

1. The meeting was resumed at 11:00 a.m. on 9.12.2011.
2. The following Members and the Secretary were present in the morning session:

Mr. Thomas Chow Chairman

Mr. K.Y. Leung

Mr. B.W. Chan

Mr. Rock C.N. Chen

Mr. Y.K. Cheng

Professor Eddie C.M. Hui

Dr. C.P. Lau

Dr. James C.W. Lau

Mr. Roger K.H. Luk

Mr. Timothy K.W. Ma

Miss Anita W.T. Ma

Professor S.C. Wong

Dr. W.K. Yau

Assistant Director (2), Home Affairs Department

Mr. Eric Hui

Principal Assistant Secretary (Transport)

Transport and Housing Bureau

Mr. Fletch Chan

Director of Planning

Mr. Jimmy Leung

Agenda Item 1

[Open Meeting (Presentation and Question Session only)]

Consideration of Representations and Comments to the
Draft Tseung Kwan O Outline Zoning Plan No. S/TKO/18
Group 2: R1(part) to R2467, R2468 (part) to R2479,
C1(part) to C66, C67(part) to C163, C164(part) to C166 and C167(part) to C205
(TPB Paper No. 8939)

[The meeting was conducted in Cantonese.]

3. Mr. Fletch Chan declared interest in this item as the Mass Transit Railway Company Limited (MTRCL) was a representer to the subject OZP. Mr. Chan left the meeting at this point.

4. The Chairman said that Members agreed at the last session of the meeting on 7.12.2011 that the hearing would be resumed at 11:00 a.m. on 9.12.2011 for the question and answer session (Q&A session). The resumption of the meeting had also been announced in the Town Planning Board's website. Since Members had already waited for 15 minutes, Members agreed to proceed with the meeting in the absence of the representers and commenters.

5. The following representatives of the Planning Department (PlanD), Environmental Protection Department (EPD), Transport Department (TD) and Consultants were invited to the meeting at this point:

Mr. Ivan M.K. Chung - District Planning Officer/Sai Kung and Islands (DPO/SKIs), PlanD

Mr. Wilfred C.H. Cheng - Senior Town Planner/Tseung Kwan O, PlanD

Mr. Stephen K.S. Lee - Town Planner/Tseung Kwan O, PlanD

Dr. Ellen Y.L. Chan - Assistant Director (Environmental Infrastructure) (AD(EI)), EPD

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| Mr. Lawrence M.C. Lau | - Principal Environmental Protection Officer
(Waste Facilities) (PEPO(WF)), EPD |
| Mr. Dave T.Y. Ho | - Principal Environmental Protection Officer
(Air Science) (PEPO(AS)), EPD |
| Mr. Tommy K.L. Lai | - Senior Environmental Protection Officer
(Waste Facilities) (SEPO(WF)), EPD |
| Ms. Heidi M.C. Lam | - Environmental Protection officer (Waste Facilities) (EPO(WF)), EPD |
| Mr. Wallace Y.M. Yiu | - Environmental Protection officer (Waste Facilities) (EPO(WF)), EPD |
| Mr. Ma Kwai Loeng | - Senior Engineer/Housing & Planning/New Territories East (SE/H&P/NTE), TD |
| Mr. Frank C.H. Wan | - Partner, Environmental Resources Management (ERM) |
| Mr. Terence C.W. Fong | - Principal Consultant Landscape & Ecology, ERM |

6. The Chairman extended a welcome and invited questions from Members.
7. The Secretary said that the Vice-chairman had tendered an apology for not being able to attend the meeting today and asked the Secretary to ask questions on his behalf based on the questions he had written down (tabled at the meeting for Members' reference). The Secretary said that the Vice-chairman would like to express his appreciation to the representers and commenters, who had in the past few days listened to the presentations of all persons with patience and explained in detail the existing or potential problems faced by the area so that Members of the Board were able to fully

understand the case. He would like to extend his warm regards to the representers and commenters as the lengthy hearing had affected their daily schedule. The Vice-chairman also considered that the study conducted by a Form Six student and submitted by some representers, which included in-depth research, critical analysis and concrete proposals on the various ways of solid waste treatment, certainly deserved commendation. The Secretary then read out the questions made by the Vice-chairman:

- (a) data should be provided to explain how gases which would be generated from the landfill, including hydrogen sulphide, vinyl chloride, benzene, toluene and ethyl benzene, would affect the human health;
- (b) there should be explanation on how the toxic materials would be separated from the construction waste and treated; how this process would be controlled and enforced; and how the situation of Wan Po Road would be monitored;
- (c) the number of vehicles that would enter the existing South East New Territories Landfill (SENTLF) and its extension (SENTLFx) should be clarified;
- (d) it was noted that the restoration of a landfill would take as long as 30 years. There should be explanation on the steps and procedures of the restoration work;
- (e) the overriding need and urgency of extending the SENTLF should be explained;
- (f) whether other alternatives to dispose solid waste had been examined and why the landfill approach had been put forward as the only option;
- (g) should landfill be identified as the only feasible option to dispose solid waste, why only Tseung Kwan O (TKO) had been chosen for accommodating the landfill extension; and

- (h) the measures that would be taken to mitigate against the adverse impacts of the landfill extension.

8. In response to a Member's question on the planning of LOHAS Park, Mr. Ivan M.K. Chung, DPO/SKIs, made the following main points:

- (a) the rezoning of the industrial sites in TKO Area 86 to the north of the SENTLF and the proposed SENTLFX for residential development in 1998 was based on relevant planning and environmental assessments conducted for the area. The "TKO Area 86 Planning Study" on the future land uses and development parameters for Area 86 was completed in end 1997 and was agreed by the Government. The study concluded that Area 86, where LOHAS Park was presently located, was suitable for residential development. Although the study identified that there were a number of constraints in the vicinity of Area 86, including the landfill, they were not considered to be technically insurmountable. The study noted that the landfill had been designed and engineered to avoid any adverse impact on the general public. The study and its proposal for residential development in TKO Area 86 were considered acceptable by the relevant departments;
- (b) to ensure that the proposed residential development in TKO Area 86 would not be subject to undue adverse environmental impacts, it was zoned "Comprehensive Development Area" ("CDA") on the TKO OZP, under which zoning planning permission from the Board would be required for any residential development. Applicant had to submit a Master Layout Plan (MLP) for the proposed development and provide justifications and technical assessments (including environmental aspects) to substantiate the application. A planning brief had also been prepared to guide development in respect of the development parameters, and provision of community facilities and environmental mitigation measures; and
- (c) the first MLP (Application No. A/TKO/22) for the LOHAS Park

development was approved by the Board on 16.4.1999. An Environmental Assessment (EA) was submitted together with the MLP. In approving the first MLP, the Board had imposed 26 approval conditions requiring, inter alia, the provision of mitigation measures against environmental impacts. The developer had submitted relevant technical assessments for fulfilling the approval conditions, which included assessments and proposals to mitigate impacts from the landfill. The technical assessments were accepted by relevant departments.

9. In response to the questions raised by the Vice-chairman, Dr. Ellen Y.L. Chan, AD(EI), EPD, made the following main points:

Waste Management Strategy

- (a) Hong Kong was facing an imminent waste management problem. Even after waste reduction and recovery, about 13,300 tonnes of waste were needed to be disposed of at landfills every day;
- (b) in December 2005, the Government published the “Policy Framework for the Management of Municipal Solid Waste (MSW) (2005-2014)” (the Policy Framework), which set out a comprehensive waste management strategy for the next ten years. The three waste management principles included: (i) avoidance and minimization; (ii) reuse, recovery and recycling; and (iii) bulk reduction and disposal. Targets had been set and policy had been adopted under the three principles;

Avoidance and minimization

- (c) in line with the “polluter-pays principle”, the consultation exercise of the extension of the “Producer Responsibility Scheme” (“PRS”) on plastic shopping bags and electrical and electronic waste was now in progress. The Government was also considering the municipal solid waste (MSW) charging scheme and would soon initiate consultation with the community;

Reuse, recovery and recycling

- (d) since the implementation of the territory-wide source separation of waste in 2005, around 80% of the Hong Kong population had been provided with recycling facilities such as recycling bins to support their separation of waste paper, metal and plastics both at home and at work for recycling. In TKO, 42 out of some 50 estates had joined the Programme on Source Separation of Domestic Waste and some were doing very well and had won awards in EPD's annual commendation event;
- (e) Hong Kong's MSW recovery rate was 52% in 2010, which had already exceeded the target of 50% by 2014 as set out in the Policy Framework. Hong Kong's achievement was considered as high when compared with Singapore (48%) and Japan (21%), although it was lower than Germany (64%);
- (f) the target of waste recovery was raised to 55% by 2015 and the Government would enhance promotion and education work in the community in the coming months;

