

**President**

Colin C.L. Chung

Ms Mandy Poon

14 March 2014

Clerk to Panel on Environmental Affairs

Legislative Council Secretariat

2/F Legislative Council Complex

1 Legislative Council Road

Central

Hong Kong

By mail and e-mail (mpoon@legco.gov.hk)

Dear Ms Poon,

**Secretary**

Leo H.Y. Chan

**Submission of a Paper on the “Environmental Infrastructure Projects”**

**Treasurer**

Glorisun W.Y. Wong

We note that Legco Panel is now discussing landfill extension and incinerator. As a citizen of Hong Kong, we have consulted our members and we would like to submit a paper about our views, suggestions and position for the Legco’s consideration and discussion.

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Hong Kong Association of Energy Engineers (HKAEE) is a not-for-profit organization that aims to identify and support good practices, new technologies and industrial standards; promote research, organise and deliver education and training aimed at maintaining excellence in professional competence and performance in energy engineering and related subjects. We collaborate with our partners, whether they be from the government, sister associations or institutions, academia, community organisations or general members of the public, involved in energy efficiency in buildings not just in building services, electrical and mechanical aspects, but also in all manners of achieving green building design, construction, operation and maintenance especially those connected with our existing buildings where further significant energy efficiency and conservation results could be achieved in Hong Kong.

Yours Sincerely,

Hong Kong Association of Energy Engineers



Ir Colin Chung

President (2012-2014)

Encl.

## ***Response to LegCo Panel on Environmental Affairs invites deputation for landfill extension and incinerator (22.3.14)***

### *Purpose*

This is written in response to the proposal to:

- upgrade 5164DR SENT landfill to Category A which is to be exhausted in 2015 at an estimated costs of \$1,997million (MOD);
- upgrade 5177DR IWWMF Phase 1 upgrade to Category A at an estimated costs of \$18,201million (MOD);
- report progress of 5163DR NENT landfill extension to Category A;
- report progress of 5165DR WENT extension (part upgrade)

### *Position of HKAEE*

On behalf of the Hong Kong Association of Energy Engineers (HKAEE), we are writing in support of the captioned development of environmental Infrastructure Projects, particularly the importance of waste infrastructure to the sustainable development for Hong Kong.

Since last May, the HKSAR has mapped out a comprehensive strategy, with targets, policies and action plans for waste management for the next 10 years. An aggressive target was set to reduce per capital disposal rate of municipal solid waste (MSW) by 40% by 2022. Concurrent actions on the issues below are being pursued:

- Reduction at source, including quantity-based MSW charging;
- Food wise Hong Kong Campaign;
- Clean Recycling;
- Turning waste to energy; and
- More hygienic waste transportation and treatment operations.

While we understand waste management being the pressing issue in Hong Kong, significant challenges and obstacles are also anticipated in the implementation of the Action Blueprint. We believe dumping waste at landfill sites should be the last resort amongst all the waste management measures given the fact that Hong Kong is scarcity of lands.

For the landfill extension, we suggest the HKSAR Government to review the scale of expansion of landfill sites on a regular basis and to set up an independent committee to monitor and audit the progress and effectiveness of the waste management measures.

Listed below are issues we believe that should be attended in order to gain more support in landfill extensions:

- a) To reduce the objection from the local residents and communities for the landfill extension, it is of critical importance that socio-environmental issues due to waste transportation and treatment operations etc. be addressed above and beyond their expectations and should be highlighted more explicitly. How could public benefits be quantified and made a household incentive? For instance, what are the positive impacts that could be resulted from the landfill extension to the local residents? Why should the communities be incentivized in sacrificing their neighborhood for landfills?
- b) Nuisance of road transportation, odor and noise problems, spilt of liquor, air quality degradation are the most significant amongst all impacts. Suggested measures have been provided to tackle all these issues such as totally enclosed Refuse Collection Vehicles. However, it is important that specific funding be set-aside to investigate the options in tackling these problems individually to ensure in-depth consultancy studies could be conducted for more effective recommendations. For instance, the consideration of underground transport of waste to landfills which would potentially avoid the issues of road transport, air and noise quality and roadside odor; the consideration of water transport for wastes instead of road transport; conduct air ventilation assessment studies similar to the one completed by Shek Kwu Chau (SKC) so that mitigation measures such as greening could be effectively applied to minimize the odor and air issues; and the consideration of more on-site and/ or off-site applications instead of flaring the excessive gas on-site.
- c) It is important that specific funding be set-aside to conduct a thorough Sustainability assessment and be explicitly stated in the project brief to include also the sustainability features studies and associated feasibility and cost-benefit assessment.
- d) It is important that specific funding be set-aside so that recommended sustainability measures could be implemented in the project and future compromising can be avoided especially if finance becomes an issue.
- e) It is important that specific funding be set-aside to conduct a socio-economic study and be explicitly stated in future Project brief such that for instance, the financial implications due to the increase or implementation of waste charging scheme on the overall project.
- f) Lastly, as the nearby residents are suffering nuisances, incentives such as electricity tariff rebate, discounted property rental rates, discounted charges for using public facilities and transportation in the districts can be considered to gain the supports from the communities in the vicinity of the landfills.

On the Integrated Waste Management Facility (IWMF):

- a) We support the use of moving grate incineration technology or other proven incineration technologies at an artificial island near Shek Kwu Chau to reduce the volume of waste since the selected site is relatively far from the areas already accumulated with various emissions.
- b) To address the public's concern on the air quality impacts of the proposed IWMF on the surroundings, it is suggested to install an air quality monitoring station (AQMS) at Cheung Chau or nearby sensitive areas, which will post the real time air quality data on the website for public access. This will enhance the confidence of the public or nearby residents on the concern of pollutants arisen from the IWMF and also serve as a kind of performance indicator to the operators.
- c) Apart from those parameters in the Air Quality Objective, the AQMS should also include dioxin and furan. Mitigation measures and actions would be initiated and taken in case of high emissions are detected if the exceedances are proved to come from malfunction of IWMF.
- d) Residual ashes generated from the IWMF would be disposed of in the landfill sites. The technical issues of handling ashes should also be addressed to minimize the impact to the environment and nuisances during the transportation.

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