



Message from the Editor:

This Newsletter requires your participation. We would like to hear your experience in implementing good waste management practices in Hong Kong or overseas. If you have an interesting story to tell, please write to me at barry_adcock@swiresita.com

Name Your Newsletter

The HKWMA's newsletter does not have a name. Members are invited to submit their suggestions for consideration by the Executive Committee.

The editor's suggestion is "Waste Line". A former Chairman of the Association has rather unkindly suggested that it should be called "News Later" to reflect the time it's taken the editor to get out this edition.

Whatever, please let us have your suggestions.

Visit to Xiaping Landfill, Shenzhen in December 2007

HKWMA led a group of 13 members to the Xiaping Landfill Site in Shenzhen, Guangdong Province on 15 December 2007. The landfill is currently receiving over 3,000 tonnes of municipal solid waste and 500 tonnes of sludge on a daily basis with a total design capacity of 50 million cubic meters. It is one of the largest MSW landfills in China, and is also the second largest landfill Clean Development Mechanism (CDM) project successfully registered today in China under the Kyoto Protocol.



Desk-top Introduction

Members were first provided with a desk-top introduction to the landfill and the basic background information of CDM, followed by field visits to several locations on the site including the active tipping face, the leachate treatment plant, the compressed purified landfill gas (CPLG) system, the landfill gas flares and the electricity generation system. The leachate treatment plant is capable of treating 1,000 m³/day of influent using the sequential batch reactor (SBR) biological technique. The current landfill gas generation rate is over 2,000 m³/hr at ~55% CH₄, supporting a 3 MW grid-connected electricity generation system, and a flare system to thermally destroy any residual landfill gas. The CPLG system can also produce up to 250 m³ per hour of purified product gas at >90% CH₄ for internal site vehicle use. It is one of the first commercial landfill gas purification facilities to come on-stream in China.

The visit was very interactive and was well-received, providing all members with an updated perspective of the current landfill management practices and commercial drivers/incentives in China.



Overview of the Active Tipping Face



Leachate Treatment Plant



Landfill Gas-fueled Engines Supplying Electricity to the Shenzhen City Grid



Group Photo in front of the Landfill Gas Flaring System



Green Carnival 2008

On 27 January 2008, the Green Council hosted a Green Carnival at Wanchai Sports Ground. This was the fourth time HKWMA participated as a supporting organization in this annual event. Thousands of students and their family members attended this fun day.



Carnival Opening Ceremony : HKWMA Chairman on Far Left

Ms Audrey Eu, Chairman of the Environmental Affairs Panel of the Legislative Council officiated at the opening ceremony with other guests. The theme of this year's Carnival was "A Green New Year". HKWMA Chairman, Dr Albert Koenig, took part in the Fai-Chun opening gimmicks with a number of guests. Other programme activities of the day included stage performances, game booths and educational displays. Mr C.F. LAM led a team of volunteers and boy scouts to set up a booth for HKWMA where displays for sustainable waste management facilities and a recycling game were open to visitors. The highlight of the Carnival was the "Eco-model Tournament 2008" which was a rubber band-powered hovercraft competition. Primary and secondary schools were invited to design and fabricate their rubber band-powered hovercraft from recyclable materials. The one able to travel the longest distance was the champion. Mr C.F. LAM formed part of the adjudication team to select the hovercraft with the most innovative design with good use of recycled materials.

All the participants and visitors enjoyed a fun but cool day! They brought home the message of waste reduction and recycling.



Chairman, Training and Education Co-ordinator and 'Helpers' in front of HKWMA Booth

Technical Seminar on Eco-Park in Tuen Mun Area 38 : 18 December 2007

EcoPark is a 20 ha waterfront site located in Tuen Mun Area 38. EcoPark is similar in concept to a business park but is for the exclusive use of the recycling and associated industries involved in the management of waste generated in Hong Kong. The purpose of EcoPark is to provide long-term land at an affordable rental with the provision of basic infrastructure under the day-to-day management of an experienced facilities management company.