Bulk reduction and disposal

- (g) the Government had long recognized that relying solely on landfills as the only means of waste disposal was not sustainable and had been planning new facilities like waste-to-energy incinerators. In January 2011, the Government reaffirmed and announced the three-pronged approach in waste management, namely, waste reduction and recycling, use of modern waste treatment facilities (including waste-to-energy incinerators) and extension of landfills;
- (h) the Sludge Treatment Facility (STF) at Tsang Tsui, Tuen Mun, which had a capacity to treat up to 2,000 tonnes of sewage sludge per day, would be commissioned in 2013;
- (i) the use of modern incineration technology could significantly reduce the waste treated by about 90% of its original volume. Electricity could also be generated from the incineration process, which would turn waste into

energy. The EIA studies on the proposed integrated waste management facilities (IWMF) at an artificial island near Shek Kwu Chau or Tsang Tsui in Tuen Mun had been completed. Taking into account the results of the EIAs and other site selection considerations, the first IWMF was proposed to be located at the artificial island near Shek Kwu Chau, which was expected to be commissioned by 2018. This first IWMF would have a capacity of treating 3,000 tonnes of MSW daily and the electricity generated during the incineration process could meet the electricity need of 100,000 households;

- (j) two organic waste treatment facilities (OWTF) were planned at Siu Ho Wan and Sha Ling. The two OWTFs would have a total treatment capacity of 500 tonnes of food/organic waste daily and would be commissioned by 2014 and 2016/17 respectively;
- (k) even with the new waste reduction and recovery measures as well as modern incineration facilities, landfills were still required for waste not treated by IWMF due to capacity constraints, unavoidable and non-recyclable waste, non-combustible waste and incineration ashes. To address the need, all three landfills would have to be extended;
- (l) the SENTLF should be retained and extended to maintain the capacity of the landfills for receiving waste in the meantime;
- (m) since the existing SENTLF was bounded by the Clear Water Bay Country Park to the east, the closed TKO Stage II/III Landfill to the north, the TKO Industrial Estate to the west and other planned uses to the south, only a relatively small area within Area 137 to the south of the existing SENTLF could be utilized for the SENTLFX;

EIA Studies

- (n) two studies had been conducted for the extension of landfills;

Disposal Sites (2000-2003)

- (o) this was a strategic study conducted by EPD for assessing the need for landfill capacity and the options for extending the existing landfills and identifying new landfills, including marine sites and land sites. However, for developing a new landfill, no site at outlying islands was considered suitable at the time of the study;
- (p) a strategic Environmental Assessment (SEA), which was a key planning tool for major infrastructure development in the territory, had been conducted as part of the study. The objective was to identify potential environmental impacts early at the planning stage;
- (q) the study confirmed that there was a need to extend the three existing landfills. For the proposed SENTLFx, it would only commence operation when the existing SENTLF was filled up and decommissioned; and

South East New Territories Landfill Extension – Feasibility Study (2005-2008)

- (r) the EIA assessed the feasibility of the SENTLFx and the consultants would provide more detailed information of this EIA.

10. In response to the question raised by the Chairman, Mr. Frank C.H. Wan (ERM, Environmental Consultant of EPD) said that he possessed a master degree on waste management. Since 1990, he had been working on waste management business, in particular on the design of landfills and other waste treatment facilities, as well as EIAs on waste management facilities. He had been involved in the planning and development of the three existing landfills in the territory, the thermal treatment facilities for wastes and the refuse transfer stations (RTS) in Hong Kong.

11. Mr. Frank C.H. Wan made the follow main points regarding the assessment of air emissions association with the operation of the SENTLFx:

- (a) the potential air emissions associated with the operation of the landfill

were mainly from dust and gas emissions from the stack of the leachate treatment plant and landfill gas flare;

- (b) the air pollutants generated from burning of methane (landfill gas) mainly included a small amount of nitrogen dioxide, carbon monoxide and sulphur dioxide. There were very small amount of volatile organic compounds (VOCs) in the raw landfill gas, and these VOCs could be destroyed under a high combustion temperature of 800°C in the flare or thermal oxidizer of the leachate treatment plant. As some VOCs such as benzene and vinyl chloride were identified as carcinogens, as a conservative approach, a health risk assessment had also been carried out assuming there would be a trace amount of these VOCs in the air emission of the stack. The air quality impact assessment was based on the Hong Kong Air Quality Objectives. If there were no relevant standards in the Air Quality Objectives, relevant standards from the World Health Organization, United States Environmental Protection Agency and California Air Resources Board (CARB) were adopted according to requirement stipulated in the EIA Study Brief;
- (c) the assessment indicated that the predicted concentrations of nitrogen dioxide, carbon monoxide and sulphur dioxide at the representative Air Sensitive Receivers (ASRs) were all below the respective Hong Kong Air Quality Objectives. The predicted benzene and vinyl chloride concentrations at the ASRs were well below the respective acute and chronic health risk reference concentrations. The total cancer risk was considered insignificant. The assessment also reviewed the fugitive emission of VOCs from the landfill site and covered a total of 39 VOCs that might be found in landfills for the disposal of MSW. The Consultants had reviewed all the VOCs monitoring results of the existing SENTLF. The concentrations measurements of benzene, vinyl chloride, ethyl benzene and toluene, as mentioned by some representatives/commenters in their representations, and other VOCs were well below the relevant trigger levels or even not detected. Therefore, there would be no adverse air quality impacts due to the operation of the

SENTLFx;

- (d) as the SENTLFx would be restricted for disposal of construction waste only, it was anticipated that the VOC concentrations at the SENTLFx would be even lower;
- (e) as the area of the SENTLFx which was not yet in operation (i.e. not for disposal of waste), would be covered with soil of 600mm and an impermeable liner, and that landfill gas would be extracted via a comprehensive landfill gas collection system during the operation of the landfill extension, it was anticipated that the fugitive VOC emission from the landfill extension due to waste tipping activities would be significantly reduced relative to the existing SENTLF. With reference to the VOC monitoring results at the existing SENTLF, it was expected that the VOC concentrations at the SENTLFx boundary would be well below the trigger levels. VOC concentrations were expected to be further diluted due to dispersion off-site. As such, the anticipated VOC concentrations at the identified ARSs would be minimal and would not cause adverse impacts;
- (f) the Vice-chairman had mentioned about hydrogen sulphide which was a highly odourous gas. There was no record of detecting any malodour generated from hydrogen sulphide at the landfill. As the acute and chronic health risk reference concentration of hydrogen sulphide was much higher than its odour threshold, receivers would detect hydrogen sulphide and move away from the source and unlikely be exposed to unacceptable levels of hydrogen sulphide. The potential health risk to the identified ASRs due to exposure of hydrogen sulphide generated from the landfill operation was considered minimal;
- (g) some VOCs, such as benzene and vinyl chloride, would have negative impact on human health, including adverse impact on the respiratory system. As the VOC concentrations measured at the landfill site boundary were well below their trigger levels or even not detected, and

VOCs would be further diluted when they dispersed off-site, there was no reason to believe that there would be a health risk concern to the people living in the surrounding areas (more than 500m away) and they would not cause eye irritation etc.; and

- (h) the landfill contractors had monitored the health conditions of their staff working at the landfills. There was no indication that the people working at the landfills had a higher health risk than those working in other occupations.

12. In response to the Chairman's enquiry, Mr. Frank C.H. Wan said that according to his understanding, people working in the landfills were only equipped with normal protection devices such as face masks and no special protective clothing was required. Dr. Ellen Y.L. Chan supplemented that the monitoring staff of EPD and its contractors at the landfills were normally equipped with masks, helmets and reflective clothing, but not other special protective clothing.

13. Mr. Tommy K.L. Lai, SEPO(WF), EPD, supplemented the following main points in respect of VOC monitoring in the SENTLF:

- (a) there were four existing VOC monitoring points at the boundary of the SENTLF. Samples were collected quarterly to monitor the VOC concentrations;
- (b) referring to Table 4.5f of the EIA Report which was displayed on the visualizer (copy attached) for Members' reference as well as the data collected in 2010, the concentrations of concerned VOCs, including vinyl chloride, benzene, toluene and ethyl benzene, were far below the relevant trigger levels. Some other VOCs were even not detected; and
- (c) since the operation of the SENTLF, the concentrations of VOCs measured had never exceeded the relevant trigger levels laid down in the stipulated standards;

[Miss Annie Tam arrived to join the meeting at this point.]

