

**立法會**  
**Legislative Council**

LC Paper No. CB(1) 222/08-09  
(These minutes have been seen  
by the Administration)

Ref : CB1/PL/EA/1

**Panel on Environmental Affairs**

**Minutes of meeting**  
**held on Monday, 27 October 2008, at 2:30 pm**  
**in Conference Room A of the Legislative Council Building**

- Members present** : Hon Audrey EU Yuet-mee, SC, JP (Chairman)  
Hon CHAN Hak-kan (Deputy Chairman)  
Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP  
Hon James TO Kun-sun  
Hon LAU Kong-wah, JP  
Hon Miriam LAU Kin-yee, GBS, JP  
Hon Andrew CHENG Kar-foo  
Hon LEE Wing-tat  
Hon Jeffrey LAM Kin-fung, SBS, JP  
Hon CHEUNG Hok-ming, SBS, JP  
Prof Hon Patrick LAU Sau-shing, SBS, JP  
Hon KAM Nai-wai, MH  
Hon Cyd HO Sau-lan  
Hon CHAN Kin-por, JP  
Dr Hon Priscilla LEUNG Mei-fun
- Member attending** : Hon Ronny TONG Ka-wah, SC
- Members absent** : Hon WONG Yung-kan, SBS, JP  
Hon Albert CHAN Wai-yip
- Public officers attending** : **For item IV**  
  
Dr Kitty POON  
Under Secretary for the Environment  
  
Mr Carlson K S CHAN  
Deputy Director of Environmental Protection (3)

Mr S W PANG  
Principal Environmental Protection Officer (Air Policy)  
Environmental Protection Department

**For item V**

Dr Kitty POON  
Under Secretary for the Environment

Mr Elvis AU  
Assistant Director (Water Policy)  
Environmental Protection Department

Dr H Y YEUNG  
Principal Environmental Protection Officer (Sewerage  
Infrastructure)  
Environmental Protection Department

Mr SHIU Wing-yu  
Assistant Director (Sewage Services)  
Drainage Services Department

Mr CHUI Wing-wah  
Chief Engineer (Harbour Area Treatment Scheme)  
Drainage Services Department

**For item VI**

Dr Kitty POON  
Under Secretary for the Environment

Dr Ellen CHAN  
Assistant Director (Environmental Infrastructure)  
Environmental Protection Department

Mr Vincent TANG  
Assistant Director (Nature Conservation & Infrastructure  
Planning)  
Environmental Protection Department

Mr Lawrence LAU  
Principal Environmental Protection Officer (Waste  
Facilities)  
Environmental Protection Department

**Clerk in attendance** : Miss Becky YU  
Chief Council Secretary (1)1

**Staff in attendance** : Mrs Mary TANG  
Senior Council Secretary (1)2

Miss Mandy POON  
Legislative Assistant (1)4

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Action

**I. Confirmation of minutes**

(LC Paper No. CB(1) 87/08-09 — Minutes of the meeting held on 14 October 2008)

The minutes of the meeting held on 14 October 2008 were confirmed.

**II. Information paper issued since last meeting**

2. Members noted that the following information paper had been issued since last meeting -

LC Paper No. CB(1) 43/08-09(01) — Information paper on "Proposed amendments to the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586)"

**III. Items for discussion at the next meeting**

(LC Paper No. CB(1) 88/08-09(01) — List of follow-up actions  
LC Paper No. CB(1) 88/08-09(02) — List of outstanding items for discussion)

3. Members agreed to discuss the following items at the next regular meeting scheduled for Monday, 24 November 2008, at 2:30pm -

- (a) Implementation details of environmental levy scheme on plastic shopping bags under the proposed Product Eco-responsibility (Plastic Shopping Bags) Regulation;
- (b) Extending the scope of Air Pollution Control (Volatile Organic Compounds) Regulation to control vehicle refinishing paints, marine paints, adhesives and sealants;
- (c) Enhancing the Control of Ozone Depleting Substances; and
- (d) Early replacement of pre-Euro and Euro I diesel commercial vehicles.