The presentation which was co-organised by HKWMA and the Chartered Institution of Water and Environmental Management (CIWEM), briefly examined the issues related to the history of EcoPark, its design, construction and operation. The presentation was given by Alexi Bhanja, HKWMA Immediate Past Chairman; author of the EcoPark Preliminary Feasibility Study, the EcoPark EIA and the EcoPark Landuse Rezoning Reports; the Operator's environmental consultant; and former member of Government's EcoPark Advisory Committee.

The history of EcoPark examined the need for the facility and described the studies that were undertaken; the design and construction of EcoPark examined the rationale for the layout of the site, and in particular addressed the environmentally sustainable design aspects included in its construction; and the operation of EcoPark reviewed the tendering process adopted for tenants, the difficulties encountered and the successes to-date of the project.



Administration Building at EcoPark

It was concluded that EcoPark is a positive step forward towards more sustainable waste management in Hong Kong and that when landfill charging for Municipal Solid Waste (MSW) comes into effect, this will further strengthen the role of EcoPark as a key piece of Hong Kong's waste management infrastructure.



Technical Visit to North East New Territories (NENT) Landfill - Landfill Gas (LFG) Treatment Unit (TU)

A technical visit was organized to North East New Territories (NENT) Landfill for 19 participants on Saturday 13 Oct 2007. In the visit, Far East Landfill Technologies Ltd. – Project Manager, Mr. Benny CT Liu and Towngas – Mr. Vincent Ng gave the visitors a comprehensive presentation of the NENT Landfill Gas Export Project.



Far East Landfill Technologies Ltd. – Project Manager, Mr. Benny CT Liu gave us a presentation inside the conference room

NENT Landfill Gas Export Project is based on a Sales Contract between Far East Landfill Technologies Ltd. (FELT) and the Hong Kong and China Gas Co., Ltd. (HKCG). The scope of this project is to supply treated landfill gas to the Towngas Production Plant at Tai Po to be used as heating fuel in the towngas production process. The project execution included the design and construction of a Landfill Gas Treatment Unit and a 19 km long underground gas pipeline from NENT landfill to the Towngas Plant at Tai Po.



Landfill Gas Treatment Unit

State-of-the-art technologies have been adopted to construct the landfill gas treatment unit (TU) at NENT landfill. The TU removes hydrogen sulphide (H₂S), water, heavy non-methane hydrocarbons, carbon dioxide (CO₂) and other unwanted gases from the LFG to leave a product gas containing over 85% methane (CH₄). The treated landfill gas then has

THT added to it to give it a characteristic “Towngas” odour. Now classified as synthetic natural gas (SNG) it is supplied through the 19 km long underground pipeline to the Tai Po Towngas Plant.

During the visit, Mr. Benny CT Liu guided the participants to see the operation of the landfill site and showed us the Landfill Gas Treatment Unit. On behalf of the HKWMA, we take this opportunity to give many thanks to Mr. Benny CT Liu (FELT) and Mr. Vincent Ng (Towngas) for their warm hospitality.



Photos of North East New Territories (NENT) Landfill



Group photo taken at the Landfill Gas Treatment Unit



Site Visit to Sunburst Biotechnologies Ltd. Vermiculture Facility at Ma On Kong near Kam Tin, New Territories

On the morning of Saturday, 15 March 2008, Events Manager Mr. Frank Wan led a technical visit of 20 HKWMA members to visit the operations of Sunburst Biotechnologies Ltd.

The party of visitors was first given an introduction to Sunburst's techniques by Mr. David Ellery, Managing Director, who later took the visitors on a tour of the facility.