14. Dr. Ellen Y.L. Chan went on to make the following main points in response to the other questions raised by the Vice-chairman:

- (a) a progressive restoration approach had been adopted for the SENTLF. The part of the landfill which was already full would be capped with impermeable liner and soil and planted with trees on top. It would take one to two years to restore the whole landfill area for other beneficial uses;
- (b) there were many examples on successful restoration of landfills in Hong Kong for recreational uses, including the parks at Sai Tso Wan, Jordan Valley and Ngau Chi Wan. These parks provided popular recreation facilities to the residents;
- (c) regarding the allegation that there was ground settlement at the closed landfill at Area 77, the area had been handed over to the Sai Kung District Council (SKDC) for the development of a pet garden. Works had already commenced in January 2011 and were scheduled to complete in early 2012. While there would be ground settlement at the landfill, the settlement was only about 1 to 10 mm, which was considered insignificant and normal for such restored landfills. The works consultant and engineers responsible for the construction works should have taken into account the settlement of the area in designing the park and the related works. The settlement would not affect the foundation of the area; and
- (d) the residents and representers had raised concern on the release of methane from a landfill gas flaring plant near the LOHAS Park. It should be noted that there were two flares, one for the restored TKO Stage I Landfill at Area 77 (which was closer to the LOHAS Park) and the other located at the restored TKO Stage II/III Landfill at Area 105. These flares were used to burn off methane from the landfill. EPD had

closely monitored the surface emission of methane at the landfill and the measurements were ranged from 0 to 0.002%, which were all well below the safety limit of 1% by volume.

15. Mr. Lawrence M.C. Lau, PEPO(WF), EPD, made the following main points in respect of the concern on the number of vehicle trips generated by the operation of the landfill and the adverse impacts created by disposal of construction waste in the landfill:

- (a) according to EPD's record in November 2011, the average numbers of construction waste collection vehicles, refuse collection vehicles (RCVs) and other vehicles visiting the SENTLF in one day were 503, 231 and 249 respectively, with a total of 983 vehicles going to the SENTLF for disposal of waste per day. The monthly average numbers of vehicles going to the landfill from January to November 2011 were similar. The 2,000 to 3,000 vehicles at Wan Po Road observed by the representers would probably include construction vehicles of the other works sites and activities in the area;
- (b) since the SENTLFx would be restricted for the disposal of construction waste, only construction waste collection vehicles would go to the SENTLFx during operation. Hence, the number of vehicles visiting the SENTLFx was expected to be reduced to about 500 by then;
- (c) construction waste was defined under the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. It could be inert (e.g. rock, rubble, fill, sand and concrete) or non-inert (e.g. bamboo, wood, vegetation and packaging materials). Inert construction waste could be reused in site formation works, while parts of the appropriately sorted non-inert construction waste could be reused/recycled. The remaining mixed construction waste would be disposed in the landfills. The statutory definition of construction waste had clearly indicated that construction waste should not contain chemical waste and therefore chemical waste such as asbestos and organic solvents, which were subject to control under the Waste Disposal (Chemical Waste) (General)

Regulation, was not allowed to be mixed with construction waste for disposal in the landfills;

- (d) construction contractors/waste haulers delivering construction waste to landfills for disposal were required under the Waste Disposal (Charges for Disposal of Construction Waste) Regulation to open a billing account with EPD and pay for the construction waste disposal charge. Through the billing account system, EPD had a register containing the names of relevant construction contractors/waste haulers as well as the sources of the construction waste. The construction contractors/waste haulers would be required to produce a valid “chit” for the disposal of construction waste at the designated waste disposal facility. On enforcement, at the entry of the landfill, the landfill operator would screen and take record photograph of every waste load. Mobile CCTV surveillance station had also been set up at the tipping area to monitor the waste disposal operation to safeguard against any malpractice. All incoming waste loads were monitored at the gate of the landfill and some waste loads were subject to further detailed inspection. If in doubt, waste haulers were required to make declarations at the gate that the waste to be disposed of was construction waste. The records kept by EPD would facilitate prosecution against non-compliance, where appropriate. EPD would also step up enforcement and prosecution actions against non-compliance; and
- (e) EPD had been working closely with the construction industry to ensure proper handling and disposal of construction waste. Works contractors were requested to sort construction waste at source and chemical waste was to be treated separately under stringent control in accordance with the relevant regulations.

16. A Member noted that the SENTLFx only had an area of 13 ha and the other landfills in the territory were located in more remote areas and would generate less impact to the surrounding community as in the case of the SENTLF. This Member asked if the other existing landfills had more scope for extension.

17. In response, Dr. Ellen Y.L. Chan made the following main points:

- (a) each of the three existing landfills in the territory served its own role and the different waste arising catchments for meeting Hong Kong's disposal demand. If any of the landfills was to be closed, the construction waste collection vehicles and RCVs would need to travel a much longer distance to the remaining two landfills and a larger geographical area would be affected environmentally in terms of extra traffic, additional fuel consumption, emission of greenhouse gas etc. In addition, the SENTLF was located closest to the urban area where there were public works and urban renewal sites. It would be more environmentally acceptable and convenient for the works contractors to use the SENTLF and its extension for disposing of construction waste; and
- (b) the reduced SENTLFX would only include the 13 ha of land within Area 137 for disposal of construction waste which would help minimize the impact of the landfill extension.

[Mr. Eric Hui left the meeting at this point.]

18. A Member said that it would be difficult to separate paint from the construction waste. This Member asked if the disposal of construction waste with paint on it would generate VOCs in the landfill. This Member also said that the waste producers could use marine transport for delivering solid waste to the West New Territories Landfill (WENTLF) and the waste could be compacted in the RTS before transporting to the WENTLF for disposal. However, the RCVs and construction waste collection vehicles had to share the same access with residential developments within TKO which might generate negative impacts to the living environment of the residents. This Member asked if EPD had considered using marine transport for transporting waste to the SENTLFX and compacting the waste at the RTS before transporting to the SENTLF and its extension for disposal.

19. In response, Dr. Ellen Y.L. Chan made the following main points:

- (a) paint residues in construction waste (e.g. painted walls or doors) from demolished buildings were not regarded as chemical waste as they were no longer volatile and would not generate adverse environmental impact;
- (b) an impermeable composite liner system would be placed at the base of the landfill to avoid leachate migrating off-site. The leachate collection layer would collect and drain leachate for treatment and disposal. Gaseous emission would also be collected for treatment;
- (c) there was close monitoring of leachate and VOCs at the landfill as mentioned above;
- (d) MSW collected by FEHD would be compacted at the RTSs before transporting to the WENTLF for disposal. The location of the WENTLF at Nim Wan, Tuen Mun allowed the use of marine transport for delivering the compacted refuse from the RTSs to the WENTLF. The North East New Territories Landfill (NENTLF), which was located at a valley area, did not allow the use of marine transport. The SENTLF mainly received waste from private refuse collection haulers and construction waste from works sites who used road transport;
- (e) the transportation of refuse and construction waste was subject to certain control under relevant regulations. When construction waste collection vehicles left construction sites, they should be properly covered. Otherwise, it would be against the law if nuisance was caused by construction waste collection vehicles travelling on roads. Dripping of waste water by RCVs and dropping of debris from construction waste collection vehicles on roads were controlled under the Public Health and Municipal Services Ordinance. The relevant government departments would continue to undertake enforcement work to ensure compliance with the legislation;
- (f) EPD had close contact and liaison with the waste collection trade and

would continue to encourage them to undertake good practice, such as covering up trucks carrying waste before leaving the construction sites;

- (g) EPD would work closely with other relevant departments. An inter-departmental working group led by the District Officer/Sai Kung (DO/SK) had been set up to monitor and improve the condition of Wan Po Road. During the joint blitz action taken by the inter-departmental working group last year, two haulers had been prosecuted on dripping of waste water and causing nuisance along Wan Po Road;
- (h) Wan Po Road had been washed six times (eight times at the part near LOHAS Park) each day; and
- (i) a new and vehicle washing facility had been constructed at the SENTLF to wash RCVs and construction waste collection vehicles before leaving the landfill.

