

**立法會**  
**Legislative Council**

LC Paper No. CB(1) 2196/08-09  
(These minutes have been seen  
by the Administration)

Ref : CB1/PL/EA/1

**Panel on Environmental Affairs**

**Minutes of meeting**  
**held on Monday, 25 May 2009, at 2:30 pm**  
**in Conference Room A of the Legislative Council Building**

- Members present** : 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 WONG Yung-kan, SBS, JP  
Hon LAU Kong-wah, JP  
Hon Miriam LAU Kin-yee, GBS, JP  
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
- Members absent** : Hon Audrey EU Yuet-mee, SC, JP (Chairman)  
Hon Andrew CHENG Kar-foo  
Hon Albert CHAN Wai-yip  
Dr Hon Priscilla LEUNG Mei-fun
- Public officers attending** : **For item IV**
- Mr Elvis AU  
Assistant Director (Water Policy)  
Environmental Protection Department
- Dr YEUNG Hung-yiu  
Principal Environmental Protection Officer (Sewerage  
Infrastructure)  
Environmental Protection Department

Mr TSUI Wai  
Assistant Director/Projects & Development  
Drainage Services Department

Mr IP Wing-cheung  
Chief Engineer/Project Management  
Drainage Services Department

**For item V**

Dr Kitty POON  
Under Secretary for the Environment

Mr Carlson K S CHAN  
Deputy Director of Environmental Protection (3)  
Environmental Protection Department

Mr W C MOK  
Acting Assistant Director (Air Policy)  
Environmental Protection Department

Mr Edmond HO  
Principal Environmental Protection Officer (Mobile  
Source Control)  
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

In the absence of Chairman who was not able to attend the meeting, Mr CHAN Hak-kan, Deputy Chairman, took over the chair.

- I. Confirmation of minutes**  
(LC Paper No. CB(1) 1627/08-09 — Minutes of the meeting held on 30 March 2009)
2. The minutes of the meeting held on 30 March 2009 were confirmed.

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

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

LC Paper No. CB(1) 1681/08-09(01) — The summary of the Sewage Services Accounts for 2007-2008 and the projection for 2008-2009

**III. Items for discussion at the next meeting and matters arising**

(LC Paper No. CB(1) 1628/08-09(01) — List of follow-up actions

LC Paper No. CB(1) 1628/08-09(02) — List of outstanding items for discussion)

4. Members agreed to discuss the following items at the next regular meeting scheduled for Monday, 22 June 2009, at 2:30 pm -

(a) Odour management in sewage treatment works of Hong Kong; and

(b) Promoting the use of electric vehicles.

**IV. 346DS - Upgrading of Tuen Mun sewerage, phase 1**

(LC Paper No. CB(1) 1628/08-09(03) — Administration's paper on 346DS - Upgrading of Tuen Mun sewerage, phase 1)

5. The Assistant Director of Drainage Services/Projects & Development (ADDS/P&D) gave a power-point presentation on the Administration's proposal to construct trunk sewers in western Tuen Mun, provide village sewerage for unsewered villages in Tuen Mun, and to upgrade part of 346DS to Category A in mid 2009 at an estimated cost of about \$1,340 million in money-of-the-day prices.

6. Mr CHAN Kin-bor opined that the construction of sewerage for unsewered villages/areas in Tuen Mun should have started years ago given the repeated requests from Tuen Mun District Council to improve the aquatic environment with high level of *E Coli*. The Assistant Director of Environmental Protection (Water Policy) (ADEP(WP)) acknowledged that the pollution of Tuen Mun River had been a subject of concern to residents and efforts had been made to reduce the *E Coli* level. The Environmental Protection Department (EPD) had completed the "Review of Tuen Mun and Tsing Yi Sewerage Master Plans" in 2003, which was meant to assess whether the existing sewerage in Tuen Mun catchment had the capacity to cater for the planned developments and forecast population change. Subsequently, the Drainage Services Department (DSD) had employed consultants in January 2007 to carry out investigation, design and construction supervision of the sewerage works recommended in the Review. Efforts would be made to expedite the sewerage works to tie in with the population growth and future developments in the areas.