Sunburst Technologies Managing Director, Mr. David Ellery, briefing the HKWMA visitors

Sunburst started operations in Australia in 1997 using earthworms to treat organic waste to give a valuable product, organic fertiliser. The first commercial demonstration plant in Australia started operation in 1999. Sunburst came to Hong Kong to explore the Asian market in 2006. The original technique in Australia made use of clean organic waste. "Clean" organic waste means that up to 20% of contamination can be accepted. Sunburst see Hong Kong as being a very good location for their process because there are many organisations in a small area producing clean, unmixed, waste; companies like Disney, the Hong Kong Jockey Club, Cathay Pacific, Hong Kong Bank, Ocean Park and McDonalds (from which Sunburst takes organic waste from twenty stores at present with the intention to eventually take waste from all 210 no).

Sunburst's procedure for linking up with a new customer starts with a desktop audit followed by a physical audit including a determination of the carbon/nitrogen ratio as well as a check that there is no chemical or metallic contamination of the waste. If all these items check out, then the waste is accepted for processing into organic fertiliser. Because there is no landfill charge in Hong Kong, Sunburst has to appeal to customers who want to recycle waste and produce a valuable end product for environmental / sustainability reasons rather than, or as well as, commercial ones.

All incoming waste is weighed in over a weighbridge and it is then stacked in two separate areas : a carbon-based area for animal manure and a nitrogen-based area for food waste etc. The two materials are then blended together in a hyper-processor mixer to give an homogenised material with the optimum C/N ratio for the vermiculture process. Following the mixing the biological process starts. The mixed waste is dewatered by a belt process to 60-70% moisture content. It then sits for 7 to 10 days for preliminary composting.



Delivery of Raw Material : Horse Manure with Shredded Paper Bedding



Mixer for Blending Raw Materials into Mixture with Optimum C/N Ratio



Vermiculture is not thermophilic, it is a cold process. The blended waste material is put in at the top of the processing vessel and the worms eat the waste in the top 200 mm of the vessel. The worm castings are then sliced off the bottom of the vessel. The product, the worm castings, is black and has very concentrated nutrients, about seven times more than thermophilic compost. The product is then blended to suit each particular client's needs. Some clients need a fungal-dominated product whereas others require it to be bacterial-dominated. Which one is chosen depends on the plants to be grown; whether grass turf for recreational purposes or vegetables for human consumption etc. The castings can also be converted into a liquid organic fertiliser which is easier to use than the solid product. The liquid version of the fertiliser is made by leaching the solid (vermicasts) product.

Mr. Ellery emphasised that Sunburst is a fertiliser producer whereas the press in Hong Kong have built them up as a recycler / waste treatment facility, but that's just their raw material. Their business is the production of high quality organic fertiliser. Their product has full certification from the Australian NASAA. Earthworms destroy pathogens very effectively, including e-coli, and therefore the bacterial content of the feed waste is almost completely removed in the vermicasts.

If the throughput of a vermiculture process is increased, then the worms will breed to cope with the extra food input. The system is therefore self-regulating. Depending on the feedstock and the weather, the complete process of turning waste into organic fertiliser takes 40 – 45 days. Tolerable temperature limits for the worms are 8 °C to 35°C. The temperature is controlled by controlling the moisture content of the feed material and the oxygen content. Worms can live for about five years but if they are worked very hard, they will die in an average of 12 months.

One point that has to be borne in mind with using animal waste as a feedstock for the process is that any anti-worming treatments given to animals can devastate the earthworms, if the manure is used unchecked. Accordingly, if any suspect animal manure is delivered for treatment, a small trial is done first. If the material is chemically contaminated and is poisonous to worms, the worms will not enter the material.

The usual depth for a vermiculture container is 900 to 1,000 mm. If it is made any deeper, the material can become anaerobic and the worms would die because they need oxygen. Production vermiculture units for industrial application are about 6 m wide and 100 m long. In Australia, small domestic units are also produced for individual dwellings and farms. The usual population of worms in the process vessel is 5,000 worms per kg of material. The best ratio of carbon to nitrogen material for making good organic fertilizer is approximately 30 carbon to 1 nitrogen i.e. 30 manure to 1 food waste. 60% of the waste input

to the process is turned into verimcast. The balance is used to provide energy to the worms.