20. A Member noted that EPD had undertaken a lot of measures to minimize the impacts generated by the SENTLF. However, there were still many complaints from the residents on the poor environmental condition in the area. Since SENTLF was the only landfill located close to residential area, more should be done to monitor the negative impacts. For example, in addition to the four VOC monitoring points at the boundary of the landfill as mentioned by the representatives of EPD, monitoring points should also be set up at the residential developments and appropriate mitigation measures should be undertaken for the residents. It was noted that there was health assessment for people working at the landfill. The Government could consider doing more to enable the residents to have a better understanding of the operation of the landfill and the mitigation measures undertaken so as to ease their concern regarding the health hazard of the landfill. This Member also asked if additional measures could be adopted to mitigate the impact created from the landfill. As the EIA completed in 2008 was undertaken before population intake in LOHAS Park, the Member also asked if EPD would consider undertaking another EIA and include assessment on the increase in population in the area.

21. In response, Dr. Ellen Y.L. Chan made the following main points:

- (a) EPD would consider installing monitoring points at the residential developments nearby. However, agreement from the residential developments was required. The Government had previously suggested to install an electronic odour monitoring device at LOHAS Park, but the suggestion was opposed by the residents;
- (b) it would be difficult to conduct health check for residents as it was difficult to ascertain whether the health condition of individual resident was caused by the operation of the landfill;
- (c) the assessment in the EIA was not based on the number of the existing population to be affected by the landfill. Instead, the EIA would project and identify potential ASRs and undertake assessment on potential environmental impacts generated from the operation of the landfill on all the identified ASRs. LOHAS Park was one of the 43 ASRs identified in the EIA. The residential developments in the Eastern District of the Hong Kong Island were also identified as sensitive receivers and included in the assessment in the EIA. Furthermore, under the EIA completed in 2008, the proposed SENTLFx occupied a larger area and was proposed to receive both MSW and construction waste. As the area of the proposed SENTLFx had now been reduced and the landfill extension was proposed to receive construction waste only, the potential environmental impact created by the landfill extension was expected to be less than the original proposal. As such, according to the requirement stipulated in the EIAO, there was no need to undertake a new EIA; and
- (d) as proposed in the EA for the LOHAS Park development, environmental mitigation measures, which included the paving of low noise materials on two sections of Wan Po Road adjacent to LOHAS Park, had been provided. The effectiveness of the noise barriers along Wan Po Road would be subject to review if considered necessary.

22. Mr. Ma Kwai Loeng, SE/H&P/NTE, TD, made the following main points in

respect of the traffic at Wan Po Road:

- (a) according to TD's record, there were about 12,000 vehicle trips each day on each direction at Wan Po Road, which was a two-way four-lane road. About 30% of the traffic was from goods vehicles and/or construction vehicles. The traffic of Wan Po Road was considered low when compared with other roads of the same design standard;
- (b) the design of Wan Po Road, including the road geometry and sight distance, met the relevant standards. There might be cases of dropping of debris from construction waste collection vehicles at Wan Po Road. If vehicles maintained a safe travelling distance from the construction waste collection vehicles, the possibility of having accidents caused by dropping of debris could be minimized; and
- (c) soon after the population intake in the area in 2009, the speed limit of Wan Po Road near Oscar by the Sea had been reduced from 70km per hour to 50 km per hour. As for the section near LOHAS Park, the speed limit had been temporarily reduced from 70km per hour to 50km per hour up to 30 September 2012. TD would review the situation, and if necessary, consider further traffic management measures to cope with the latest development in the area.

23. A Member said that while EPD had undertaken a lot of mitigation measures to improve the environmental condition of Wan Po Road, the local residents considered that the mitigation measures were not effective and the environmental condition of Wan Po Road was far from satisfactory. Hence, the residents had no confidence that the environment would be improved after the extension of the SENTLF. This Member had the following questions/views on the EIA and the proposed landfill extension:

- (a) while EPD indicated that there were ordinances/regulations governing the transportation and disposal of refuse and construction waste in the landfills, it was noted that there had been only a few prosecution cases against the non-compliance with the relevant ordinances/regulations.

EPD mainly relied on reminding the construction trade to be self-disciplined and it was doubtful if the enforcement work undertaken by EPD was effective. EPD might consider using CCTV surveillance cameras to help undertake enforcement and prosecution work;

- (b) EPD should respond to the allegation from some representers that the equipment installed by EPD could not detect some toxic gas emitted from the landfill;
- (c) whether the extension of the SENTLF was included as a proposal in the SEA completed in 2003 and when this SEA was promulgated for public information;
- (d) whether the Radio Television Hong Kong site and the biodiesel plant had been included in the EIA for the extension of the SENTLF completed in 2008;
- (e) when the site of the MTR depot was decided for residential development; and
- (f) whether there was any plan or programme for the closure of the SENTLF and its extension.

24. In response, Dr. Ellen Y.L. Chan made the following main points:

- (a) the Government would step up enforcement and prosecution action against non-compliant cases. For example, if construction waste collection vehicles going to the landfill were found uncovered, the contractors of the respective construction site would be warned, and enforcement action, if required, would be undertaken under relevant regulations. However, using CCTV surveillance cameras to monitor the situation at Wan Po Road would involve privacy issues and the public should be consulted on whether the proposed measure should be supported;

- (b) when the SEA for the study on the “Extension of Existing Landfills and Identification of Potential New Waste Disposal Sites (2000-2003)” was undertaken, there were already planned land uses in Area 137. However, according to the recommendation of the study, if there were changes in the planned land uses in Area 137, a small scale extension of the SENTLF to Area 137 was feasible. Subsequent to a further review on the land uses of TKO Area 137, the proposal of carrying out a detailed EIA study for the extension of the SENTLF was submitted to the Advisory Council on the Environment (ACE) in 2003. The ACE endorsed the proposal;
- (c) since 2004, the relevant DCs including SKDC had been briefed on the 2003 study and the SKDC had also been informed that detailed EIA would be undertaken for the proposed extension to the SENTLF and would be consulted on the project profile for the EIA;
- (d) the EIA completed in 2008 covered all land uses surrounding the proposed SENTLF extension area. The use of the Radio Television Hong Kong site was not specified at that time but it was an ordinary office development and the site had already been included as ordinary government uses in the EIA assessment. The TKO Industrial Estate had been included in the EIA. In fact, as the biodiesel plant was a designated project under the EIAO, the proponent of the plant had to undertake a separate EIA for the plant; and
- (e) it was difficult for the Government to have a definite timetable for the closure of the SENTLF and its extension as their closure would be subject to the amount of waste needed to be handled in Hong Kong, the effectiveness of the reduction and recycling activities, the development of the modern waste treatment facilities including waste incinerators and the pace of economic growth in Hong Kong.

[Mr. Rock C.N. Chen left the meeting at this point.]

25. Mr. Lawrence M.C. Lau supplemented the following main points in respect of the estimated closure time of the SENTLF and its extension:

- (a) the planning of the extension of the three landfills had started since 2004. However, there was no definite timetable for the closure of the three landfills;
- (b) the information quoted by a representer that the SENTLF would be closed in 2018 was only an estimate made by a sub-contractor of the SENTLF. It was not an estimate made by the Government. The information on closure time for the SENTLF was also not correct; and
- (c) as stated in a press release issued by EPD on 28.2.2011 (displayed at the meeting), in assessing when the landfill would reach its full capacity, the EPD needed to go through a stringent and scientific evaluation process, which was also based on facts. EPD had analysed the historical trend and forecast of various data, including waste generation, the results of waste separation and recycling efforts, population growth, economic development as well as the business environment, with a view to attaining accurate assessments. The capacity of the landfill was also affected by its design. The design of the landfill, including the slope design, the thickness of the covers and the forecast of waste settlement, needed to adhere to very stringent standards to ensure the safe and proper management of the landfill during operation and after closure, and at the same time to meet the forecast on capacity. The design capacity of the SENTLF was 43 million cubic metres. As at the end of 2009, the remaining capacity of the landfill was 11 million cubic metres. Based on an estimated intake of about 2 million cubic metres per year, the SENT landfill was expected to reach its full capacity in 2014.

26. Mr. Dave T.Y. Ho, PEPO(AS), EPD, made the following main points in respect of suspended particulates ($PM_{2.5}$ and PM_{10}):

- (a) PM_{2.5} and PM₁₀ were very tiny particles present in the air and would have adverse impact on human health. EPD regularly monitored the presence of PM₁₀ in the air of Hong Kong in all EPD's monitoring stations. As for PM_{2.5}, it was also monitored at five monitoring stations;
- (b) EPD had also worked with experts in universities to study the levels of suspended particulates present in the air of Hong Kong and the characteristics and origins of these suspended particulates; and
- (c) according to the studies, it was found that suspended particulates were a regional air pollution issue mainly contributed by fuel combustion sources and a large proportion of suspended particulates present in our air could have come from sources outside Hong Kong.

