

FRED KAN & CO.

Solicitors & Notaries

URBAN PLANNING AND ENVIRONMENTAL LAW QUARTERLY (Published since May 1992)

簡家馳律師行・城規環保簡訊

Although there is a welcome increasing community focus on one of Hong Kong's most serious environmental problems – our poor air quality – other equally serious environmental issues do not get the same level of attention from the government or public. One of these is the security of water supplies for China, Hong Kong and, indeed, the world. In this edition we look at a logical part-solution to the critical problem of diminishing water reserves: recycling waste-water.

The Editors

CONTENTS

 Water down the drain: can we afford not to recycle waste-water?

The world-wide water crisis.

Where will our future supplies of potable water for domestic, industrial and agricultural use come from?

For Hong Kong, this is not a question which is at the forefront of the minds of the government and community. Hong Kong's own water reserves are not nearly sufficient to meet its needs, especially with our population increasing each year. However, we are insulated from what is today a critical problem in virtually every part of the world – diminishing water sources and reserves – by purchasing water from Guandong under a long-term agreement.

As well, the government very sensibly has reduced our reliance on freshwater supplies by using seawater for a significant proportion of toilet flushing requirements.

Whilst the world-wide water crisis may not register as a significant issue with the majority of Hong Kong residents (although it should, for environmental reasons) in China the problem is causing the government a great deal of concern. Recently, for example, it was reported that Beijing will be unable to provide fresh water to its inhabitants within a few short years. This is a situation repeated throughout much of the country. Indeed, more than 600 mainland cities are officially recognised as having a water shortage, and 300 million people have unsafe drinking water supplies.

Consequently, the central government now plans desperate attempts to divert rivers from waterrich areas to water-poor regions. Such schemes, like the construction of huge dams on rivers and transferring water by viaducts over hundreds of kilometres, are almost always unjustifiably costly, ineffective and, especially, are severely damaging to the environment in numerous ways.

Australia, the driest continent on earth, provides another dramatic example of how freshwater shortages has become a critical everyday problem for governments and the community. It is no longer an issue concerning only far-sighted scientists and environmentalists.

Most of Australia's huge territory is currently suffering prolonged drought conditions, the worst in 100 years or so. Global warming is one of the causes. Whatever the causes might be, it is now a chilling reality in Australia that both rural areas, major metropolitan centres and regional towns will be unable to sustain their demands for freshwater within a few years. In capital cities, reservoirs are at 30% or less maximum capacity. Even when (if ever) at full capacity, reserves of water are now barely sufficient for current population levels. This is a problem for many cities throughout the world. Australia and China provide just two, prominent examples of the modern day water crisis.

To overcome inadequate water supplies, China appears to be favouring the huge infrastructure approach referred to above. In Australia, where the supply of water is largely a state government responsibility, the various state governments are heading in different directions. Some will build more dams; some will invest in large desalination plants; and at least one will place more reliance on drawing water from rivers, which comes

at considerable environmental costs and is unpopular with the majority of people. In addition to such measures, all levels of government have imposed severe restrictions on the use of water.

As in other parts of the world, several Australian governments have also decided to implement large-scale recycling of wastewater as the principal method of increasing freshwater supplies. Among the known, technically practicable solutions, recycling of water is undoubtedly the optimum option, both environmentally and, usually, economically as well

What is water recycling?

So, what is water recycling? The U.S. Environmental Protection Agency ("EPA") explains it as follows:

Recycle: verb a) to recover useful materials from garbage or waste; b) to extract and reuse.

While recycling is a term generally applied to aluminum cans, glass bottles, and newspapers, water can be recycled as well. Water recycling is: reusing treated wastewater for beneficial purposes such as agricultural and landscape irrigation, industrial processes, toilet flushing, and replenishing a ground water basin (referred to as ground water recharge). Water is sometimes recycled and reused onsite; for example, when an industrial facility recycles water used for cooling processes. A common type of recycled water is water that has been reclaimed from municipal wastewater, or sewage. The term water recycling is generally used synonymously with water reclamation and water reuse.

"Unplanned water recycling" occurs when water is drawn from a river into which waste-water has been dumped upstream. "Planned water recycling" is where a town or city develops facilities for capturing, treating and reusing water which has already been used by its inhabitants. We are referring to, and advocating the virtues of, planned recycling in this article.

A water recycling scheme typically comprises three treatment stages :

- a primary water collection pond where sedimentation treatment occurs
- secondary treatment consisting of biological oxidation disinfection
- tertiary, advanced treatment by chemical coagulation, filtration and disinfection

Water in the primary treatment stage cannot be used. Secondary treated water can be used for: irrigating non-food crops; supplementing water sources for wetlands and ground-water recharge; industrial cooling processes; and similar uses. Water which has passed through the advanced treatment stage is suitable for drinking and, therefore, for augmenting drinking water supplies.

Environmental benefits of water recycling.

The EPA describes environmental benefits of a water recycling system as follows:

Take pressure off ecosystems.