Sunburst's demonstration plant in Hong Kong presently has an intake of 50 tonnes of organic waste a day but they are now ramping up the operation to be able to take 200 tonnes a day. Sunburst's facility was running for 12 hours a day, 7 days a week and that was soon to be stepped up to 16 hours a day. The facility could run 24 hours a day if the demand was there. The ideal throughput for a typical vermiculture processing plant is 200 to 400 tonnes per day.



Demonstration / Domestic Size Vermiculture Fertiliser Production Unit



The Worms at Work in the Demonstration Unit

Sunburst's plant near Kam Tin is in an old pig farm. Their ideal would be to site their facility on a landfill but they had not been able to make the necessary arrangements so far.



Certificate Course on Waste & Environmental Management

The second round of the Certificate Course on Waste & Environmental Management was successfully run by HKWMA in collaboration with CityU from 8 December 2007 to 16 February 2008. A total of 13 practitioners in the environmental and related fields attended this training course offered by a number of eminently qualified speakers from government, consultants, waste management contractors and a power company. The course aimed to equip participants with the necessary skills to apply and integrate theoretical and practical environmental management knowledge for effective participation in project teamwork. One of the main focuses of the course was the sustainable management of solid waste which is a big challenge facing us today.

This course was designed for those who need to formulate company environmental policy or improve their environmental performance. It started with the fundamental concepts of environmental management, pollution prevention and control followed by waste management policy, treatment and disposal methodologies to procurement and financing options for waste management facilities. To supplement classroom training and experience sharing, technical visits were also arranged for the participants to enhance their knowledge of the operation of waste management facilities including automatic refuse collection system, refuse transfer station and landfill. Based on a holistic approach, which integrates science, technology, legislation, economics, society and environment, the participants were provided with a convenient and formal qualification addressing government policy and legislation as well as business ethics.



Course Participants in front of the Gas Treatment and Utilisation Facility during a Study Visit to WENT Landfill

After rigorous training and assessment, all the participants were presented with Certificates of Performance or Certificates of Attendance at the HKWMA Annual Cocktail Reception held at the Hong Kong Club on 29th April 2008. They became members of HKWMA with a subscription fee waiver for one year. The qualification is also recognized under the Government's Continuing Education Fund Scheme.



Some of the Course Participants with their Lecturers after Receiving their Certificates at the HKWMA Spring Reception held on 29 April 2008

Report on "Technical Seminar of the Xiaping Landfill CDM Project"

Following a site visit to the Xiaping Landfill Site in Shenzhen on 15th December 2007, HKWMA, in association with the Research Center for Environment Technology and Management of PolyU, organized a technical seminar on 13th March 2008 to further present and discuss the said landfill gas utilization project under the Clean Development Mechanism (CDM) in a classroom environment.

Mr. Louis Chan (vice-chairman of HKWMA) first provided the audience with an overview of the Kyoto Protocol and the CDM framework, and then followed by an in-depth presentation on the Xiaping project. The seminar was well received by over 30 participants, and proactive discussions were initiated by numerous members of the audience during the Q&A session.

With the recent implementation of CDM projects in Hong Kong announced in early June 2008, the technical seminar provided HKWMA members and participants with the latest industrial insights, and to better prepare themselves for the upcoming opportunities and challenges in the carbon market.



Technical Seminar on Green Purchasing, 23rd April 2008

• **Green Purchasing – The Environmental Context**

For many years, environmental purchasing or green purchasing has been a much-neglected subject. However since the last decade, it has been widely discussed, presented and even promoted. This is probably due to many public and private organizations now showing an increasing interest in environmental issues, or as a part of an engagement with the wider context of “sustainable development” and / or “corporate social responsibilities”. Moreover, green purchasing makes the connection between supply chain management and environmental management systems (EMS). An EMS requires the identification and evaluation of significant environmental aspects and this in turn becomes part of supply chain and contractor management.