In view of the long agenda, the Chairman sought members' views on the need to advance the start time of the meeting to 1:30 pm to allow sufficient time for discussion.

4. Ir Dr Raymond HO expressed concern that if the meeting was advanced to start at 1:30 pm, some members might not be able to attend the first part of discussion due to prior engagements. He would prefer to hold an additional meeting instead. Given the many items to be discussed in the current legislative session, Mr Andrew CHENG opined that consideration could be given to setting up subcommittees to study individual issues, such as air quality, to allow more time for the Panel to discuss other issues, thereby dispensing with the need to hold frequent additional or extended meetings. Mr LEE Wing-tat expressed support for setting up a subcommittee to study issues relating to the improvement of air quality. Other members expressed different views on the proposed subcommittee on improving air quality. While some supported the proposal, some other members pointed out that subcommittees should only be formed to deal with very specific issues rather than general issues, such as air quality. There was also concern about possible duplication of work of the Panel and its subcommittee. The Chairman explained the existing arrangements for setting up subcommittees, inter alia, the need for members to decide on the terms of reference, time-frame, and the proposed work plan of the subcommittee to be set up. She also invited members to put down their proposals in writing for consideration of the Panel.

5. Mr Andrew CHENG subsequently moved the following motion, which was seconded by Professor Patrick LAU -

"本會決議在環境事務委員會下成立改善空氣質素之工作小組。"

(Translation)

"That the Panel on Environmental Affairs resolves to set up under its purview a Subcommittee on Improving Air Quality."

The Chairman put the motion to vote. Of the members present, five members voted for the motion, one voted against it and two abstained. The Chairman declared the motion passed. The Chairman requested the Secretariat to prepare a paper on the setting up of the Subcommittee for consideration by the Panel, and inform the House Committee accordingly.

6. Members agreed to advance the start time of the next regular Panel meeting on 24 November 2008 to 1:30 pm to allow more time for discussion.

#### **IV. Technical Memorandum to Stipulate the Quantities of Emission Allowances for Power Plants**

(LC Paper No. CB(1) 88/08-09(03) — Administration's paper on Technical Memorandum to Stipulate the Quantities of Emission Allowances for Power Plants

LC Paper No. CB(1) 88/08-09(04) — Paper on Technical Memorandum for Allocation of Emission

Allowances in respect of Specified Licence prepared by the Legislative Council Secretariat (Background brief)

7. The Under Secretary for the Environment (USEN) briefed members on the proposed “Technical Memorandum For Allocation Of Emission Allowances In Respect of Specified Licence” (TM) to be made by the Secretary for the Environment under section 26G of the Air Pollution Control Ordinance (Cap. 311) (APCO) to allocate quantities of emission allowances for the three specified pollutants, namely sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and respirable suspended particulates (RSP), to the power plants in Hong Kong for the year 2010 and beyond.

Emission allowances for 2010

8. Mr LEE Wing-tat enquired about the basis upon which the reduction percentage of 54% in respect of SO<sub>2</sub> for the power generation sector was arrived at. Mr CHAN Kin-por also questioned why the reduction percentage of 24% in respect of NO<sub>x</sub> was much lower than that of other pollutants. USEN explained that in 2002, the Government of the Special Administrative Region had reached a consensus with the Guangdong Provincial Government (GPG) to reduce, on a best endeavour basis, the emissions of SO<sub>2</sub>, NO<sub>x</sub>, RSP and volatile organic compounds by 40%, 20%, 55% and 55% respectively by 2010 compared to 1997 levels. In setting the emission allowances for power companies, the Administration had taken into account the practicality of prevailing pollution abatement measures, such as installation of desulphurization facilities and use of cleaner fuels. The Deputy Director of Environmental Protection (3) (DDEP(3)) added that the Administration had engaged the two local power companies since 2003 regarding the extent of emission reduction required on the part of the power generation sector for achieving the 2010 emission reduction targets. Taking into account the measures to be contemplated to reduce emissions from other sources and sectors, the Administration had worked out the reduction percentages of 54% and 24% in respect of SO<sub>2</sub> and NO<sub>x</sub> respectively for the power generation sector. SO<sub>2</sub> emission from power plants had increased by 11% as compared to 1997 levels. This was attributable to increased use of fossil fuels for power generation as a result of instable supply of natural gas. The situation would improve following the commissioning of desulphurization facilities of power companies in 2009, which would reduce SO<sub>2</sub> emission up to 90%. It was expected that the 2010 emission reduction targets could be achieved in time.