In addition to providing a dependable, locally-controlled water supply, water recycling provides tremendous environmental benefits. By providing an additional source of water, water recycling can help us find ways to decrease the diversion of water from sensitive ecosystems. Other benefits include decreasing wastewater discharges and reducing and preventing pollution. Recycled water can also be used to create or enhance wetlands and riparian habitats.

Water recycling can decrease diversion of freshwater from sensitive ecosystems.

Plants, wildlife, and fish depend on sufficient water flows to their habitats to live and reproduce. The lack of adequate flow, as a result of diversion for agricultural, urban, and industrial purposes, can cause deterioration of water quality and ecosystem health. Water users can supplement their demands by using recycled water, which can free considerable amounts of water for the environment and increase flows to vital ecosystems.

Water recycling decreases discharge to sensitive water bodies.

In some cases, the impetus for water recycling comes not from a water supply need, but from a need to eliminate or decrease wastewater discharge to the ocean, an estuary, or a stream. For example, high volumes of treated wastewater discharged from the San Jose/Santa Clara Water Pollution Control Plant into the south San Francisco Bay threatened the area's natural salt water marsh. In response, a \$140 million recycling project was completed in 1997. The South Bay Water Recycling Program has the capacity to provide 21 million gallons per day of recycled water for use in irrigation and industry. By avoiding the conversion of salt water marsh to brackish marsh, the habitat for two endangered species can be protected.

Recycled water may be used to create or enhance wetlands and riparian (stream) habitats.

Wetlands provide many benefits, which include wildlife and wildfowl habitat, water quality improvement, flood diminishment, and fisheries breeding grounds. For streams that have been impaired or dried from water diversion, water flow can be augmented with recycled water to sustain and improve the aquatic and wildlife habitat.

Water recycling can reduce and prevent pollution.

When pollutant discharges to oceans, rivers, and other water bodies are curtailed, the pollutant loadings to these bodies are decreased. Moreover, in some cases, substances that can be pollutants when discharged to a body of water can be beneficially reused for irrigation. For example, recycled water may contain higher levels of nutrients, such as nitrogen, than potable water. Application of recycled water for agricultural and landscape irrigation can provide an additional source of nutrients and lessen the need to apply synthetic fertilizers.

Examples of water recycling

Water supply agencies in many countries are turning to the idea of recycling sewerage and waste-water.

In Australia, Adelaide (the capital of South Australia) already recycles 20% of its water to irrigate market gardens. The state of Victoria is implementing multi-million dollar projects to replace freshwater with recycled water for various industrial uses, such as cooling coal-fired power generators. The government also plans to replace freshwater with recycled water for irrigating many public parks.

In Hobart, Tasurania, a suburban council has recently commissioned a HK\$96 million recycling plant which treats effluent – which formerly flowed into the Derwent River – from where it is piped 20 kilometres to be used for irrigating crops.

Unfortunately, the notion of using treated sewerage directly as drinking water is more difficult to sell to the public. Recently, in Toowoomba (a regional city in Queensland, population approximately 100,000) a referendum was conducted to decide whether recycled water should be used to augment dwindling reservoir supplies. Voters soundly rejected the proposal, notwithstanding scientific evidence that the treated water was purer than existing reservoir supplies.

The United Kingdom, which is suffering drought conditions in some regions, is tentatively turning to recycled water as a solution. A recycling plant has operated in Langford, Essex, for three years, producing highly treated water.

Numerous communities in the United States have embraced the use of recycled water, particularly in California. Redwood City (near San Francisco) has implemented a large-scale recycling scheme which will see it enjoying water surpluses by 2010, despite an increasing population. Farmers growing food crops in the Salinas Valley rely heavily on recycled water for irrigation. However, recently, a local legislator there proposed legislation banning the irrigation of food crops with recycled water, claiming the water was unsafe. A headline in the local newspaper summed up the government's reaction

: "Recycled water safe, essential, officials say". The water agency responsible for the recycling scheme claimed that recycling water, if treated correctly, is in fact "so much cleaner than a lot of other water sources".

Future of water recycling

We could describe many more examples of the successful implementation of water recycling schemes, both for augmenting directly drinking water supplies, and indirectly sustaining water reserves by replacing the use of potable water for agricultural and industrial uses. It is not a new or scientifically difficult concept. And much of the treatment process can be done naturally, using reed-beds and other natural systems.

As with recycling of waste – which the Hong Kong government quite rightly encourages – we should be taking steps to implement a waste-water recycling scheme. This is especially important for Hong Kong, given our limited water reserves and China's worsening water shortages.

It is to be hoped the government is not too occupied with our serious air quality problems as to ignore Hong Kong's looming water supply crisis

Conclusion

Perhaps we should leave the last word to the EPA, a usually conservative environmental monitoring agency, as to the importance of recycling waste water to help solve the world's water crisis:

Water recycling has proven to be effective and successful in creating a new and reliable water supply, while not compromising public health. Non-potable reuse is a widely accepted practice that will continue to grow. However, in many parts of the United States, the uses of recycled water are expanding in order to accommodate the needs of the environment and growing water supply demands. Advances in wastewater treatment technology and health studies of indirect potable reuse have led many to predict that planned indirect potable reuse will soon become more common.