Miss Linda Ho being Presented with a Souvenir by HKWMA Exco Member, Mr. C. M. Choi, in the Presence of Ir. P. K. Lee of HKIE Environmental Division

• **What is green purchasing?**

Green purchasing is not an easy subject to fully understand and practise effectively. It is mostly explained as a combination of both product specifications and supplier environmental performance. It can be interpreted from simply buying recycled papers and selecting energy efficient appliances to incorporating “Design for the Environment” principles into a product. Sometimes, it may even involve a whole life costing and financial evaluation.

• **Green Purchasing : Policies, Trends and Practices**

On 23 April 2008, Hong Kong Waste Management Association and the Hong Kong Institution of Engineers jointly organized a seminar and invited Ms. Linda Ho, Chief Executive Officer of the Green Council, to share her experience on green purchasing for a topic entitled “Overview on Green Purchasing - policies, trends, practices and influence in Hong Kong”.

Ms. Ho explained how green purchasing had become a tool for environmental protection through encouraging the development of environmentally preferable products and services outside industries and enhancement of product circulation. She also pointed out that many countries, including China, Japan, Korea, etc., had put in place green purchasing regulations to facilitate its implementation and similar policies were also established in Europe and America.

In summary, this seminar provided an insight on world policies, trends and practices on green purchasing, particularly in public procurement and how such demand affects private procurement and the environmentally preferable product industry.

About 30 participants joined this seminar.



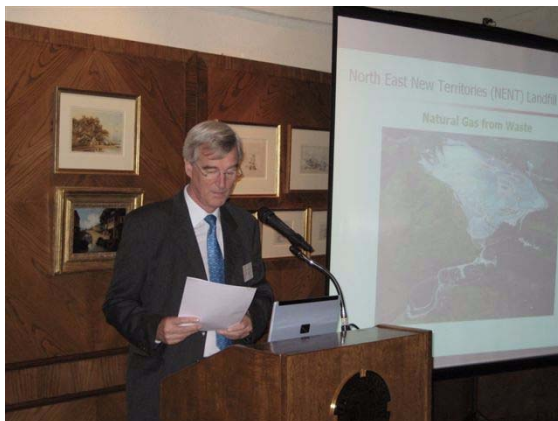
Spring Reception

On 29 April 2008 some 50 members of HKWMA and their guests gathered in the Hong Kong Club for the Association's Annual Spring Reception. In his introduction, the Chairman of the Association, Professor Albert Koenig, welcomed members and guests to the reception and reminded them of other forthcoming events.



Members and Guests at the Reception

The Chairman then invited Mr. Barry Adcock, General Manager of Far East Landfill Technologies Ltd. (FELT) and a member of the Association's Executive Committee, to present a talk titled "NENT Landfill : Natural Gas from Waste". In his talk, Mr. Adcock gave a general description of the scheme which had been running at NENT Landfill for a little under a year to convert landfill gas extracted from the landfill into synthetic natural gas (SNG) which is supplied to Hong Kong and China Gas Company Ltd. (Towngas) through a 19 km long pipeline to their Towngas production facility at Taipo Industrial Estate. The project has been jointly undertaken by Towngas and FELT. The project was sanctioned by EPD under the landfill main contract and the Government receive a royalty from any profit made by FELT from the sale of SNG to Towngas.



Mr. Adcock giving a Presentation titled "NENT Landfill : Natural Gas from Waste"

The Landfill Gas Treatment Unit, which converts landfill gas into synthetic natural gas, was designed and built by Towngas for FELT who now operate the plant. The presentation explained the technology used for the treatment of the gas including the use of proprietary iron oxide to remove hydrogen-sulphide, temperature swing adsorption to remove non-methane hydro-carbons and pressure swing adsorption to remove carbon dioxide from the incoming landfill gas to leave a methane-rich product. Typically the landfill gas collected from the NENT landfill contains some 55% of methane whereas, after it has passed through the treatment unit, the proportion of methane in the product SNG is in the order of 85 – 88%. The product SNG is colourless and virtually odourless. Before it enters the pipeline to go to Taipo, it is therefore injected with THT, a synthesised chemical which gives the gas the characteristic odour that people associate with the original Towngas made from coal. This precaution ensures that any leaks of SNG are quickly recognised by members of the public.