7. Mr CHEUNG Hok-ming said that he would support in principle the provision of sewerage in unsewered villages. However, he was concerned about the extent of land needed to be resumed for the construction of village sewerage, and the consultation process with affected landowners. In this regard, EPD should maintain close liaison with the Lands Department (Lands D) in the land resumption process. Given that a number of villages in Tuen Mun would still remain unsewered, he enquired about the time frame for the connection of the sewerage network to these villages. The Chief Engineer/Project Management (CE/PM) advised that there were four planned projects to provide sewerage for unsewered villages in Tuen Mun, including 346DS. Upon completion of these sewerage projects by about 2017-2018, it was expected that only a few villages in Tuen Mun would be left unsewered, most of them were remotely located and sparsely populated. As regards land resumption, CE/PM said that while this was not required for Tsing Shan Tsuen and Tseng Tau Sheung Tsuen under the present proposal, it was anticipated that more than 1 000 land lots would need to be resumed for the four village sewerage projects. DSD and EPD would liaise with Heung Yee Kuk and Lands D in the land resumption process which would take some time to complete.

8. Ms Miriam LAU noted that the full scope of 346DS comprised construction of 8.2 kilometres (km) of trunk sewers, 52 km of village sewers, and the associated pumping stations, while the part of 346DS to be upgraded under the present proposal only comprised 7 km of trunk sewers, 7 km of village sewers, and a new sewage pumping station. She enquired whether the remaining sewerage works under 346DS were included in the other three sewerage projects in Tuen Mun referred to in the preceding paragraph. CE/PM said that the full scope of 346DS and the part of 346DS to be upgraded under the present proposal were illustrated at enclosures 1 and 2 to the Administration's paper (LC Paper CB(1) 1628/08-09(03)). He also undertook to include in the submission to the Public Works Subcommittee (PWSC) the programme and costs of the remaining sewerage works under 346DS as well as a plan delineating the scopes of the part to be upgraded and of the remaining part of 346DS.

*(Post-meeting note: The required information was circulated to members vide LC Paper No. CB(1) 1797/08-09 on 3 June 2009.)*

9. Noting that the part of 346DS to be upgraded would commence construction in end 2009 for completion in 2014, Mr Jeffrey LAM enquired if it was possible to expedite the works with a view to creating more employment opportunities for the construction industry. ADDS/P&D said that there were technical difficulties in expediting the works, particularly in respect of the construction of the new pumping station at the junction of Wong Chu Road and Tsing Wun Road where a large number of trees and a major electrical cable had to be relocated and deep excavation works had to be performed. Trenchless method would also need to be employed for the construction of the trunk sewers in western Tuen Mun, which would be laid under roads with heavy traffic. This would require extensive works and a long construction time. Notwithstanding, the Administration would endeavour to expedite the works as far as practicable. At members' request, ADDS/P&D agreed to look into the feasibility of expediting the proposed works and include the outcome in the submission to PWSC.

10. On the trenchless method, Mr CHEUNG Hok-ming enquired about the exit locations for and the amount of excavated soil lest the excavation works would have adverse impacts on the neighbouring community. He also pointed out the need to ensure that the trunk sewers should be of a sufficient width and depth for the collection of all sewage within the sewerage network. CE/PM explained that the trenchless method would involve digging excavation pits every 100 to 200 metres (m) along the path of the trunk sewers. The excavated material would be transported for storage at the public fill bank in Tuen Mun for future use. ADDSP&D added that the tunneling works for the trunk sewers would be quite extensive, with some of the sections being laid at 16 metres below ground level. Therefore, the trunk sewers would be deep enough to collect all the sewage from within the sewerage network.

11. Ms Miriam LAU enquired whether the trunk sewers would need to be further extended in line with the extension of the village sewers, and whether the Pillar Point Sewage Treatment Works (PPSTW) was able to cater for all the planned developments. Expressing similar views, Prof Patrick LAU asked if there was a need to expand PPSTW to treat the anticipated increase in sewage following the completion of the trunk sewers. CE/PM said that the trunk sewers in western Tuen Mun and the two associated sewage pumping stations would convey sewage to PPSTW for treatment. ADEP(WP) added that proposal to increase the daily treatment capacity of PPSTW from 215 000 m<sup>3</sup> to 241 000 m<sup>3</sup> had been submitted for consideration by the Panel in October 2008. Apart from the design capacity, the level of sewage treatment at PPSTW had also been upgraded from preliminary treatment to chemically enhanced primary treatment (CEPT) with disinfection. DSD was working on the tender of the project. At members' request, the Administration undertook to provide more information on the sewerage connections in the submission to PWSC.