27. Mr. Ivan M.K. Chung made the following main points in respect of the planning of the LOHAS Park development:

- (a) the rezoning of the LOHAS Park site for residential development was incorporated in the TKO OZP in 1998 and the first MLP for the LOHAS Park development was approved by the Board in 1999;
- (b) according to the first MLP approved in 1999, the planned population of LOHAS Park was 57,000 people to be accommodated in 21,500 flats. The two key development parameters had not been changed in the latest plan of the LOHAS Park development;
- (c) in the EA submitted together with the MLP, the developer had already proposed some environmental mitigation measures which included the paving of noise reduction material along the section of Wan Po Road near LOHAS Park. The requirements on the provision of environmental mitigation measures had been incorporated in the lease conditions of the LOHAS Park development; and
- (d) it was noted that noise barriers would also be installed along the road

(Road D9) linking the area to the Cross Bay Link to be constructed by the Civil Engineering and Development Department. Noise barriers to mitigate against noise impact would also be installed to the road to the north of LOHAS Park.

28. A Member raised the following questions:

- (a) whether paint residues in construction waste were toxic material and had impact on human health, and whether disposal of construction waste would generate VOCs;
- (b) whether EIA had been undertaken for the LOHAS Park development;
- (c) whether the Stockholm Convention mentioned by a representer was applicable to Hong Kong;
- (d) whether human ashes would be allowed to be dumped at landfill and whether this would generate virus;
- (e) whether the EIA was conducted for the proposed extension of the existing landfill, or for a new landfill;
- (f) whether methane gas would be collected throughout the whole landfill area; and
- (g) why DC had to be consulted regarding the installation of CCTV surveillance cameras to monitor the situation of Wan Po Road, while it was noted that TD had installed CCTV surveillance cameras at major roads to monitor the traffic conditions.

29. Dr. Ellen Y.L. Chan made the following responses:

- (a) paint residues in construction waste (e.g. painted walls and doors) from demolished buildings were not regarded as chemical waste as it was no

longer volatile and would not generate adverse environmental impacts;

- (b) the LOHAS Park development was not a designated use and it was not required to undertake any EIA under the EIAO. However, as explained by DPO/SKIs above, the developer had undertaken an EA for the development and submitted together with the MLP to the Board for consideration as required under the Notes of the “CDA” zone for the subject site;
- (c) the Stockholm Convention mainly controlled the trade, production and use of persistent organic pollutants (POPs). POPs and VOCs were inherently very different types of chemicals compounds. Commonly known POPs included DDT which was used years ago as pesticides. Hence, the Convention was considered not relevant in the context of the discussion and had not been included in the EIA;
- (d) the disposal of construction waste at landfill would not generate VOCs. As for the emission of VOCs from disposal of MSW, there was close monitoring of concentration of VOCs at landfills as mentioned above. The data collected in the monitoring system indicated that the concentration of all VOCs at the SENTLF was well below their respective trigger levels;
- (e) the EIA for the proposed SENTLFx was conducted under the requirements set out in the TM of the EIAO. The proposed extension did not only cover the new area in Area 137, but also the piggy-back part of the existing SENTLF. The extension area would not be in operation until the existing landfill area was full and decommissioned;
- (f) about 85% of the existing SENTLF that was not in active operation was already covered with a temporary impermeable plastic cover (a sample was displaced at the meeting). With the impermeable cover, landfill gas would not leak out and there were also gas extraction wells and pipes installed in the landfill to collect landfill gas (including methane)

throughout the landfill area; and

- (g) the purpose of installing CCTV surveillance cameras along Wan Po Road would be for the monitoring of non-compliant cases with subsequent potential prosecution actions related to uncovered construction waste collection vehicles visiting the landfill. This was different from the purpose of installing surveillance cameras along the major roads by TD, which was for monitoring of traffic condition of these roads and not for prosecution purpose.

30. Mr. Ma Kwai Loeng supplemented that the CCTV surveillance cameras installed by TD at major roads were to monitor traffic condition and they would not capture any private information.

31. A Member said that as indicated by a representer, there was regulation in Japan to require landfill to be located not within 4km from residential developments. This Member asked if there was such a regulation in Hong Kong.

32. In response, Dr. Ellen Y.L. Chan said that she had no information on the requirement in Japan as mentioned by that representer. However, as for Hong Kong, there was a requirement to undertake landfill gas hazard assessment for developments within 250m from a landfill. Mitigation or safety measures had to be adopted for these developments in accordance with the results and recommendations of the hazard assessment. The developer of the LOHAS Park development had also undertaken this hazard assessment before the commencement of the development.

[Mr. Timothy K.W. Ma left the meeting at this point.]

33. A Member noted that many representers raised doubt on the effectiveness of the Government's determination in enforcing and monitoring illegal dumping activities. This Member asked if the Government had comprehensive regulations governing the disposal of construction waste. This Member also asked how the Government was going to monitor and control disposal of construction waste which was mixed with some toxic chemical materials, and whether the Government would conduct random check, step up

enforcement and prosecution, and increase penalty to deter illegal dumping activities.

34. In response, Dr. Ellen Y.L. Chan made the following main points:

- (a) as mentioned above, the disposal of construction waste at landfill was subject to a charging scheme with effect from January 2006 and there was a legal definition on construction waste under the Waste Disposal Ordinance. Amendments to the Schedule in the relevant regulation would be required to restrict disposal of construction waste only at the SENTLFX;
- (b) under the Waste Disposal Ordinance, any offence would be subject to a maximum fine of \$100,000; and
- (c) the enforcement and prosecution action against non-compliance cases would be stepped up.

35. In response to a Member's question regarding the collection of gas emitted from landfills, Dr. Ellen Y.L. Chan said that an impermeable composite liner system (sample of the liner material was displayed at meeting) had been placed at the base of the landfill to avoid leachate migrating off-site. There were pipes in the liner system to collect gaseous emission for treatment. The landfill gas collected would be used for generating electricity and for treating the leachate from the landfill. The residual gas would be burnt off to ensure safety. Leachate was also collected and treated before discharge and there were also monitoring points in the landfill to monitor leachate. In addition, since SENTLF was located close to residential area, additional mitigation measures had also been implemented to control odour, such as covering the landfilling areas with a cement-based material called Posi-Shell Cover (sample was displayed at meeting).

36. A Member noted from other sources that VOCs would be transformed to smog under the sunlight and the smog frequently found in Southern China was a result of the presence of VOCs. This Member asked if the VOCs generated in the landfill would be transformed to smog and suspended particulates.

37. In response, Mr. Dave T.Y. Ho said that the presence of fine suspended particulates and occurrence of smog in Hong Kong were mainly caused by burning of fossil fuel and the sources were mainly from the Southern China outside Hong Kong. The local sources of VOCs were mainly generated from motor vehicles and the use of VOC-containing products such as paints, printing inks and some consumer products.

38. A Member said that the function of CCTV surveillance cameras was to monitor and deter non-compliance of regulations by waste producers in disposing waste at landfill. It should not involve privacy problem. This Member also asked if there were any specific mitigation measures that could be undertaken for LOHAS Park as it would be subject to impacts from the landfill due to the change in prevailing wind directions in different seasons. Relevant departments were also requested to explain the results of the consultation with the SKDC as the representers did not agree with departments' interpretation on the views of SKDC.

39. In response, Dr. Ellen Y.L. Chan said that the inter-departmental working group would follow up and discuss whether CCTV surveillance cameras could be installed at Wan Po Road for prosecution purpose. Regarding the consultation with SKDC, Dr. Ellen Y.L. Chan showed a copy of the minutes of the SKDC meeting held on 3.5.2011 and said that according to the minutes (paragraph 62), the Chairman of the SKDC concluded that most SKDC members present at that meeting supported the revised plan for the landfill extension, i.e. to receive construction waste only. Some SKDC members still did not agree with the revised plan and the views of these members should be taken into account. The SKDC Chairman also stated that since the Government had made positive response and resolved the concern on odour problem in the revised landfill extension plan, he considered that the SKDC should accept the Government's revised plan for the landfill extension. Dr. Ellen Y.L. Chan also drew Members' attention to paragraphs 64 and 65 of the SKDC minutes and said that at the SKDC meeting held on 3.5.2011, the discussion was mainly on the Government's revised plan on the landfill extension in response to public concerns on malodour. As indicated in paragraph 65 of the SKDC minutes, the SKDC Chairman concluded that the SKDC members had fully expressed their views on the Government's revised plan and there was no need for the SKDC to pass any motion on the subject matter at the meeting.