The SNG is used at Taipo to replace a proportion of the LNG feedstock which is burnt in the Towngas production process to provide thermal energy for the conversion of LNG to Towngas. The initiative at NENT Landfill, therefore, uses a renewable resource, landfill gas, to replace a non-renewable fossil fuel, LNG.

After the end of the presentation, the Chairman, Professor Albert Koenig, and Professor Andrew Layfield from City University, presented certificates to students who had recently successfully completed the HKWMA / City University second course on Waste and Environmental Management.



Participant in the Second Certificate Course on Waste and Environmental Management Receiving her Certificate from Prof. Andrew Layfield of City University (L) and Prof. Albert Koenig, Chairman of HKWMA (R)



Participants in the Second Certificate Course on Waste and Environmental Management Receiving their Certificates from Prof. Andrew Layfield of City University (L) and Prof. Albert Koenig, Chairman of HKWMA (R)

After the students had received their certificates, all present moved on to the principal purpose of the evening, enjoying the fellowship of the other members and guests and the excellent cocktails and snacks provided by the Hong Kong Club.

New Association Logo

Members have commented in recent years that the HKWMA logo was starting to look a little dated and, when photo-reduced, it was not very clear or distinctive. Accordingly the Executive Committee began to consider the adoption of a new logo which would be clearer and more readily recognisable than the existing one, both at full size and when photo-reduced.

A former Chairman of the Association, Mr. James Tam, volunteered the services of his wife, Satu, to put in the creative thinking and to prepare alternative new logo designs for consideration. One of the proposed new logos was selected by the Executive Committee and further developed. The new logo set out to be simpler than the original and to focus on the Association's main mission of waste management which is represented by the recycling icon. The circular shape of the logo has been retained but with the addition of a rectangular box bearing the initials of the Association, "HKWMA". The principal colours of the proposed new logo are greens which reflect the Association's contribution to the protection of the environment in Hong Kong.

The full logo includes a box to the left of the circular device giving the Association's full name in English and Chinese. The "shorthand" version of the logo omits the full names and comprises the circular device with the Association's initials in a rectangular box beneath. The new logo is shown below for members' reference.





PRODUCT RESPONSIBILITY

The following two articles were prepared as briefing papers for the Association's Executive Committee by one of its members. In view of the topicality and importance of the issues addressed in the papers, this edited version is now reprinted in the Newsletter for the information of a wider readership among the Association's membership.

Product Responsibility Schemes (PRS's)

The concept that the decisions made by companies specifying and designing products and their packaging, and by those responsible for wholesale, retail and marketing operations, could have a significant impact on waste generation, has been around for several decades. In some cases, voluntary schemes were set up to manage the process and Government environmental agencies in many countries introduced mandatory schemes. Early examples were mandatory deposits on beverage containers in Oregon and South Australia.

In Hong Kong, the EPD and its predecessors have been monitoring the position and discussing potential programs with industry bodies for almost 30 years. The general approach was the familiar carrot and stick, with the threat being the introduction of a mandatory scheme and the incentive the willingness of EPD to postpone the introduction of a mandatory scheme whilst voluntary approaches are tried.

Over the past few decades, many voluntary schemes have been encouraged, and several have succeeded in becoming established. In the 1980s, EPD had many meetings with the Beverage Manufacturers Association and other beverage industry support groups, in an attempt to promote the recovery and reuse of beverage containers. A few years later, EPD began to promote measures to reduce the generation of waste plastic bags. Whilst the Bring Your Own Bag scheme was fairly successful, efforts in encouraging the reduction of plastic bag use through retail charges, and reduction in the generation of waste beverage containers through voluntary deposits were total failures. Negotiations with the industry followed a similar pattern, whereby no one company was prepared to volunteer to introduce a deposit or fee unless all the competitors also agreed to do so. Where companies set up a unilateral voluntary scheme, they soon folded if their competitors were unwilling to do the same, a good recent example being the plastic bag charge introduced by Park'N Shop. Some low-key voluntary schemes have continued, but their impact on waste generation is very limited.