While water recycling is a sustainable approach and can be cost-effective in the long term, the treatment of wastewater for reuse and the installation of distribution systems can be initially expensive compared to such water supply alternatives as imported water or ground water. Institutional barriers, as well as varying agency priorities, can make it difficult to implement water recycling projects. Finally, early in the planning process, agencies must implement public outreach to address any concerns and to keep the public involved in the planning process.

As water demands and environmental needs grow, water recycling will play a greater role in our overall water supply. By working together to overcome obstacles, water recycling, along with water conservation, can help us to conserve and

sustainably manage our vital water resources.

In the near-term and years to come, you will be hearing much more of the water supply crisis, and the critical need to recycle waste water and sewerage. It would be refreshing if our government could, on this issue, take a lead for once, rather than following years behind the developed world as is usually the case.

TOWN PLANNING

Planning board keeps the lid on Kowloon Tong

The Town Planning Board recently overruled objections from developers and residents who fear the tighter height restrictions at Kowloon Tong will adversely affect land prices. The Board said the government would consider relaxing the restriction only if the development had design merit, in order to retain the unique character of the low-density residential district.

The Board maintains that Kowloon Tong is not the only district in Hong Kong where tighter building controls are imposed. The Board will continue to review the development restrictions for all districts, particularly the middle-density residential district. In order to speed up the height restriction process, the Town Planning Department has set up two special units to carry out the tasks.

Charles Chan, a director at Savills, said the height restrictions were "unfair" to developers. Before the existing restrictions are imposed, developers may build 25 and 30-storey residential buildings. But under the new rules, the height of new buildings on 22 sites in and around College Road, Ede Road and Broadcast Drive will be limited to between 3 and 13 storeys. Chan expected that the price of new developments will drop by 20 to 30 per cent.

[SCMP, 15/07/06]

Wetland saved from large-scale development

The Town Planning Board decided recently to uphold the government's plan for the 32.4 hectare site at Sham Chung in Sai Kung, which has been spared large-scale development for three years.

The decision prohibits Sun Hung Kai Properties, which has bought out most villagers and owns 80 per cent of private land on the site, from building a helicopter pad, a holiday camp, resort-style hotel, houses, a picnic area, private club, church and recreation and sport centres.

However, the decision did not satisfy environmentalists. Although they were pleased that the developer could not undertake largescale development of the wetland in the near future, they said that the Board failed to reduce the amount of land on which village house development was permitted. Therefore, developers might cause further damage to the wetland and its environmental value. In fact, Sun Hung Kai has already planted grass on land it owns, preparing the way for a golf course.

Sham Chung is one of 12 priority ecological sites listed by the Environmental Protection Department, which includes a large area of wetland that is home to rare paradise fish found only in a few spots in Hong Kong.

The Planning Department's plan calls for half the site to be a conservation area in which development would be banned without exceptional approval. An additional quarter is zoned for agricultural use. About 2.6 hectares is earmarked for expansion of the village. The rest is green belt and a coastal protection area. The Board received 37 objections to the draft.

[SCMP, 15/07/06]

Stone Nullah Lane Development Plan

The Town Planning Board recently announced the publication of the "draft Urban Renewal Authority Stone Nullah Lane/Hing Wan Street/ King Sing Street Development Scheme Plan". The scheme area was designated as "Open Space and Historical Buildings Preserved for Cultural, Community and Commercial Uses", intended primarily to preserve the historical buildings for cultural, community and commercial uses.

Some time ago, the Hong Kong Housing Society and the Urban Renewal Authority jointly announced that they would launch a revitalization and preservation project for an area of 929.5 square metres located in Wan Chai Stone Nullah Lane, Hing Wan Street and King Sing Street at a cost of about \$100 million. Besides retaining some of the buildings with historic value and special architectural design—such as the Blue House—the area will be developed along with a theme of tea and medicine shops, in line with its historical background of tea trade and medical services.

[Sing Tao Daily, 21/07/06]

Harbour group fights to turn KCRC wharf over to leisure

Designing Hong Kong Harbour District recently filed a rezoning request with the Town Planning Board, proposing to turn the KCRC's cargo wharf on the Hunghom waterfront into a leisure and entertainment district. Under the proposal, buildings in the area would be limited to four storeys and cover no more than 40 per cent of the site's 23,200 square metres. The final 40-metre section at the pier's tip would be an open plaza accessible to the public. The request also cited the 2003 harbour study by the government, which recommended that the area be devoted to public enjoyment of the waterfront, not cargo handling.

The KCRC, which rents the land from the

government, urged the Board to reject the rezoning request, saying any rezoning would affect its logistics business and future development plans. It applied two years ago to turn the land into an expo- centre, but its request was rejected by the Board.

The harbour group's application also faces objections from various government departments and bureaus.

[SCMP, 05/08/06]

Kwun Tong project could take 12 years

The Urban Renewal Authority recently launched a two-month consultation exercise concerning three concept designs for the renewal of a 5.3 hectare area bordered by Hip Wo Street, Mut Wah Street, Hong Ning Road, and Kwun Tong Road

URA managing director Billy Lam Chunglun described the project as the largest single development in the Authority's history. The project has been planned since 1998 and is expected to take 12 years to complete at a cost of HK\$30 billion.

