick-started parallel public engagement consultations on harbour front alternative planning and land use. This will certainly affect population growth of the HATS catchment.

5.3 It is equally important to assess changes in population growth trends with respect to Hong Kong's immigration policy, population policy, business relocation or repatriation due to the CEPA (Closer Economic Partnership Agreement) trading promotion between Hong Kong and China as well as the tourism management demand from the relaxation of visa requirement for mainland tourists to Hong Kong.

5.4 Friends of the Earth (HK) is not convinced that uncertainty in population growth nor high cost should be justified as reasons for phase by phase commitment of a harbor clean-up.

Centralized vs. Distributed Options

6.1 The consideration of centralized or distributed treatment options were assessed on 5 main criteria including environmental, engineering, social, economic and land resources factors.

6.2 According to the Evaluation of Options based on Environment and Public Health Criteria, it is confined to within Hong Kong boundaries. Cleaning up our harbour goes beyond a local responsibility. It is a regional responsibility. It would be worthwhile to evaluate actual impacts or contribution within the PRD context.

6.3 According to the Evaluation of Options based on Engineering / Technical Criteria, the scoring for Option A, centralized treatment at Stonecutters Island, need clarifications. HATS System Resiliency and Ability to cope with Change do not seem to tally. The need for extensive tunnel system and lower transfer system resiliency means a LARGE bulk of the expenditure goes into tunneling. Leakages and blockages might pose higher economic investment risks. But then the claim of lower construction and operational risk when compared to treatment works in caverns is not convincing. Because treating localized sewage effluence can scale down the length and depth of tunneling, thus leads to lower the long-term energy cost of pumping and transporting sewage through deep tunnels across the harbor to the eventual treatment at Stonecutters Island treatment plant.

Economic Criteria

6.4 According to the Evaluation of Options based on Economics, Option A, centralized sewage treatment at Stonecutters Island, scores the best. Assessing the Total Lifecycle Cost of various options of treatment facilities, the existing Stonecutters Island Treatment Works and expansion would appear most cost effective. It is rather misleading because the Stonecutter Island Sewage Treatment Works' original footprint and impact (including land cost and social costs to nearby district such as Tseun Wan) would not be accounted for in the comparison. Thus the economic cost of building NEW capital works of distributed treatment facilities would appear to be astronomical, unfavorable and unaffordable.

6.5 Cost of overall sludge disposal was not fully reflected in the Economics Criteria. In response to a Friends of the Earth (HK) query, the Government released some estimates. 1200 tons of sludge a day would be generated from Stage 2a compared to 600 tons a day at the present treatment level at the Stonecutters Island Sewage Treatment Works. 2300 tons a day would be generated from 2b, including the biological treatment facilities. Annual sludge disposal is projected at $1.2 billion a year. Without counting the capital cost of building a sludge incinerator which costs around $2.2 billion.

6.6 With the advancement of nano technologies and new efficient treatment processes, is Hong Kong ready to test alternative options without being biased and bound by the Stage 1 fait accompli? In another words, is there any scope and hope of testing new efficient and cost effective options in a new site?

6.7 Cost of the Biological Treatment for Stage 2b was being cited as a big consideration. Again, COST is being presented as an uncertainty for Hong Kong to commit to a holistic and sustainable sewage strategy that extends beyond preliminary chemical enhanced treatment to help remove more organic pollutants, toxic ammonia and nutrients which are the cause for red tides.

Re-interpret the Economics

6.8 Friends of the Earth (HK) urges the Government to re-interpret the Economic Criteria in ranking the treatment options. If based on COST criteria to adopt the minimal commitment for clean up of our precious natural asset, the Victoria Harbour, Hong Kong will need to seriously contemplate whether it has embrace the precautionary principle and a NO Regret Policy. Don't underestimate the COST of remedial actions that is precisely what the present price tag of $20 billion is all about. Inaction or partial response is expensive in the long run.

Contingency Planning

7 Contingency planning to address uncertainties is not presented in detail. Go as we plan? Expand when approaching the limits? Commit when we have the money? We urge the policy makers to provide contingency planning in response to population growth, tunneling and construction risks, water quality objective exceedance, disinfection failure, chemical overdose, excessive sludge and operational costs inflation due to inefficient outdated systems and budget inflation.

Ecological Monitoring

8 There has been a deficiency in ecological monitoring of the Victoria Harbour with respect to the cumulative toxicological impacts on marine life and species habitats. There is a need for more in-depth research and monitoring to establish a more conclusive causal link between the nutrient level to algae bloom and red tides that possibly have been incubated in-situ but transported to sensitive mariculture zones and marine habitats.

Total Water Management

9 Investment in sewage treatment is expensive. Water wastage and excessive consumption are equally costly. Friends of the Earth (HK) urges for more INVESTMENT and funding dedicated to public education and capacity build Hong Kong people to save water thus decrease water consumption and wastage. Demand Side Management should be proactively promoted and implemented. Provide incentive to reduce consumption and encourage water re-use and conservation.

Prepare Hong Kong for the Water Crisis

10 However small the benefit and scale of re-use of treated waste water, we believe the value lies in education and demonstration to show the public that It is in the spirit of sustainable development and crisis management, that Hong Kong need to be prepared for the water shortage crisis that is already hindering China's economic development. Time to learn from the expensive lesson of the Energy Crisis that has caused oil price to climb to a record level and hindering global economic growth. Provide incentives to encourage use of low flush toilets or waterless toilets, low flow showers and ban using precious drinking water for car washing and street washing.

Pearl River Delta Co-operation

11 Sewage treatment and disposal is beyond boundaries, beyond technologies, beyond costs, beyond options, Hong Kong needs to work closely with our neigbours, particularly the Pearl River Delta. There is the need to explore cross-border initiatives to conserve regional water resource and share responsibility to manage sewage effluence properly and sustainably. Learn a lesson from SARS epidemic; there is a need for joint monitoring, proactive information and technology exchange, concerted management, alert

mechanism and innovative financing such as setting up a Pearl River Delta Sewage Trading Fund.

Review of Water Quality Objective

12 Set a regular time frame to review Hong Kong's Water Quality Objective (WQO). The policy promoter has been boasting of a cross-harbour swim when the Stage 2 of the HATS scheme is implemented. It is prudent to build realistic objectives for our harbor water quality. It is equally prudent to demand collective responsibility to reduce consumption and wastage. It is fair and just to demand the users pay for the treatment costs. It is the duty of a responsible government and legislators to ensure that fairshare of responsibility through fair pricing.

Conduct a comprehensive EIA

13 Friends of the Earth (HK) recommends that a comprehensive Environmental Impact Assessment (EIA) be conducted for both stages (2a plus 2b). We would like to emphasize the importance of the EIA being conducted in a regional context, including the Pearl River Delta impact. A regional assessment would provide basis for deciding not only the fate of stage 2b but would also serve as an inventory for engaging our PRD stakeholders in collective management of marine pollution and treatment responsibility.

Conclusion

14 Water is public property. Nobody owns it, but everybody has the right to consume but equally the responsibility for shoulder the social, environmental and economical costs. We need to ensure that our future generation's right to enjoy a clean Victoria Harbour, safe seafood and clean drinking water.

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