The more successful schemes have involved specialist sectors and the more environmentally responsible manufacturers and their importing agents. Rechargeable batteries for mobile phones, computers and cameras have been collected in a voluntary scheme supported by the importing agents. Recently, a voluntary trade-funded recycling

programme for used computer equipment was launched, and the HK Chamber of Computer Industry has set up a WEEE Recycling Association to manage the new programme. More details could be located at the website

https://www.wastereduction.gov.hk/en/workplace/crp_intro.htm

Another programme will be launched soon for fluorescent lamps, supported by 15 importers or suppliers. The recovered lamps will be sent to the mercury treatment facility at the Chemical Waste Treatment Centre (CWTC) in Tsing Yi.

Some LegCo members have become very interested in product responsibility, particularly for electronic goods and components. Two LegCo questions on the recovery of used TVs, and the replies by EPD could be found at

<http://www.info.gov.hk/gia/general/200801/30/P200801300186.htm>

<http://www.info.gov.hk/gia/general/200712/19/P200712190224.htm>

Many of the PRS and recovery schemes have been supported by the voluntary effort of NGOs, usually referred to in Hong Kong as the Green Groups, and their contribution is noteworthy.

In December 2005, the EPD published A Policy Framework for the Management of Municipal Solid Waste (MSW) (2005-2014), which can be accessed via the following link:-

http://www.epd.gov.hk/epd/msw/html_en/content.htm

This policy framework included product responsibility in an overall programme for managing MSW. The target programme relating to product responsibility was:-

To introduce a Product Eco-responsibility Bill to LegCo in 2006.

To introduce subsidiary legislation [regulations] mandating PRS for specific products as a priority, according to the following programme:-

- Electrical & electronic equipment 2007
- Vehicle tyres 2007
- Plastic bags 2007
- Packaging materials 2008
- Beverage containers 2008
- Rechargeable batteries 2009

The Product Eco-responsibility Bill was introduced into LegCo at the end of 2007 together with proposed regulations on plastic



bags. However, the regulations as drafted would cover only a minority of the retail outlets using plastic bags. There has been no public indication about the intention or timing in relation to the other priority products mentioned in the framework policy document.

One of the other undertakings in the framework policy document was to implement the polluter pays policy for MSW in 2007 by introducing a bill for a gate fee at the landfills. Hong Kong is perhaps alone among advanced major cities in having completely free disposal for MSW. A landfill charge regulation was passed by LegCo in 1995, but the Government decided not to implement it following protests by waste truckers. The lack of a charge provides a huge incentive to dispose of waste rather than adopting more environmentally friendly alternatives, undermines the market support for recycling, makes product responsibility schemes much more difficult to establish and leads to other market distortions. For instance, several of the EPD refuse transfer stations (RTS's) accept MSW delivered by private contractors collecting commercial and industrial waste (C&I), but there is a charge for such deliveries. Not unexpectedly, most C & I waste is taken direct to landfill, where it may be dumped free of charge. This results in underused capacity at the RTS's and many unnecessary journeys to and from landfills. This is especially evident in the case of the North Lantau RTS, which was designed to handle the MSW from the Tung Chung new town, Chek Lap Kok airport and other areas, but is in practice receiving little more than the domestic waste collected by FEHD and its direct contract service.