9. Mr LEE Wing-tat considered it necessary for the Administration to tighten control over RSP emission, which was the cause of many respiratory diseases in Hong Kong. USEN advised that to improve air quality in the long run, the Chief Executive had pledged in his 2008-2009 Policy Address that Hong Kong would be adopting targets in stages in line with the World Health Organization (WHO)'s guidelines. Meanwhile, a review of the Air Quality Objectives (AQO) was being conducted, and the study was expected to be completed by the end of the year. The question of control of particulate matters smaller than 2.5 microns (PM 2.5) would be included in the review.

10. Mr Jeffrey LAM enquired about the impacts of the financial tsunami on electricity consumption, allocation of emission allowances, and Hong Kong's ability to achieve the 2010 emission reduction targets. USEN said that according to the mid-term review conducted in late 2007 on the progress of the 2010 emission reduction targets, GPG had to carry out some enhancement measures in order to achieve the 2010 emission reduction targets in time. Notwithstanding, further talks with GPG on the impacts of the financial tsunami on the emission reduction plans would be held.

11. As the two local power companies would need to build into their operational plans to provide for the installation of the necessary pollution abatement equipment and use of cleaner fuels to achieve the emission reduction targets, Mr Andrew CHENG was concerned that the costs incurred would be passed on to consumers through increased electricity tariffs. Given that profits of the two companies were guaranteed, he hoped that they would shoulder their corporate responsibility to ensure that the costs incurred in meeting the 2010 emission reduction targets and improving air quality would not be transferred to consumers. USEN said that under the new Scheme of Control Agreement (SCA) signed in 2008, the permitted rate of return on average net fixed assets of the two local power companies had been reduced from 13% to 9.9%. To achieve further improvement in air quality and compliance in stages with WHO guidelines, there might be a need to increase the use of natural gas for power generation from 25% to 50%. However, the change in fuel mix might have cost implications in power generation. Whether and to what extent the public would have to bear the cost for improving air quality would be a subject for further discussion. The Administration would welcome any views on the way forward on improving air quality from the public. Mr CHENG stressed that the Government had a role to play to ensure that power companies would not transfer the costs incurred in achieving the emission reduction targets to the public.

12. Professor Patrick LAU enquired about the cost implications of installing pollution abatement equipment and using cleaner fuels. The Principal Environmental Protection Officer (Air Policy) (PEPO(AP)) said that the two local power companies had installed desulphurization facilities in an attempt to reduce emissions from power generation. To meet the emission reduction targets in 2010 and beyond, use of cleaner fuels would be required. USEN supplemented that it would be difficult to assess the cost implications of using cleaner fuels for power generation as fuel prices fluctuated according to market trend.

13. Mr CHAN Kin-por enquired about the penalties to be imposed if the power companies failed to comply with the emission allowances. PEPO(AP) explained that under APCO, a fine of \$30,000 would be imposed on each tonne of actual emission in excess of the allowed emission. On a second or subsequent conviction, a fine of \$60,000 per tonne of actual emission in excess of the allowed emission and imprisonment for six months would be imposed.

