



中華人民共和國香港特別行政區  
Hong Kong Special Administrative Region of the People's Republic of China



立法會LEGISLATIVE COUNCIL  
張宇人議員 Hon Tommy Yu-Yan CHEUNG

9 Oct 2014

Mr. Wong Kam Sing, JP  
Secretary for the Environment  
East Wing,  
Central Government Offices,  
2 Tim Mei Avenue,  
Tamar, Hong Kong

Dear Mr Wong,

Organic Waste Treatment Facilities Phase 1

Thanks for your letter dated 6 Oct 2014, attached with the replies to my questions on Organic Waste Treatment Facilities (OWTF) phase 1. However, I wonder whether all necessary measures have been taken to ensure the cost effectiveness of the project. I am afraid that the fees and charges arising from the project will continually increase if the overall design requirements remain unchanged. This is unfair to the catering industry as they will pay for the hefty costs of the project under the 'polluter pays' principle. To make our discussion in focus, I have further questions as follows:

1. Organic waste treatment facilities in other countries are usually housed by steel frame structure, which is usually lower in cost and can be built in shorter time. What is the consideration in this proposed works in architectural design with respect to cost effectiveness?
2. From the break-down of capital cost, the works of OWTF is a self-contained design, with in-house waste water treatment facility (estimated cost \$48 Mn). Are there any cost and operational synergy effects for waste water to be delivered to nearby Siu Ho Wan Sewage



Treatment Works? The design capacity of the nearby Siu Ho Wan waste water treatment works is 180,000m<sup>3</sup>/day and its current utilization is less than 30%. The waste water from OWTF phase 1 would be approximately 200m<sup>3</sup>/day, which is around 0.1% of the capacity of the said waste water treatment works. It is well understood that if waste water is to be discharged to public sewer, the effluent from organic waste treatment process should be treated to a level that comparable to ordinary household and commercial waste water. However, instead of discharge to public sewer, OWTF phase 1 could be connected directly to the waste water treatment works through a dedicated pipeline. Effluent could be then mixed with the other incoming waste water and properly treated by the already built facilities. As such, the waste water treatment equipment in OWTF phase 1 can be down-sized to manage the need of recycled water for process use water only. Shall we save more money by the following two options: (1) discharging the waste water for treatment to nearby Siu Ho Wan Sewage Treatment Works through a dedicated pipeline or (2) diluting the waste water with the treated water from Siu Ho Wan Sewage Treatment Works before discharging it to public sewer?

3. The estimated cost of heat recovery, power generation and surplus electricity export systems is \$99.6M. From previous information, 14 million kWh of surplus electricity can be supplied to the power grid per year. The installed power generation capacity is estimated to be around 2MW and the cost would be exceptionally high. What will be the feed-in tariff of electricity supplied to power grid and the corresponding revenue? Is it possible to make it contribute to off-set part of the cost of the project?
4. The anaerobic digestion residues are handled by composting (\$20.5Mn). Due to the relatively small local agricultural and gardening industries in Hong Kong, the demand for compost is in doubt. The Mainland is also self-sufficient in compost production. Have you assessed the difficulties and the costs for Hong Kong to open up the compost market of the Mainland? Even under the situation of your suggested market demand of



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20,000 tonne per year, the compost arising from treating organic waste of commercial sector alone would be over 30,000 tonne per year. Composting is obviously not an appropriate mean to handle the residue. Instead of investing in composting system, is there any consideration in recycling of the residue by means of sludge incineration to generate energy?

I look forward to receiving your early reply.

Yours sincerely,

Tommy Cheung  
Legislative Council Member

c.c. Mr. Au Wai Kwong, Elvis,  
Assistant Director (Nature Conservation & Infrastructure Planning)  
Environmental Protection Department