A complete list of the targets in the policy framework document may be found at:-

http://www.epd.gov.hk/epd/english/environmentinhk/waste/files/Targets_E.pdf

The Product Eco-responsibility Bill and Regulations to Control Plastic Bags

The proposal was announced by EPD in May 2007. HKWMA and other organisations were invited at that time by the LegCo to provide comments. The then Chairman, Alexi Bhanja, consulted ExCo members and submitted comments by letter on 6 July 2007. The main points made by HKWMA were, to agree that the problem of MSW is serious and a top priority, that the Polluter Pays Principle should be applied properly to MSW, expressing concern at the excessive consumption and disposal of plastic bags but doubting the effectiveness of the proposed regulations in so doing [especially since many of the foregone supermarket bags would be replaced by plastic bags bought as bin liners], querying the government's assertions about the success of such schemes in Taiwan and Ireland [whilst pointing to schemes elsewhere that have succeeded], maintaining that it is inequitable to impose the plastic bag levy on the general public whilst commerce and industry is able to use plastic bags without restriction and is free to dispose of waste at government landfills

without charge, and finally pointing out that the administrative arrangements are confusing and difficult.

The HKIE also submitted some useful comments at that time, mostly complementary to those expressed by HKWMA. One comment made was [similar to HKWMA] that the proposal was discriminatory, covering only a minority of plastic bag use, and targeting the general public whilst leaving much of commerce and industry unaffected. The LegCo picked up these views and proposed that the approach of an umbrella PRS ordinance, with specific controls in regulations, should be replaced by individual bills for each of the priority PRS proposals. That idea was not accepted by the Government and seems to have been dropped.

The LegCo have set up a bills committee, and again invited comments from HKWMA and other organisations, in writing and through attending the committee meeting on 23 February 2008. The HKWMA chairman, Dr Albert Koenig, decided not to add to the comments submitted last year. This is a good, pragmatic approach, because EPD seem to react to criticism of their proposals by delaying actions. In that context, it will be better to see the passing of the bill and regulations, and then to press for further actions under the new umbrella legislation for PRS. Of course, we must not forget the Polluter Pays Principle and the need for the Government to introduce charges for the disposal of MSW at landfills. The Secretary for the Environment, Edward Yau, said recently that the charging proposal is not an immediate priority, and EPD seems accordingly to have put it on the back-burner once more. This is a huge disappointment, because without a proper market it is very difficult to encourage waste producers to make informed environmental decisions. Lobbying for effective charges for MSW disposal should be HKWMA's top priority.



Upcoming Activities

Green Construction Seminar and Site Visit to International Commerce Centre

Members are encouraged to take part in the seminar and site visit on Green Construction being arranged by the Association with the Environmental Division of the Hong Kong Institution of Engineers (HKIE).

The project selected is the International Commerce Centre (ICC), presently under construction on the West Kowloon reclamation which when complete will be the third tallest building in the world. The seminar will be held on Tuesday, 30 September 2008 at 6:30 pm in HKIE headquarters in Causeway Bay at which the speaker will be Ir. Henry Lam of Sanfield Building Contractors Ltd. who are building the ICC. The seminar will be followed by a site visit to ICC on Saturday, 4 October 2008 to see Green Construction in action.

Association Sponsors Delegation to ISWA World Congress

The International Solid Waste Association (ISWA) is holding its World Congress in 2008 in Singapore from 3 to 6 November. To encourage members of HKWMA to take advantage of the World Congress being in our region the Association offered sponsorship for the Congress fee to members who wished to attend. Sponsorship of HK\$5,000 per person was offered for a maximum of 10 delegates. Nine members of the Association applied for sponsorship and all were successful in their applications. The nine members will be forming an HKWMA delegation to the Congress in November. The theme of the Congress is "East Meets Waste".

The Congress shows every sign of being very interesting and relevant to the Association's activities in managing waste in Hong Kong, and all members are encouraged to attend if they can.

Plastic Forum

HKWMA has been invited by the Green Council to co-organize the first Plastic Forum in Hong Kong on 11th November 2008. This forum will provide a platform for the stakeholders in the plastics industry and in waste management to discuss in depth the issues related to plastic usage and recycling such as overseas and local policies and experience, technological advancement and sustainability issues, etc. Details of the forum will be announced shortly.