### Arrangements for new comers

14. Mr KAM Nai-wai enquired about the arrangements for new comers of the power generation sector as it appeared that the emission allowances for these new comers were very low. USEN said that to cater for the requirements of potential new comers, the Administration proposed to temporarily allocate to each new comer a small amount of emission allowances up to around 1% of the total emission allowances for the power sector. DDEP(3) added that the proposed emission allowances should be sufficient for the new comer to start a reasonably sized business since all new power generation units in Hong Kong must use gas or cleaner fuel. The quantity of emission allowances required would be small and would have little impact on the overall emission levels of Hong Kong. The new comer would also be included in the subsequent updates and would be allocated with the updated quantity of emission allowances according to its market share. Mr KAM opined that under the existing conditions, it was unlikely for a new power company to start its business in Hong Kong. USEN explained that there were different ways to increase market competition, either from supply side or distribution side. However, the issue needed to be further discussed.

15. Noting that an advance notice of no less than four years would be given to the power companies before any changes to the allocation of emission allowances arising from the regular updating to take effect, Mr KAM Nai-wai was concerned whether such a long lead time was necessary and whether SCA would need to be revised in response to the change, and if so, would these changes be reflected in electricity tariffs. USEN said that the advance notice of four years was not a part of TM but was a requirement under APCO.

16. Professor Patrick LAU enquired if new comers developing renewable energy (RE) could have access to the electricity grid. USEN said that to encourage the development of RE, new comers developing RE would be given a higher permitted rate of return on average net fixed assets. The issue of access to electricity grid by new comers fell outside TM and had yet to be decided.

### Emissions trading

17. Ms Cyd HO questioned the efficacy of emissions trading among power plants in Hong Kong and Guangdong, as experience in European Union countries showed that emissions trading had not only encouraged the rich countries to use more energy rather than conserving it, but also enabled profiteering by these countries. She enquired about the measures which the Administration would take to prevent this from happening in Hong Kong. USEN said that under the proposed cross-boundary emissions trading scheme (ETS), there would not be any net increase in pollutant emissions on a regional basis because the increase or decrease in emissions from power plants under a recognized ETS would be offset by the corresponding decrease or increase in emissions from their partners. Power plants acting as sellers of emission credits would have to reduce their emissions on top of their required emission reduction in order to generate emission credits. DDEP(3) added that power plants

could not simply acquire emission credits from their partners. The eligible power plants would have to implement an additional emission reduction project to further reduce their total emissions below the caps imposed on them for consideration by the joint management panel set up by the environmental protection authorities in Hong Kong and Guangdong.

#### Legislative timetable

18. Mr CHAN Kin-por held the view the Administration should have introduced TM earlier than November 2008, given that consensus with GPG on the 2010 emission reduction targets was reached in 2002. USEN explained that emission caps on the power stations had been imposed since 2005 upon renewal of their respective specified process licences. These emission caps were being progressively tightened to ensure that Hong Kong could meet the 2010 emission reduction targets.

#### **V. 329DS - Upgrading of Pillar Point sewage treatment works**

(LC Paper No. CB(1) 88/08-09(05) — Administration's paper on 329DS - Upgrading of Pillar Point sewage treatment works)

19. USEN briefly introduced the proposal to upgrade “329DS - Upgrading of Pillar Point sewage treatment works” (PPSTW) to Category A at an estimated cost of about \$1,415 million in money-of-the-day prices. The Chief Engineer, Drainage Services Department (CE,DSD) then gave a power-point presentation on the proposed project.

*(Post-meeting note: The power-point presentation materials were circulated to members vide LC Paper No. CB(1) 134/08-09(01) on 28 October 2008.)*

20. Noting that the treatment capacity of PPSTW would be expanded after the proposed upgrading, Professor Patrick LAU asked if the existing twin submarine outfall was still sufficient to handle the increased flow of effluent. CE,DSD explained that as the treatment capacity of PPSTW would only be increased from 215 000 cubic metres (m<sup>3</sup>) to 241 000 m<sup>3</sup> per day, the twin submarine outfall was able to discharge the treated effluent into the north-western waters as designed.

