

**The Legislative Council**  
**Panel on Environmental Affairs -Environmental Infrastructure Projects**  
**NENT/SENT/WENT Landfill Extension**

Dear Chairman and Members of Environmental Affairs Panel

I refer to the Panel on Environmental Affairs Papers (LC Papers No. CB(1)1079/12-13(01) and CB(1)1079/12-13(02) pertaining to the Environmental Infrastructure Projects (5163DR for NENT, 5164DR for SENT and 5165DR for WENT landfill extensions) and wish to give below my comments and views for your consideration.

**General**

1. Being a Hong Kong permanent resident, I deeply share the community's aspiration for quality and sustainable environment which is vital to the health and well-being of the people and plays an important role in maintaining the competitiveness of Hong Kong as an international business and financial centre. Air pollution and refuse problem are undoubtedly the two most pressing local environmental challenges facing Hong Kong.
2. It is pleasing to see that the Environment Bureau has recently published two documents, viz. A Clean Air Plan for Hong Kong (March 2013) and Hong Kong Blueprint for Sustainable Use of Resources 2013-2022 (May 2013), to address Hong Kong's two most environmental pressing issues of air quality and waste management.

**Waste Management**

3. The actions outlined in the Blue Print for Sustainable Use of Resources covering charging schemes for MSW, PRS on plastic shopping bags extension/WEEE/beverage bottles, construction of WEEE treatment plant/STF/ OWTF/ IWTF, extension of landfills and social mobilization are considered nothing significantly new but serve to stress the urgency and seriousness of the refuse problem.
4. I support multi-pronged approach for waste management which should put top priority on waste avoidance, reuse, recover and recycle. As adopted by most developed economies, waste to energy incineration is considered necessary for waste volume reduction (should have been promptly implemented in Hong Kong) whereas landfill extension for waste disposal is in my opinion the last resort.
5. I would not dispute that no matter how hard we work to avoid, reduce, reuse and recycle wastes, there are still inert materials, non-recyclables, construction waste and post-treatment/incineration residues that need to be disposed of. In reality, landfill is the ultimate part of the waste management chain almost everywhere in the world, and Hong Kong is no exception.
6. Hong Kong is an open society with diverse vested interests. Implementation of the aforesaid Blue Print would require significant changes of the mind set and life style of individuals and most likely lead to an increase in costs of living, all of which would inevitably invite extensive and intensive debate. The success of the Blue Print hinges on the willingness of all stakeholders to put aside their own vested interests and support Hong Kong to advance its' mission to a city of quality living.

## Proposed Landfill Extensions

7. It is undeniable that we are facing a critical situation with our three landfills reaching full capacity before the end of the decade (SENT in 2014/15, NENT in 2016/17 and WENT in 2018/19). Giving incineration for waste volume reduction would not be in place before the anticipated year of landfill exhaustion and the other waste management measures would likely take considerable time to produce significant impacts, I concur that extension/expansion of our landfills is reluctantly unavoidable, a practical interim means to tackle Hong Kong's pressing and serious refuse problem.
8. It is pleasing to note that the scope of provisions for the proposed NENT and SENT Landfill Extensions as outlined in Sections 4.1.1.2 and 4.2.1.2 of LC Paper No. CB(1)1079/12-13(01) are comparable with the following international best practices adopted for a well-engineered modern landfill to prevent potential hazards and minimize the impact on the environment.
  - *Composite liners requirements* - overlaying compacted clay soil lining the bottom and sides of the landfill, protect groundwater and the underlying soil from leachate releases.
  - *Leachate collection and removal systems* - sit on top of the composite liner and removes leachate from the landfill for treatment and disposal.
  - *Landfill gas collection and removal systems* – collect potentially harmful landfill gas emissions and convert the gas into energy
  - *Operating practices* - include compacting and covering waste frequently with soil help reduce odor; control litter, insects, and rodents; and protect public health.
  - *Groundwater monitoring requirements* - requires testing groundwater wells to determine whether waste materials have escaped from the landfill.
  - *Wheel washing system* - clean the wheels as the vehicle exits the landfill.
  - *Corrective action provisions* - control and clean up landfill releases and achieve groundwater protection standards.
  - *Closure and post-closure care requirements* - include covering landfills and providing long-term care of closed landfills.

Notwithstanding the absence of similar information given in the LC Paper for the proposed WENT Landfill Extension, it is expected same practices will apply for consistence.

9. The planned actions of (i) not dumping odourous sludge (ii) reduced dumping of food waste and (iii) using cleaner diesel commercial vehicles for refuse transportation for the proposed landfill extensions will certainly help reduce nuisances to and protect the health of the nearby community.
10. It is noted that the additional landfill capacity of 19 million m<sup>3</sup>, 6.5 million m<sup>3</sup> and 81 million m<sup>3</sup> will be provided by the proposed NENT, SENT and WENT landfill extensions respectively. It is also noted that based on the current schedule NENT would be able to commencing waste intake in late 2016, whereas SENT in early 2016 and WENT in 2018/19. It would be helpful to give more details based on which the additional landfill capacities were worked out to cope with the anticipated volume of wastes to be landfilled and the anticipated year of exhaustion of all three landfills upon completion of extensions.

11. In the absence of data and information, it is difficult to comment on the capital costs of the proposed landfill extensions viz. \$7,026.9 million for NENT, \$1,886.4 million for SENT and \$9,000 million for WENT, and hence the important issue of value for money. I have to leave the funding issue to our learned Legislators.
12. In view of the strong objection of the local community to the proposed SENT Landfill extension and its comparatively smallest additional landfill capacity of 6.5 million m<sup>3</sup>, the Administration should seriously study the feasibility of confining the extensions to NENT and SENT landfills and work out the impact on the overall waste management strategy.

Thank you very much for your attention.

Yours faithfully,



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