40. Mr. Frank C.H. Wan said that the EIA had assessed data collected throughout the whole year. The impact of odour carried by prevailing wind to the residential area had been taken into account in the assessment. In summer months when the prevailing wind came from the southeast, only the southern portion of the landfill would be in operation. In winter months when prevailing wind came from northeast, the northern part of the landfill would be used. It should also be noted that as the SENTLFx would receive construction waste only, malodour would no longer be a problem.

41. A Member noted that EPD would issue warnings to waste haulers for not covering up the construction waste collection vehicles, and EPD had the records of all construction waste collection vehicles visiting the landfill for disposing construction waste. This Member asked why EPD did not take direct enforcement and prosecution action against these non-compliant cases. This Member also noted that there were lots of complaints on malodour from the landfill and asked about the source/composition of the malodour and whether the malodour would affect the health of residents nearby.

42. In response, Dr. Ellen Y.L. Chan said that EPD had no authority under the Waste Disposal Ordinance to take enforcement and prosecution action against cases related to uncovered construction waste collection vehicles visiting the landfill. Prosecution action could only be undertaken against cases related to uncovered construction waste collection vehicles leaving the construction sites under the Air Pollution Control (Construction Dust) Regulation under the Air Pollution Control Ordinance (Cap. 311). However, EPD would closely liaise with the trade and advise them to be self-disciplined and cover all construction waste collection vehicles before leaving the construction sites and during the course of transporting the waste to landfill for disposal. Regarding malodour, Dr. Ellen Y.L. Chan said that it was difficult to distinguish between the different types of malodour and identify the source(s). However, there was a new technique to analyze odour by using electronic odour detectors (“E-Nose”). An “E-Nose” had been installed at the SENTLF and a housing estate to monitor malodour problem.

43. With the aid of some photographs and graphs, Mr. Tommy K.L. Lai supplemented on the following main points in respect of the “E-Nose”:

- (a) electronic odour detectors (“E-Nose”) were introduced to Hong Kong in July 2010 and two detectors, one at SENTLF and one at the refuge floor at Ocean Shores (3km away from the SENTLF), were installed under a one-year trial scheme; and
- (b) odours were detected by the sensors in the “E-Noses”. The data collected in the “E-Noses” would be used to compare with the information on some known types of odours. The results of the monitoring indicated that no direct relationship between the responses of the two “E-Noses” or the odours detected at the two locations could be established. Since odours might be dispersed over distance, affected by wind direction or mixed with other types of odours, it was very difficult to conclude the source of the odours and whether the odours were generated from the refuse disposed at the landfill. The results and analysis made during the past year had been presented to the SKDC.

44. A Member noted that most portions of the landfill which were not in operation were paved with Posi-Shell Cover to mitigate odour impact. However, as noted from a representer’s representation, there were many eagles flying around the landfill. EPD was requested to explain whether the presence of eagles at the landfill was related to the MSW disposed at the landfill.

45. Mr. Jimmy Leung asked the following questions:

- (a) as stated by some representers, TKO Tunnel was frequently closed in order to clear the garbage dropped from RCVs and construction waste collection vehicles in the tunnel. He asked if TD had any information on the closure of TKO Tunnel caused by the dropping of garbage from RCVs and construction waste collection vehicles;
- (b) whether there was any control on the placing of skips on streets; and
- (c) whether EPD had any response to a representer’s representation that the odour impact from the landfill on LOHAS Park was more substantial

during the period between March and September when the prevailing wind came from the southeast. However, the EIA undertaken by EPD had only included assessment on data collected in end November and early December.

46. The Chairman raised the following questions:

- (a) why a site close to high-density residential developments was selected for the landfill extension and why remote areas such as outlying islands were not selected;
- (b) why marine transport was not used to deliver waste to the SENTLF. If marine transport was used, there was no need for the RCVs and construction waste collection vehicles to share common access with the residential developments;
- (c) how EPD would continue to conduct blitz operation against non-compliant cases related to uncovered construction waste collection vehicles. While it was noted that EPD would issue warnings to contractors at works sites if their construction waste collection vehicles were found uncovered and would request the trade to be self-disciplined, there were cases that construction waste collection vehicles were still found uncovered when travelling on roads. EPD should clarify whether it would step up enforcement action against such cases;
- (d) whether EPD had undertaken any measures in preventing or addressing nuisance caused by eagles flying around the landfill areas and wild dogs wandering and finding food around the areas;
- (e) while it was the planning intention that the landfill which had been decommissioned could be restored for open space use, it was argued by some representers that the open space could not be implemented because of ground settlement problem; and

- (f) why over one year had been taken to arrange the hearing of the representations to the TKO OZP No. S/TKO/18.

47. In response to the questions on eagles and bird flu, Mr. Terence C.W. Fong, ERM, Consultant of EPD, made the following main points:

- (a) eagles were opportunists and would search for food wherever possible. It was a fact that there might be food residues in the MSW disposed at the landfill. However, as the tipping areas of the SENTLF and its extension would be reduced and the SENTLFx would only receive construction waste, the nuisance caused by the eagles would be reduced; and
- (b) as it was the habit of eagles to rest in woodland and to avoid human beings, there would not be close contact between eagles and human beings. The risk of transmitting bird flu from eagles to human beings was considered low.

48. Dr. Ellen Y.L. Chan supplemented the following points in respect of the concern on bird flu:

- (a) the Agriculture, Fisheries and Conservation Department (AFCD) had an established protocol to test sick and dead birds in Hong Kong. According to the recent testing results, the incidence of positive rate of avian flu H5 in dead birds was only 0.07% and the figure was relatively low when compared with that of European countries (e.g. 4 to 5% in Sweden and Denmark); and
- (b) the previous transmission of avian flu in Hong Kong was associated with domestic birds. Studies and research indicated that the transmission of avian flu from wild birds to human beings was very low. For human infection cases, only two cases as reported in Azerbaijan were known to be associated with contact with wild birds. These two cases occurred under very peculiar circumstances where feathers of dead swans were plucked out for making pillows.

49. Mr. Frank C.H. Wan then made the following main points in respect of the EIA and odour problem:

- (a) as mentioned above, the air quality modelling was conducted using meteorological data (e.g. wind speed, wind direction, stability class) collected throughout the year and, the highest air pollutant concentrations predicted at the representative ASRs were presented in the EIA report; and
- (b) some VOCs such as dimethyl sulphide were odorous compounds. As the VOC concentrations measured at the landfill boundary were very low and below the respective trigger levels, the VOCs emission from the landfill would not cause adverse health impact to the identified ASRs.

50. Dr. Ellen Y.L. Chan went on to make the following main points regarding enforcement and ground settlement:

- (a) the Government would step up enforcement against non-compliances related to uncovered construction waste collection vehicles. The inter-departmental working group would follow up with the appropriate action to be taken on enforcement and prosecution; and
- (b) while there would be ground settlement at restored landfills, the settlement was only about 1 to 10 mm, which was considered insignificant. The works consultant and engineers responsible for the restoration works should have taken into account the settlement of the area in designing the park and the related works. The settlement would not affect the foundation of the area for recreation use. There were already good examples of parks and other recreational uses in restored landfills in Hong Kong (e.g. parks in Sai Tso Wan, Ngau Chi Wan and Jordan Valley).

51. Mr. Lawrence M.C. Lau made the following points in respect of site selection:

- (a) the SENTLF was mainly used by private refuse collection haulers who used road transport for delivering refuse to landfill for disposal;
- (b) there was only one berthing point near but outside the landfill area for loading and unloading of materials for construction works and operation of the landfill. Owing to its restricted uses and location, the berthing point would be difficult for allowing marine transport for delivering refuse to the landfill;
- (c) the SEA completed in 2003 had assessed options for marine sites, including outlying islands and artificial islands, for the development of landfill. However, no suitable site at outlying islands could be identified, taking into account all relevant considerations including engineering, environmental, accessibility, land uses, social-economic aspects, etc.;
- (d) the proposed extension to all the three existing landfills was considered the most feasible option in the medium term to tackle waste disposal problem in Hong Kong; and
- (e) the artificial island option of construction of a landfill would be retained as an long-term option.

52. Mr. Ma Kwai Loeng said that TD did not have any information on the closure of the TKO Tunnel caused by the dropping of rubbish from RCVs and construction waste collection vehicles. However, he undertook to check with the tunnel company and report to the Board on information of such cases.

[Professor Edwin H.W. Chan arrived to join the meeting at this point.]

53. Dr. Ellen Y.L. Chan said that the placing of skips on streets was a territorial issue, rather than an issue specific to TKO. Dr. Chan said that there was a site at Pak Shing Kok in TKO for placing of skips. The inter-departmental working group would also follow up the issue of illegal placing of skips on streets.