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12. Mr WONG Yung-kan questioned if the proposed expansion of PPSTW would be adequate. He also enquired about the number of residents who would benefit from the sewerage projects, and whether the surrounding beaches would be clean enough for swimming with the upgrading of treatment at PPSTW. CE/PM said that the construction of about 52 km of village sewers under the full scope of 346DS would provide the needed sewerage connections to about 26 000 village residents. ADEP(WP) added that after upgrading, PPSTW would have sufficient capacity to cater for the planned developments and forecast population change in Tuen Mun. It was expected that the aquatic environment would be significantly improved following the upgrading of sewage treatment level from preliminary treatment to CEPT with disinfection. By way of illustration, the *E Coli* levels of the discharge would be reduced by 99.9% through disinfection. The water quality of beaches would be further improved following the commissioning of the Harbour Area Treatment Scheme Stage 2A. The Administration would closely monitor the water quality of the closed Tsuen Wan beaches, and consider reopening beaches where situation warranted as in the case of Castle Peak beach in Tuen Mun.

13. Mr KAM Nai-wai enquired whether parameters, such as the level of *E Coli* in surrounding waters, would be used to assess the effectiveness of sewage treatment methods. He was also concerned about the odour nuisance associated with the sewage pumping station and its impact on the neighbouring community as in the case

of the Chai Wan sewage treatment works. ADDS/P&D said that sewage pumping station at the junction of Wong Chu Road and Tsing Wun Road would not cause much odour nuisance as most of the sewers would be located underground. The pumping station would be fully enclosed and where necessary, activated carbon would be used as deodorant. Regarding water quality, ADEP(WP) said that the upper stream of the Tuen Mun River was more polluted because of the discharge from unsewered villages, which accounted for 80% of the pollution load. With the provision of sewerage to most of the unsewered villages upon completion of the four sewerage projects in Tuen Mun, the water quality was expected to be significantly improved.

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

**V. Introducing regulatory control for motor vehicle biodiesel**

- (LC Paper No. CB(1) 1628/08-09(04) — Administration's paper on introducing regulatory control for motor vehicle biodiesel
- LC Paper No. CB(1) 1628/08-09(05) — Paper on promoting the use of biodiesel prepared by the Legislative Council Secretariat (background brief))

15. The Under Secretary for the Environment (USEN) briefed members on the Administration's proposal to introduce regulatory control on motor vehicle biodiesel by highlighting the salient points in the information paper.

Promotion of biodiesel

16. Mr WONG Yung-kan said that the Democratic Alliance for Betterment and Progress of Hong Kong had been advocating the use of biodiesel for a few years. While the use of biodiesel was not uncommon in overseas countries, not much progress had been made in promoting the use of biodiesel in Hong Kong, judging from the fact that there was only one supplier of biodiesel in Hong Kong. To strengthen vehicle owners' confidence in the fuel and to create a biodiesel market in Hong Kong, there was a need for the Government fleet to switch to the use of biodiesel. USEN said that with the availability of vehicle biodiesel in the market, the Government would take the lead in the use of fuel, taking into account the compatibility of the vehicles. It was hoped that with the introduction of the proposed regulatory control on the use of vehicle biodiesel, there would be more suppliers and manufacturers in Hong Kong. Meanwhile, more scientific studies on the use of vehicle biodiesel would be required.

17. Mr WONG Yung-kan opined that apart from providing assistance to facilitate the supply and manufacture of vehicle biodiesel in Hong Kong, consideration should also be given to offering financial incentives to vehicle owners to encourage the switch. A comprehensive plan should be worked out for the promotion of vehicle biodiesel, including the provision of financial subsidies for the retrofitting of vehicles to facilitate the switch. USEN said that the wider use of biodiesel to replace fossil diesel was

conducive to reducing greenhouse gas emissions, since the more environment friendly biodiesel was a form of renewable energy generated from waste oil. While the potentials of Euro V and biodiesel in improving roadside air quality were much the same, it was worth noting that biodiesel had a higher emission level of nitrogen oxides (NO<sub>x</sub>) than Euro V diesel. The Administration would take into account the environmental performance of biodiesel when deciding on the need for financial incentives in promoting the use of biodiesel. The Acting Assistant Director Environmental Protection (Air Policy) (Atg ADEP(AP)) added that the previous decision to introduce subsidy schemes to encourage the switch to liquefied petroleum gas (LPG) vehicles was based on the proven performance of these vehicles in improving roadside air quality given their low emissions of respirable suspended particulates (RSP) and NO<sub>x</sub>. However, the same did not apply to vehicles using biodiesel because they had slightly higher NO<sub>x</sub> emissions. Hence, it had not been contemplated that subsidy schemes would be introduced to encourage the switch. Mr WONG said that he might have to reconsider his support for the promotion of biodiesel on account of its high NO<sub>x</sub> emissions.