With a net increase of only 600 residential units, the project is designed to be commercially orientated in an attempt to stimulate economic growth. Commercial units are expected to take up 237,000 square meters, whilst open-air spaces and areas reserved for a two-level, transport terminus will be tripled. Yue Man Square will be expanded to the equivalent of two Southorn Playgrounds, four times its current size. Space for communal and public facilities will be increased by 70 percent. Shopping malls, hotels or office blocks could reach the height of the current APM shopping mall. The plot ratio of the three designs range between 2.89 and 2.98, and more details on the individual concepts will be available when the models are unveiled later.

Architects have drawn up three designs which are entitled, "The Model City of Tomorrow," "Civic Hub," and "Metamorphosis." The designs will be displayed in various venues around Kwun Tong over the next three weeks.

[The Standard, 09/08/06]

Temporary cruise ship terminal on the horizon

The Federation of Trade Unions legislator Chan Yuen-han recently revealed that despite ongoing public consultation concerning the Kai Tak development project, the government will go ahead and seek up to HK\$1 billion to build a provisional cruise terminal at the site.

The government will bypass the town planning process and submit a funding proposal to the Legislative Council when sessions resume in October, requesting between HK\$800 million

and HK\$1 billion for the immediate construction of a two-berth cruise terminal.

The temporary terminal will help serve heavy industry demand, whilst the rest of the site undergoes consultation and the approval process, all of which could take two to three years.

The terminal will continue to function as the territory's main docking point for cruise liners until the permanent terminal is completed in 2011. Construction is expected to begin in 2008.

Chan also said that whilst the government will foot the bill for the provisional terminal, it will put the permanent terminal up for tender. That terminal will be 20 storeys in total, 10 above ground and 10 below. There will be passenger halls, a shopping mall and a car park.

[The Standard, 24/08/06]

New look for waterfront

The government has recently released its blueprint for the Wan Chai waterfront. The plan forms a core part of the project to build a new expressway connecting Central and Causeway Bay to cope with increased vehicular traffic on Hong Kong Island.

According to the plan, construction work is expected to begin in early 2009. A bypass involving the reclamation of 15 hectares of Victoria Harbour should be completed by 2015. There will be a 4km public promenade from Central to North Point divided into five themed precincts. To the east of the Hong Kong Convention and Exhibition Centre will be a "water park precinct", while the Causeway Bay typhoon shelter will form a "heritage precinct", with a new landscaped deck linking with Victoria Park

The blueprint calls for a new expressway to be built under the Hong Kong Convention and Exhibition Centre and to run underwater to the east of the typhoon shelter in Causeway Bay before surfacing to connect with the Island Eastern Corridor.

Although officials said this option required the least reclamation, some harbour activists were still unhappy with the plan and maintained that any reclamation was unacceptable.

Members of the public will be consulted on the latest design during the next two months. The government hopes to release a finalised design by the end of the year.

[SCMP, 26/08/06]

Conservationists' plea to save Central Police Station is rejected

Heritage Hong Kong's proposals to amend the planning guidelines, which it claimed could have saved the historic Central Police Station complex from being turned into business premises, were rejected by the Town Planning Board.

The conservation group wanted the Board's planning intention for the Central Police Station complex to be amended, and to include guidelines giving the Board more control over the site's development. However, Board members feared the proposals would give rise to more red tape than protection of the heritage site, which is in Hollywood Road. Board member Walter Chan Kar-lok was convinced that the group's proposal, if adopted, could delay the project because any minute changes would, by law, have to be approved by the Board.

The 1.4-hectare site was originally developed in 1864, whilst new blocks were added between 1910 and 1925. It covers 17 buildings which include the Central Police Station, Victoria Prison and the Central Magistracy. In 2004, the Hotung family's proposal to turn the site into a cultural complex was rejected by the government. The government has hoped to tender out the land to promote heritage tourism.

[SCMP, 26/08/06]

'Outdated' heritage policy needs fixing

The government has been urged to modify the policy on preserving heritage buildings and to refrain from bulldozing its headquarters building after government functions move to Tamar in 2010

Lee Ho-yin, director of the Architectural Conservation Program at Hong Kong University, accused the government of continuing to take an "outdated approach" in its cultural heritage conservation policy. He said the government was still scrutinising whether buildings were worthwhile preserving individually, without studying whether they were part of a heritage cluster, or giving some thought to their surrounding environment.

The government has been reluctant to commit to preserving Government Hill, which includes the cluster of government buildings and green areas bounded by Upper Albert Road, Queen's Road Central, Garden Road and Glenealy.

Lister Cheung Lai-ping, chief executive of green group the Conservancy Association, said vegetation on the Government Hill area offered an ideal natural environment in the urban area. She hoped the government would not see the issue as purely financial and would protect the area from commercial development.