21. Ms Cyd HO enquired about the improvement to the receiving waters as a result of the upgrading of the treatment level at PPSTW from preliminary treatment to chemically enhanced primary treatment (CEPT) with disinfection. The Assistant Director of Environmental Protection (Water Policy) (ADEP(WP)) responded that the quality of the north-western waters was affected by the pollution loads from the Pearl River Delta Region, which were relatively high in nutrient content. With the upgrading of the treatment level at PPSTW, the biochemical oxygen demand of the discharge would be decreased by 55% and suspended solids by 70%. It was expected that the *E Coli* levels of the discharge would also be reduced by 99.9% through disinfection. As the sensitivity test showed that the use of secondary treatment with nitrogen removal would not be able to improve the water quality significantly, the



Environmental Impact Assessment study concluded that the proposed CEPT coupled with disinfection would be an effective treatment method for PPSTW.

22. Ms Cyd HO enquired whether, with the upgrading of treatment at PPSTW, the Tsuen Wan beaches would be clean enough for swimming. ADEP(WP) clarified that the water quality at the closed Tsuen Wan beaches was affected by the effluent from the Harbour Area Treatment Scheme rather than the discharge from PPSTW. The Administration would revert to the Panel on the progress of measures to improve the water quality of the Tsuen Wan beaches in due course.

23. On sludge treatment, Professor Patrick LAU enquired how the sludge from PPSTW was disposed of. CE,DSD said that the sludge would undergo de-watering treatment before disposal of at landfills. Studies were being made on the feasibility of adopting incineration to treat sludge. Professor LAU asked whether the sludge could be recycled into compost. CE,DSD explained that this might not be feasible because sludge in Hong Kong usually contained high concentration of salt as a result of using sea water for flushing.

24. Professor Patrick LAU opined that consideration should be given to using the rooftop of the sedimentation tanks as football fields for the enjoyment of the public. CE,DSD said that the rooftops of the sedimentation tanks would not be large enough for football fields. Besides, the rooftops might need to be opened up to facilitate repair and maintenance works. He nevertheless advised that greening of rooftops for the treatment facilities would be applied as appropriate to improve their aesthetics.

25. In concluding, the Chairman said that members did not object to the submission of the proposal for consideration by PWSC.

**VI. Possible environmental impacts associated with the proposed extension of the South East New Territories Landfill to the Clear Water Bay Country Park**

(LC Paper No. CB(1) 88/08-09(06) — Administration's paper on possible environmental impacts associated with the proposed extension of the South East New Territories Landfill to the Clear Water Bay Country Park

LC Paper No. CB(1) 88/08-09(07) — Information note on "Possible environmental impacts associated with the proposed extension of the South East New Territories Landfill to the Clear Water Bay Country Park")

26. USEN briefed members on the possible environmental impacts associated with the proposed extension of the South East New Territories Landfill (SENT) to the Clear Water Bay Country Park (CWBCP).

27. Mr Ronny TONG said that Tseung Kwan O residents were very annoyed about the proposed extension of SENT Landfill. He pointed out that the daily throughput of 3 600 truckloads delivering 8 000 tonnes of waste at the SENT Landfill from 8:00 am to 11:00 pm had been a constant source of odour nuisance to the neighbouring community. The proposed extension would further aggravate the situation as this would bring about an increase in the throughput and amount of waste being deposited at the SENT Landfill. The Assistant Director of Environmental Protection (Environmental Infrastructure) (ADEP(EI)) said that following the implementation of the Construction Waste Disposal Charging Scheme, the amount of waste deposited at landfills had decreased significantly. For the SENT Landfill, the daily throughput as at 2007 was about 1 500 truckloads delivering about 5 300 tonnes of waste for disposal. Hence, the proposed extension of the SENT Landfill would not bring about much increase in the amount of waste to be disposed of.