54. In respect of the complaints that more than one year had been taken to arrange the hearing of the representations to the TKO OZP No. S/TKO/18, which would be in contravention to the provisions in the Town Planning Ordinance, Mr. Ivan M.K. Chung said that the TKO OZP No. S/TKO/18 was gazetted under s.5 of the Ordinance on 7.5.2010. According to requirement stipulated under the Ordinance, the OZP had to be submitted to the Chief Executive in Council (CE in C) for approval within nine months from the end of the plan exhibition period by 7.4.2011. As mentioned in paragraph 4.8 of the TPB Paper, there were changes in the planning circumstances owing to the announcement of the Administration to exclude the 5 ha of country park land from the proposed extension of the SENTLF and the scaling down of the SENTLFx from 15.6 ha to 13 ha. An extension of the statutory deadline for six months for submission of the OZP to CE in C had been sought and obtained from the CE. In the meantime, the OZP was amended under s.7 of the Ordinance to incorporate the rezoning for the Radio Television Hong Kong site. Under the Ordinance, the nine-month statutory deadline for submission of the draft OZP to the CE in C would be calculated from the end of the exhibition of the amendments to the OZP under s.7 of the Ordinance. The representation hearing process of the TKO OZP complied with the provisions of the Town Planning Ordinance.

55. Mr. Jimmy Leung said that some representers raised concern that the TPB Paper for the hearing was so bulky and a lot of paper had been wasted to produce the copies of the Paper for the representers and commenters. Mr. Leung said that to facilitate the conduct of a fair hearing, all papers and documents for the case had to be sent to the relevant parties. He would like to inform the Board that according to the current practice, before sending the paper to relevant representers and commenters, the Secretariat would ask if they would like to have copies of the appendices to the paper in order to reduce consumption of paper. Only for those who had indicated that they would like to have the appendices, the Secretariat would send the whole set of the paper with all the appendices to them. Consideration had been given to using electronic means to send papers to applicants/representers/commenters in order to reduce consumption of paper. However, since the TPB papers usually contained plans, photographs and diagrams with large file size which were difficult to be transmitted through electronic means and some applicants/representers/commenters might not have access to computers, the traditional way of sending hard copies of the papers and documents to relevant parties was considered

appropriate in the circumstances.

56. As Members had no further question to raise, the Chairman said that the hearing procedures had been completed and the Board would deliberate on the representations in the absence of the representers. The Chairman thanked the representatives of the government departments and the Consultants for attending the meeting. They all left the meeting at this point.

57. The Chairman said that to allow time for Members to consider the representations made by representers and commenters during the different sessions of the hearing, the meeting would be resumed on 13.12.2011 for the deliberation of the representations on TKO OZP No. S/TKO/18. Members agreed.

58. The meeting was adjourned for lunch break at 2:40 p.m.

Table 4.5f VOC Concentrations at Site Boundary and On-site of the Existing SENT Landfill (2002 - 2006)

Pollutant	Trigger Level	Monitored VOC Concentration ($\mu\text{g m}^{-3}$)						VOC/8						On-site				
		VOC/1		VOC/4		VOC/6		VOC/8		Min		Max		Min		Max		
		Min	Max	Average	Min	Max	Average	Min	Max	Average	Min	Max	Average	Min	Max	Average	Min	Max
1,1,1-Trichloroethane	19,000	ND	2.3	1.2	ND	2.9	1.5	ND	5.8	1.7	ND	4.1	1.2	ND	4.1	1.4		
1,2-Dibromoethane	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	
1,2-Dichloroethane	400	ND	0.6	0.4	ND	2.1	0.9	ND	1.3	0.7	ND	2.5	1.2	ND	4.4	1.7		
Benzene	160	ND	4.4	1.0	<0.5	10.1	1.5	<0.5	25.1	2.1	<0.5	13.1	1.5	<0.5	4	1.2		
Butan-2-ol	3,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Buthane-thiol	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Butyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbon Disulphide	255	ND	0.9	0.9	ND	41.2	26.0	ND	5.5	5.1	ND	6.7	6.7	ND	6.8	6.3		
Carbon Tetrachloride	126	ND	3.5	1.1	ND	0.9	0.7	ND	1.3	0.8	ND	5	1.2	ND	3.8	1.6		
Chloroform	98	ND	67	9.5	ND	409.2	36.1	ND	19.1	3.4	ND	30.2	11.0	ND	67	17.2		
Decane	1,000	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dichlorobenzene	1500	ND	29	4.1	ND	95	19.3	ND	65	5.6	ND	137	13.8	ND	4	1.5		
Dichlorodifluoromethane	49,500	1	37.1	3.7	ND	450	27.1	ND	159.4	11.0	ND	490	25.9	ND	8.1	1.9		
Dimethyl Sulphide	11	ND	ND	ND	ND	2.4	5.0	ND	0.7	0.7	ND	ND	0.4	ND	0.2	0.2		
Di-n-Propyl Ether	2700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethanethiol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethanol	1,900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethyl Butyrate	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethyl Propionate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethylbenzene	1,000	ND	160	14.1	ND	268	28.3	ND	562	32.3	ND	182	17.8	ND	16.7			
Heptane	16,000	ND	21.9	7.2	ND	<1	0.8	ND	34	17.8	ND	49	17.0	ND	47.9	21.6		
Limonene	57	ND	5.2	5.2	ND	ND	ND	ND	3.5	3.5	ND	2	2.0	ND	ND	ND		
Methane	-	<1	480	31.2	<1	250	48.7	<1	97.9	21.1	<1	436.7	34.4	<1	130	10.2		
Methanethiol	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Methanol	2,600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methyl Butyrate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methyl Propionate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene Chloride	3,500	<0.4	557.3	49.5	<0.4	174	28.9	<0.4	104.2	17.1	ND	680.6	97.9	<0.4	2885	197.5		
n-Butyl Acetate	1,500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Nonane	24,000	ND	5	1.8	ND	29	7.9	ND	<0.9	<0.9	ND	<0.9	<0.9	ND	26	16.0		

Pollutant	Trigger Level	Monitored VOC Concentration ($\mu\text{g m}^{-3}$)						On-site					
		VOC/1		VOC/4		VOC/6		VOC/8		VOC/12		VOC/16	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Average
Octane	14500	ND	13	4.5	ND	3	1.8	ND	37	25.9	ND	30	12.2
Propyl Benzene	196	ND	74.9	11.1	<0.8	605.1	42.3	ND	340	31.0	ND	280	24.0
Propyl Propionate	56,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	282
Terpenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	3,350	ND	94.5	10.1	ND	19.5	6.3	ND	24.5	3.8	ND	11.5	6.1
Toluene	1,880	4	124	24.2	<0.5	463	89.6	<0.5	1003	74.2	<0.5	423	55.0
Trichloroethylene	5,350	ND	2.2	1.4	ND	6	3.1	ND	4.8	2.8	ND	4.4	2.0
Undecane	1,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.2
Vinyl Chloride	78	0.4	0.4	ND	9.5	4.2	ND	36.5	5.1	ND	4.9	3.5	ND <0.3
Xylene	4,350	ND	200	16.7	<0.5	479	50.1	<0.5	941	54.4	<0.5	271	29.8
												<0.5	20.0
													22.8

Notes:

- (a) "ND" means Not Detectable.
- (b) Bold and underlined figure indicates the exceedance of the trigger level.

59. The meeting was resumed at 3:45 p.m. on 9.12.2011.

60. The following Members and the Secretary were present in the afternoon session of the meeting:

Mr. Thomas Chow Chairman

Mr. K.Y. Leung

Professor Edwin H.W. Chan

Professor Eddie C.M. Hui

Dr. James C.W. Lau

Mr. Roger K.H. Luk

Ms. Anita W.T. Ma

Professor S.C. Wong

Ms. Pansy L.P. Yau

Principal Environmental Protection Officer (Strategic Assessment),
Environmental Protection Department

Mr. H.M. Wong

Deputy Director (General), Lands Department

Mr. Jeff Lam

Director of Planning

Mr. Jimmy Leung

Agenda Item 3

[Open Meeting (Presentation and Question Session only)]

Consideration of Representations and Comment to the
Draft Tseung Kwan O Outline Zoning Plan No. S/TKO/19
R1, R2(part), R3(part), R4(part) and C12
(TPB Paper No. 8940)

[The hearing was conducted in Cantonese.]