[The Standard, 11/09/06]

WEST KOWLOON CULTURAL DISTRICT (WKCD)

No halt in WKCD

The Chief Executive said that WKCD could make progress in his term of office. He emphasised that the project was not at a standstill. The Chief Secretary for Administration had been working on restructuring the whole scheme and a new proposal for WKCD would be submitted this autumn. He also mentioned that at the moment both the government and the public were making efforts in the hope that a consensus on the project could be reached.

[Sing Tao Daily, 27/07/06]

'Must-visit' status vital for cultural district

A committee advising the government on facilities for the site has said that WKCD should be developed into an integrated world-class arts, cultural, entertainment and tourism district with a must-visit appeal to both residents and visitors.

The performing arts and tourism advisory group under the Consultative Committee on the Core Arts and Cultural Facilities of the West Kowloon Cultural District (CCCACFWKCD) claimed that its proposal reflected the views of the public and the performing arts and tourism sectors. The group believed the facilities should be capable of meeting the long-term development needs of arts and culture, as well as promoting diversity and vibrancy in the development of performing arts.

[SCMP, 08/09/06]

Poor rating for the government's handling of WKCD

An SCMP/TNS Opinion Leaders Survey, commissioned by the South China Morning Post, revealed that business leaders and opinion makers gave a poor rating to the government's handling of, among other things, the WKCD arts hub and controlling air pollution. The Chief Executive had failed to progress on WKCD, according to the majority of respondents to the Survey.

[SCMP, 06/09/06]

Harbour Opera will not be built

According to the advisory group studying performing arts and tourism, CCCACFWKCD, the preliminary plan for WKCD's performance venues and facilities has been finalised. WKCD will be developed to be an international cultural complex for arts and tourism, to include: a Chinese opera centre; a hall; a performance venue for 15,000 people; and seven theatres of different sizes. Instead of the Harbour Opera, which was previously proposed by the government, there

will be a plaza of at least 30,000 square metres.

Headed by the Chief Secretary for Administration, CCCACFWKCD has called its third meeting to review the working progress of the 3 groups. The performing arts and tourism section has finalised their report on the performance venue of WKCD, and handed it to CCCACFWKCD for study and approval.

According to the report, the seven theatres will be located in different corners of WKCD. A big theatre with 2,200 seats, two medium–size theatres with 500-800 seats and four "black box theatres", specially designed for fashion artistic groups, will be built.

A member of CCCACFWKCD said after the meeting that fees for using the performance plaza should be affordable for both general artistic groups and the public, and the plaza should be able to keep its profit and also bear its losses. What is more, the facilities proposed in the report will be able to stand together with the long—term development of the city's art and culture.

[Oriental Daily, 08/09/06]

WKCD: four museums in one

The advisory group studying museums has suggested the four museums for modern art (including wash painting), design, movie and common culture respectively be developed as one "institution", and that a sky screen should not be built.

The reserved area for museums has been reduced to allow for a Chinese opera centre and theatre to be built, which was suggested by the advisory group studying performance arts and tourism. To break the isolation between four subjects and to promote communication of art and media, the group suggests exhibiting all the items of the four subjects in one institution. However, no common understanding on the details of the operation or the area of the institution has been reached as yet.

The Principal of Hong Kong Museum criticised the proposal as putting too much emphasis on visual arts over the elements of history, science and children. He also questioned the effectiveness of establishing four museums into one building and expressed his concern that by calling the building an "institution", the operator will be profit driven.

[The Sun Daily, 08/09/06]

HONG KONG BRIEFING

EcoPark construction contract awarded

A \$257 million contract for the construction of EcoPark in Tuen Mun Area 38 was signed by the Acting Director of Environmental Protection

Department (EPD) on behalf of the government with Kaden Construction Limited. The government announced this event as signifying another milestone in realising the establishment of EcoPark, which will be carried out in two phases.

The land in Phase I will be made available for occupation by the environmental and recycling industries by end 2006. Construction of the entire project is scheduled for completion by the end of 2009.

The purpose of establishing this 20-hectare EcoPark is to provide long-term land at affordable costs to the environmental and recycling industries. In turn, these industries are encouraged to invest in more advanced and value-adding recycling processes to help resolve this city's waste problem.

Kaden Construction Limited is required to construct the basic infrastructure for the EcoPark, comprising site formation, construction of internal roads, drains and sewers, utilities, an administration building, landscaping and ancillary facilities.

[EPD Press Release, 07/07/06]

Comprehensive plan to tackle road traffic noise

The EPD recently proposed a comprehensive action plan to tackle road traffic noise problems in Hong Kong. According to the EPD, road traffic noise remains a significant environmental problem affecting a large number of people in the territory.

The underlying factors causing this problem are the continuous growth in the economy, population and transport demand, as well as the scarcity of land. As a result, about 1.1 million people are suffering from high levels of road traffic noise exceeding 70 decibels.

The EPD also formulated a draft comprehensive plan to tackle road traffic noise in Hong Kong. At the same time, it proposed some enhanced measures in addition to the existing measures which are being implemented, including extending the trial of low noise road surfacing materials; reviewing the Professional Practice Note on Road Traffic Noise; and a number of other measures.