28. Given the many complaints about odour nuisance from Tseung Kwan O residents, Mr CHAN Hak-kan was concerned that the odour problem would worsen as a result of the proposed extension of SENT Landfill. Hence, efforts should be made to resolve the existing odour problem before deciding to extend the SENT Landfill. He also enquired about the number of odour complaints received by the Administration, and the number of cases which had been resolved. USEN said that during the Environmental Impact Assessment (EIA) stage of the SENT Landfill Extension project, the Environmental Protection Department (EPD) had maintained close liaison with Sai Kung District Council (SKDC) members, community organizations and rural committee/village representatives, and incorporated their suggestions into the scope of the assessment. A dedicated working group had been set up under SKDC to follow up on the potential odour issues arising from the SENT Landfill. So far, the Administration had received about 800 complaints on the odour nuisance. Noting that the predicted odour concentrations of a small area zoned for industrial development in Tseung Kwan O Area 137 would exceed the required odour criterion of 5 odour units over 5-second intervals, Mr CHAN enquired about the basis upon which the criterion was arrived at, and the mitigating measures to be adopted to address the problem. ADEP(EI) said that in August 2007, a group of students from tertiary institutes conducted a round-the-clock odour survey in Tseung Kwan O town areas for 14 days. The results revealed that odour was not detected during 99.8% of the time.

29. Mr Andrew CHENG said that Tseung Kwan O residents had been very tolerant of the odour problem, which was particularly hard to bear during the wet rainy season. While acknowledging the need for landfills, he found it difficult to accept the extension of SENT Landfill which would encroach into CWBCP. He considered it necessary for the Administration to work out a solution to resolve the waste management problem and the odour nuisance at the same time. USEN said that waste reduction was crucial to resolve the waste problem. To this end, the Administration had introduced the Product Eco-responsibility Bill to encourage reduction and recycling of waste. It was expected that with the commissioning of the Integrated Waste Management Facility in mid 2010s, the volume of waste to be disposed of at landfills would substantially reduce. In the meantime, there was a

need to extend the three strategic landfills, which would be filled up progressively within the next decade, to provide the necessary landfill capacity to serve as the final repositories for non-recyclable waste and residual waste after treatment. She added that EPD was well aware of the concern on the odour problem, and had taken measures to mitigate the nuisance as far as possible. Mr CHENG urged the Administration to endeavour to resolve the problem in collaboration with SKDC.

30. Dr Priscilla LEUNG said that of the complaints she received from residents about the proposed extension of SENT Landfill, some requested for a judicial review of the extension on ground of inadequate public consultation on the project. She enquired whether the necessary procedures had been followed. USEN said that the Administration was committed to protecting the Country Parks and their ecology. The proposed extension would only encroach five hectares of CWBCP, and no adverse residual ecological impact would be envisaged. Proper consultation had been held with the Country and Marine Parks Board. ADEP(EI) said that EPD had adopted a "Continuous Public Involvement" approach in public consultation during the EIA process, and had incorporated the views put forward by SKDC and community organizations. Suitable mitigating measures were recommended for the extension scheme, and the implementation of some measures had also been advanced at the existing SENT Landfill to address their concerns.

Admin

31. Mr KAM Nai-wai said that he also received complaints about the proposed extension project. It appeared that the proposal did not have the support of SKDC. As EPD was not able to resolve the existing odour and other nuisance problems associated with the delivery of waste, he could not accept that the proposed extension of SENT Landfill. At members' request, the Administration agreed to provide more information on the consultation with SKDC.

32. Instead of the SENT Landfill, Mr Andrew CHENG asked whether consideration could be given to extending the North East New Territories (NENT) Landfill and the West New Territories (WENT) Landfill. ADEP(EI) said that there were proposed extension schemes for these two landfills as well. The EIA for the NENT Landfill was completed and that for the WENT Landfill was in progress. However, there were space constraints in extending the NENT Landfill because it was located within a valley. While the WENT Landfill extension scheme was the largest among the three landfill extensions, diversion of all waste to the other two landfills or their extensions was not advisable as this would mean that most of the waste would have to travel very long distance for disposal.

## **VII. Any other business**

33. There being no other business, the meeting ended at 4:30 pm.