Presentation and Question Session

61. The Chairman said that the agenda of the resumed meeting at 3:30 p.m. on 9.12.2011 was already published on the Board's website. As sufficient notice had been given to all the representatives and commenter, Members agreed to proceed with the hearing in their absence.

62. The following representatives of the Planning Department (PlanD), Environmental Protection Department (EPD), Transport Department (TD), Architectural Services Department (ArchSD) and Radio Television Hong Kong (RTHK) were invited to the meeting at this point:

- | | |
|------------------------|--|
| Mr. Ivan M.K. Chung | - District Planning Officer/Sai Kung and Islands (DPO/SKIs), PlanD |
| Mr. Wilfred C.H. Cheng | - Senior Town Planner/Tseung Kwan O, PlanD |
| Mr. Stephen K.S. Lee | - Town Planner/Tseung Kwan O, PlanD |
| Dr. Ellen Y.L. Chan | - Assistant Director (Environmental Infrastructure), EPD |
| Mr. Lawrence M.C. Lau | - Principal Environmental Protection Officer (Waste Facilities), EPD |
| Mr. Tommy K.L. Lai | - Senior Environmental Protection Officer (Waste Facilities), EPD |
| Ms. Heidi M.C. Lam | - Environmental Protection Officer (Waste Facilities), EPD |

Mr. Wallace Y.M. Yiu	- Environmental Protection Officer (Waste Facilities), EPD
Mr. Ma Kwai Loeng	- Senior Engineer/Housing & Planning/New Territories East, TD
Mr. Stephen H.L. Tsang	- Senior Project Manager, ArchSD
Mrs. Fiona Chak	- Departmental Secretary, RTHK

63. The Chairman extended a welcome and explained the procedures of the hearing. He then invited DPO/SKIs to brief Members on the representations and comment.

64. With the aid of a powerpoint presentation, Mr. Ivan Chung, DPO/SKIs made the following main points as detailed in the Paper:

Background

- (a) on 13.5.2011, the draft TKO OZP No. S/TKO/19 was exhibited for public inspection under section 7 of the Town Planning Ordinance;
- (b) the amendments were related to the rezoning of a site to the south of the TKO sewage treatment works in Area 85, TKO from “Other Specified Uses” annotated “Sewage Treatment Works” (“OU(STW)”) to “Government, Institution or Community (9)” (“G/IC(9)”) for the proposed RTHK new broadcasting house and undesignated Government, institution and community (GIC) uses;
- (c) during the two-month exhibition period, a total of 4,095 representations (i.e. R1 to R4095) were received. On 12.8.2011, the representations were published for three weeks for public comments and 18 comments were received;
- (d) on 14.1.2011, the Board decided that R2(part), R3(part), R4(part) and R5 to R4095, which opposed the proposed South East New Territories

Landfill Extension (SENTLFx) in Area 137, TKO and the proposed refuse collection point (RCP) in Area 72, TKO, and/or expressed views on matters in TKO South, were invalid as they were not related to the amendments in the draft TKO OZP No. S/TKO/19. The Board also agreed to consider the valid representations R1, R2(part), R3(part) and R4(part) and the related comment C12 with respect to Amendment Item A collectively;

The Representations

- (e) R1 to R4 were submitted by Designing Hong Kong Ltd., Tim Lo, Chau Yin Ming, Francis (Sai Kung District Councillor) and Fong Kwok Shan, Christine (Sai Kung District Councillor) respectively;
- (f) R1 supported the southern part of the “G/IC(9)” zone for the RTHK new broadcasting house but objected to the northern part of the “G/IC(9)” zone for undesignated GIC uses; while R2(part), R3(part) and R4(part) supported the “G/IC(9)” zone for the RTHK new broadcasting house and undesignated GIC uses;

Grounds of the Representations

Supportive

- (g) the reprovisioning/relocation of the RTHK broadcasting house in Area 85, TKO was supported;
- (h) the removal process of the RTHK complex to TKO could be expedited so that the vacated RTHK site in Kowloon Tong could be released for other developments;
- (i) more land was reserved for undesignated GIC uses to meet future demand;

Opposing

- (j) the whole representation site and its surrounding areas had potential to become a media hub. The media and its associated industries could attract talents in media, digital technology and visual arts, and facilitate creative industry development in Hong Kong;

Representer's Proposal

- (k) in order to facilitate the development of the media industry, R1 suggested deleting the proposed undesignated G/IC site in Area 85 (2.64ha) and retaining the “OU(STW)” zone for the northern part of the representation site. R1 considered that the planning permission system would not only provide an effective control on the future land use but also allow flexibility;

Comment on the Representations

- (l) Comment No. C12 supported the development of the RTHK broadcasting house in TKO whilst opposing the proposed SENTLFx in Area 137, TKO and the proposed RCP in Area 72, TKO. The second part of C12 relating to the proposed SENTLFx and RCP was considered invalid by the Board on 14.10.2011;

The Representation Site and its Planning Intention

- (m) the RTHK broadcasting house was once proposed to be relocated to another “G/IC” site of about 1.74ha in TKO. In view of the demand for new services, particularly the provision of digital terrestrial TV services, the original site was considered too small and unsuitable for the development of the RTHK new broadcasting house. The southern part of the representation site (about 3.14ha) was subsequently identified as suitable for the proposed RTHK new broadcasting house;

- (n) as advised by the Director of Environmental Protection Department (DEP), the representation site was no longer required for the future expansion of the TKO sewage treatment works;
- (o) after allocating adequate land for the proposed RTHK new broadcasting house, the remaining land (about 2.64ha) not required for the expansion of the TKO Sewage Treatment Works was reserved for undesignated GIC uses or information technology and telecommunications related uses subject to further assessments;
- (p) the representation site was already formed and currently occupied by temporary public car park, open storage and bus depots;
- (q) to the north of the representation site was the existing TKO sewage treatment works; to the west across Wan Po Road was LOHAS Park; to the southwest was a temporary public car park; to the south was TKO Industrial Estate; and to the east was the TKO Stage II/III Landfill currently under restoration by the Environmental Protection Department;
- (r) the planning intention for “G/IC” zone was primarily for the provision of GIC facilities serving the needs of the local residents and/or a wider district, region, or the territory. It was also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments;
- (s) it was stated in the Explanatory Statement (ES) of the Plan for the “G/IC(9)” sub-area that due to proximity of this sub-area to the areas for broadcasting, innovation and technology industries in TKO, information technology and telecommunications related uses might be permitted by the Board upon application;

PlanD's Responses

- (t) the support of R2(part), R3(part), R4(part) on the “G/IC(9)” zone and the support of R1(part) and C12(part) on the southern part of the “G/IC(9)” zone for the RTHK new broadcasting house were noted;
- (u) PlanD's responses to R1 regarding his objection to the northern part of the “G/IC(9)” zone were as follows:
 - (i) the site was not required for future upgrading or expansion of the sewage treatment works. The planning intention of the “OU(STW)” zone to provide land for the said purpose was no longer relevant. Rezoning the site to “G/IC(9)” reflected the latest planning intention to reserve the site for unforeseen GIC and information technology and telecommunications related uses;
 - (ii) there was no provision for development of media, information and telecommunications related and creative industries under the “OU(STW)” zoning; and
 - (iii) the “G/IC(9)” zoning was more appropriate in that the media, information and telecommunications related and creative industries uses were either uses always permitted or might be permitted on application to the Board. The area's potential of attracting media, information technology and telecommunications related industries had already been reflected in the ES of the Plan for the “G/IC(9)” zone which stated clearly that “due to proximity of this sub-area (“G/IC(9)” zone) to the areas for broadcasting, innovation and technology industries in TKO, information technology and telecommunications related uses might be permitted in this sub-area on application to the Board”;

PlanD's Views

- (v) the support of R2(part), R3(part), R4(part) on Amendment Item A and the support of R1(part) and C12(part) on the southern part of Amendment Item A were noted;
- (w) R1's objection to the northern part of Amendment Item A for undesignated GIC uses was not supported and R1's proposal should not be upheld for the reasons given in paragraph 7.2 in of the Paper; and

Decision Sought

- (x) the Board was invited to give consideration to the representations and comment and decide whether to propose any amendment to the Plan to meet/partially meet R1.

65. As Members had no question to raise, the Chairman thanked the representatives of PlanD, EPD, TD, ArchSD and RTHK for attending the meeting. They all left the meeting at this point.

Deliberation Session

66. Members agreed that the deliberation for the representations and comment to OZP No. S/TKO/19 should be adjourned. The Secretary would inform Members of the meeting date in due course.

67. The meeting was adjourned at 3:55 p.m..