The Advisory Council on the Environment and the Legislative Council's Environmental Affairs Panel have been consulted on the plan and were satisfied with the proposed measures. In the future, stakeholders, including the concerned District Councils, transport trades, public transport operators, professionals, academia, developers, green groups and the general public, will be consulted.

As well as this comprehensive plan, the government has continued its efforts to combat

traffic noise. Thirty six existing road sections have been identified for noise barrier retrofitting works. A total of 72 local low speed road sections have been identified for resurfacing with low noise surfacing materials. From 1989 to 1999, 11 kilometres of suitable high speed highways sections were resurfaced with low noise materials. Over the past 10 to 15 years, preventive measures have been implemented in planning of new towns, residential developments and roads. Legislation was tightened in 2002, requiring individual vehicles to comply with the latest international noise standards before registration in Hong Kong could be made. These measures brought some relief to hundreds of thousands of Hong Kong people.

[EPD Press Release, 01/08/06]

Determination needed to solve rubbish crisis

The situation of waste disposal in Hong Kong is becoming more serious. There are at least three reasons for this.

First the city lacks enough space in which to dump refuse. Secondly, people in Hong Kong have failed to pay enough attention to the issue, so that too much unnecessary garbage has been generated and tossed into tips. Thirdly, the government has also been slow to make laws to improve the situation.

The government has been reluctant to legislate on new restrictions involving business, and there is a danger that existing laws will be weakened. What is more, even though now various measures are in place, and are being introduced, to encourage waste reduction and recycling, implementation of these is occurring with no sense of urgency. Therefore, environmental risks from waste disposal continue. Between the next 4 and 8 years the city's rubbish dumps will reach capacity.

Compared to the poor rate of household recycling, there has been a long–standing model system in place when it comes to construction waste. Construction companies have to pay to dispose of waste in landfills. This encourages them to dump as little as possible, by selling reusable material to recyclers, and has helped push the city's overall recycling rate to 43 per cent. However, the rate is well below the 70 per cent achieved by many cities in northern Europe and Scandinavia. There, a culture has evolved where caring for the environment goes well beyond what gets put in the garbage. Hong Kong should learn from these countries and find its own solution to the problem.

[SCMP, 21/08/06]

Pollution plan under a cloud

People have cast doubts on the pilot scheme for emissions trading between Hong Kong and Guangdong. On one side, Hong Kong officials said that they were developing the programme jointly with their Guangdong counterparts, and that details would be announced in the third quarter; on the other side, Guangdong officials were quoted in the Chinese-language media, pointing out all sorts of difficulties.

The government was criticised for neither providing enough information on the emission-trading scheme, nor releasing details of this major new policy initiative ahead of its proposed launch for the public to consider. It seems that Hong Kong's two power companies were saying even they did not know much about the detail of the scheme.

As a result, people are unable to understand why Guangdong set pollution emission targets far higher than those previously agreed with Hong Kong. The largest discrepancy in the targets is in particulate matter, where Guangdong's level is 154 per cent higher than this city's. For sulfur dioxide, the difference is 27.6 per cent and for nitrogen oxides, 16 per cent. What is more, Hong Kong and Guangdong use different methods to estimate emissions. It is for this reason that much better communication between the two governments is needed.

[SCMP, 24/08/06]

A weakness of the emissions— trading scheme is that it will involve trading in three pollutants, whereas most overseas schemes involved only one. A lack of expertise in that area in Hong Kong also has contributed to the doubts raised.

The government was urged to come clean on several questions when it announced the details of the scheme as to: the trade contents; the trade volume and how it will be determined; the period of time the scheme is to last; and the participants and their qualifications.

A veteran researcher at a public policy thinktank was of the opinion that it is very difficult technically to trade three pollutants. He also criticised the government for taking an ambitious approach, having no experience of the scheme at all to planning to trade a maximum number of pollutants with its neighbour across the border.

However, EPD denied that a scheme involving three pollutants was more complicated than having just one. Even if only one pollutant was targeted, an emission trading mechanism had to be established in any event. What was more, power plants did not have to trade all three at the same time; they could just choose one or two types.

Currently both the Hong Kong and Guangdong governments are seeking views from "relevant authorities" on the schemes before they could actually carry out the trading implementation scheme by introducing it to the power plants interested in the scheme.

[SCPM, 30/08/06]

Planners struggle to bridge differences over Kai Tak

Planners are trying their best and thinking of ways to link the former airport site at Kai Tak to neighbouring areas without contravening environmental laws.

The Acting Assistant Director of Planning said that the third stage of the review of the redevelopment plan was closed, with more than 90 submissions received. The overall consensus is for a connection between Kai Tak and the surrounding areas. The majority want a low-density development and many people want to be able to access the harbour.

The difficulty is that government lawyers regard a bridge to be built as reclamation. Therefore, to comply with the Protection of the Harbour Ordinance, for any plan involving reclamation, there must be an overriding public need, which in this case cannot easily be identified.

On the other hand, some environmental groups which were consulted by the Democratic Alliance for the Betterment and Progress of Hong Kong did not regard it as reclamation to build a 500-metre connection.