18. Prof Patrick LAU noted that Government was not very keen in promoting biodiesel because there were pros and cons in the switch to biodiesel. He enquired about the number of vehicles which would require retrofitting to accommodate the use of biodiesel, and the environmental gains to be derived from the switch. Atg ADEP(AP) said that vehicles would not require retrofitting as long as the biodiesel content of the vehicle diesel to be used was not more than 5%. Only in the case where the owners wished to use a motor vehicle diesel with a much higher percentage of biodiesel might retrofitting be required. The retrofitting costs would be minimal as compared to the switch to LPG. Given that vehicles running on biodiesel would produce less RSP but slightly more NO<sub>x</sub> as compared to those running on Euro V diesel, the Deputy Director of Environmental Protection (3) (DDEP(3)) said that there were advantages and disadvantages in the use of biodiesel from the air pollution control perspective. Nonetheless, taking account of biodiesel's benefits on greenhouse gas emissions, on balance the Administration considered it worthwhile to promote its use. However, it would prefer adopting a relatively cautious approach in doing so. While the Administration would continue to adopt a duty-free policy on biodiesel, it had no plan to offer subsidies to encourage drivers to switch to biodiesel.

#### Pricing of biodiesel

19. Mr CHAN Kin-bor enquired about the supply and price of biodiesel when compared with other vehicle diesels. He also enquired about the Government's policy on biodiesel. USEN said that at present, there was only one local supplier of biodiesel who manufactured biodiesel from used cooking oil. There would be other biodiesel manufacturing operations to be set up at the EcoPark and the Tseung Kwan O Industrial Park soon. While the exact selling price of biodiesel was not available at the present stage, it was anticipated that the price of biodiesel would be higher than that of conventional vehicle diesel but comparable with that of Euro V diesel because biodiesel was duty-free. It was hoped that with more suppliers in the market, the price of biodiesel would become more competitive.

20. Ms Cyd HO said that the Administration's discussion paper lacked details on the price difference between conventional vehicle fuels and biodiesel, the duty to be exempted in respect of biodiesel, the availability of filling stations for biodiesel etc. She held the view that the selling price of biodiesel should be attractive enough to incentivize the switch. She also pointed out the need to avoid monopolization on the supply of biodiesel as at present there was only one supplier of biodiesel in Hong Kong. USEN reiterated that the Administration had adopted a duty-free policy on biodiesel. Atg ADEP(AP) said that the prices of Euro V diesel and duty-free biodiesel were competitive. Ms HO was concerned that the Administration would withdraw the concessions after the switch/retrofitting was completed as in the case of LPG.

21. Given the increasing vehicular traffic between Hong Kong and the Mainland, Ms Cyd HO enquired whether consideration could be given to standardizing the emission performance of vehicles and fuels on both sides. USEN said that the Mainland authorities had set standards for biodiesel, but the percentage of sulphur allowed in motor vehicle diesel was not the same as that of Hong Kong. Ms HO further enquired if additional storage tanks were required in existing diesel filling stations to accommodate the sale of biodiesel. USEN said that while fuel companies were willing to increase their supply of biodiesel, it would be up to them to decide whether filling stations should be modified to accommodate the sale of biodiesel, taking into account the market demand.

#### Regulatory control on biodiesel

22. Prof Patrick LAU enquired about the legislative amendments required to implement the control on biodiesel. DDEP(3) said that should biodiesel be introduced for wider use by vehicles,, it was expected that biodiesel would be imported rather than solely relying on supply from local manufacturers. As biodiesel was already being sold in Hong Kong, there was a need to introduce suitable control on the content and quality of biodiesel. The regulatory control as proposed aimed at mandating the specifications of biodiesel in line with international standards, and introducing labeling requirements to strengthen vehicle owners' confidence in the fuel. USEN added that the Administration proposed to amend the Air Pollution Control (Motor Vehicle Fuel) Regulation (Cap. 311) to enforce the specifications and the labeling requirements. The policy on biodiesel would be worked out based on the supply and demand as not all vehicles were compatible with biodiesel. There was a need to gauge market response to the proposed regulatory control before deciding on the way forward.

#### **VI. Any other business**

23. There being no other business, the meeting ended at 4:05 pm.