This opinion, however, was not shared by the Civic Party, which submitted its views to the government, opposing plans to build a heliport at the tip of the old runway, which in their opinion was a waste of a site that offered a panoramic view of the city, and would have noise implications for the surrounding area. The party also criticised the plan to build a 40,000-seat stadium, saying it would waste up to 10 hectares. In any event, the Civic Party warned against developing the site without reference to the site's history, maintaining that to do so would defeat the purpose of the redevelopment plan.

[SCMP, 24/08/06]

Crackdown urged on polluting vehicles

A legislator from the Democratic Alliance called for a ban on vehicles that fail to meet modern emission standards by 2010. Currently, there are about 110,000 vehicles that do not meet those standards. He also suggested waiving the first registration tax for those drivers who switched to more environmental friendly vehicles, whilst a higher registration tax might be imposed for those who failed to take early action to convert at the end of the transition period.

According to this legislator, the 110,000 pre-Euro emission standard vehicles contributed more than a fifth of the pollution from vehicles in Hong Kong. The pollution from each was equivalent to 70 similar vehicles conforming to Euro IV emission standards.

The legislator also questioned why the government has not imposed a total ban on

these vehicles and offered financial incentives to encourage the use of greener vehicles. She had proposed that, first, the government should consider reducing or eliminating the first registration tax to encourage replacement by the end of next year; secondly, from 2008 to 2009, the government should introduce legislation to raise the annual registration fee for all vehicles that failed to meet modern emission standards; and thirdly, by 2010, all these non-conforming vehicles should be banned.

[SCMP, 28/08/06]

Pollution fight 'tops HK agenda'

At a meeting with the Chief Executive in preparing for his October policy address, representatives from the British, Australian, Canadian, Korean, Swedish, Indian, German, Japanese and Italian chambers urged the government to continue pushing for a better environment.

The British Chamber of Commerce regarded the environment as the "single greatest challenge for Hong Kong", and as an issue of policymaking which defines the city now, just as the issues of public housing and corruption did in the 1970s and 1980s.

The chamber suggested to the Chief Executive that the environment should be the main theme of the policy address, which could then set the direction for the remainder of his current term and build in the coming year a firm basis for action in the next full five-year term.

The chamber also recommended that resources had to be committed to particular environmental problem areas and real community involvement had to be achieved. What was more, a commitment to using sustainable energy and transport, better planning for the harbour and seashore, and a programme encouraging cleaner energy across the border had to be made by the government.

On the other hand, if the government fails to address this issue sufficiently, the deteriorating environment would adversely affect the health of the community, the citizens, the children, the businesses and the enviable international status of Hong Kong in an increasingly competitive global landscape.

The chamber also mentioned that there had been true consensus across the community and businesses to address the problem as actively as one can. In this sense of unity, Hong Kong stood on the threshold of an environmental 'tipping point'.

[SCMP, 31/08/06]

According to a survey conducted by the American Chamber of Commerce, among the 140 top executives with the chamber interviewed, 95% were worried about air quality in Hong Kong. More than 50% of those surveyed knew of professionals who declined

to come to the city because of the poor quality of its natural environment. Ninety four percent of interviewed executives ranked the "quality of natural environment" as the most important or second most important factor in terms of importance in selecting a place to live. Seventy nine percent of respondents thought that Hong Kong's attractiveness to foreign investors was decreasing. Fifty nine percent were of the opinion that the continuing deterioration would cause their companies to invest elsewhere. However, fifty six percent said they would invest more money in Hong Kong than other Asian cities if its environment improved.

The results of the survey have highlighted the possible serious business outcomes that may result if more is not done soon about improving Hong Kong's air and natural environmental qualities.

[SCMP, 28/08/06]

August adjustment in auto LPG ceiling prices

The auto liquefied petroleum gas (LPG) ceiling prices for dedicated LPG filling stations from 1 August to 31 August 2006 were adjusted by the Electrical and Mechanical Services Department (EMSD) in accordance with the terms and conditions of the contract of the dedicated LPG filling stations. The adjusted auto LPG ceiling prices for dedicated LPG filling stations range from \$2.89 to \$3.26 per litre, representing an increase of about \$0.14 per litre.

The auto LPG ceiling prices were adjusted according to a specified pricing formula, which comprises two elements: the LPG international price and LPG operating price. The LPG international price is the LPG international price of the preceding month. The LPG operating price will be adjusted on the first day of February every year according to movement in the Composite Consumer Price Index in the previous year.

[EPD Press Release, 28/07/06]

Eye health fears over air pollution

The increase of the risk of eye allergies and aggravated dry eyes in Hong Kong could have been caused by the continuing depreciation of Hong Kong's air quality, according to the president of the College of Ophthalmologists of Hong Kong.

Another ophthalmology consultant at Tuen Mun Hospital also related the relatively larger number of allergies, like asthma, allergic conjunctivitis, nose allergies and so on, to air pollution. Though no definitive studies have been conducted as to the link between air pollution and eye diseases, this view is shared by some other medical practitioners. An increase in instances of some minor eye problems, such as bloodshot eyes and eye discomfort, could also have been caused by pollution.

According to the Department of Health statistics, the number of people discharged from hospitals after being treated for different types of conjunctivitis - which was not pollution-related categories only - had risen 344 per cent to 1,522 a year over the 20 years to 2004.

Swedish researchers recently reported that people who live in so-called pollution "hot spots" have a 23 per cent higher risk of heart attack and a 40 per cent higher risk of having a fatal heart attack. The situation in Hong Kong could be worse, as pollution here is higher than most places. Local figures show 725 people died prematurely from heart failure in 2004, up 724 per cent from 20 years earlier.

ISCMP, 30/07/061

Sweet water of life

People are using fresh water at a much faster rate than it can be replenished by the natural water replenishment cycle. Hong Kong has been facing the problem of sourcing fresh water for a long time. When the first dam and reservoir project started in 1863, Hong Kong's daily water consumption was 500,000 gallons (2,273,046 litres). As the (then) proposed Pokfulam Reservoir could provide only four days of water in drought season, expansion projects and plans for more reservoirs were launched.

Hong Kong has always invested heavily in reservoirs. Arrangements are now being made for sufficient supplies of fresh water to be piped from Guangdong. Today the Dongshen water supply network supplies more than 80 per cent of Hong Kong's fresh water consumption. Furthermore, the city has had a system that allows 78.6 per cent of our population to use seawater for toilet flushing, thereby significantly reducing the demand for fresh water.

On the other hand, pollution has reduced our fresh water supply. In daily life, toxic chemicals are dumped into the waterways as a result of bleach used in household laundries, chemicals dumped into rivers by factories, and pesticides released into streams from farmers' crops.

As a result of water pollution, half of the world's patients in hospital are suffering from water-borne diseases.

[SCMP, 22/07/06]

ADVISORY COUNCIL ON THE ENVIRONMENT (ACE)

A proposal for reviewing the air quality objectives and developing a long term air quality strategy

(ACE Paper 14/2006)

Background

The Air Pollution Control Ordinance empowers the Government to establish Air Quality Objectives (AQOs) that should be achieved and maintained in order to promote the conservation and best use of air. This consultation paper seeks the advice of ACE's members on launching a comprehensive study followed by a thorough public engagement process to review Hong Kong's AQOs with a view to developing a long-term strategy on air quality.

Current efforts and issues

In recent years, Hong Kong has faced two air pollution issues – local street level pollution and regional smog.

Diesel vehicles are the main source of street-level pollution. To tackle emissions from motor vehicles, in 2000 the government embarked on a comprehensive motor vehicle emission control programme aimed at reducing the respirable suspended particulars (RSP) and nitrogen oxide (NOx) emissions in urban areas by about 80% and 30% respectively by the end of 2005. The programme has been successful and yielded concrete results. RSP and NOx emissions from vehicles in the urban areas have been reduced by about 80% and 40%. The number of smoky vehicles has also been reduced by about 80%.

The background air quality of the region, however, has been worsening. Visibility has been deteriorating quickly since the mid 1990s. The same situation exists throughout the Pearl River Delta (PRD). Smog problems cannot be resolved without the joint efforts of our neighbour, Guangdong Province.

To improve regional air quality, the government reached a consensus with the Guangdong Province Government in April 2002 to reduce the emission of four major air pollutants: sulphur dioxide (SO2), NOx, RSP and volatile organic compounds (VOC) by 40%, 20%, 55 % and 55% respectively in the region by 2010, using 1997 as the base year. In December 2003, the two governments drew up the PRD Regional Air Quality Management Plan (the "Management Plan") to meet the emission reduction targets. The PRD Air Quality Management and Monitoring Special Panel was set up under the Hong Kong/Guangdong Joint Working Group on Sustainable Development and Environmental Protection (JWG) to follow up the tasks under the Management Plan.

Progress in achieving the 2010 targets in Hong Kong

Hong Kong has made good progress towards the 2010 targets for Nox, RSP and VOC. However, for SO2, much of the effort has been offset by the increase in emissions from the power plants. Electricity generation remains the biggest source of air pollution in Hong Kong, accounting for 92% of the SO2 and half of the NOx and RSP emissions. Therefore, to achieve the 2010 emissions reduction targets and sustained improvement in our air quality, the power companies must substantially reduce their emissions.

The government is progressively tightening emission caps on the renewal of the power companies' Specified Process Licences (SPLs) issued under the Air Pollution Control Ordinance. It has also been proposed that the permitted rate of return on all fixed assets of the power companies be linked to their achievement of the emission caps stipulated in the SPLs, and reduced if they do not achieve these.

Co-operation with Mainland

At the Sixth Meeting of the JWG held on 20 December 2005, the two sides noted that there has been significant progress in implementing the Management Plan during 2005.

In addition to the air emissions inventory compilation, preventive measures on vehicles emissions and continuous emissions monitoring stationary pollution sources, additional measures will be included in the Management Plan. They include introducing emissions caps for power plants in Hong Kong, tightening control over pollutants emissions from major pollution sources in PRD, and stepping up regular inspection of in-use motor vehicles etc. The two governments will also strengthen exchanges and co-operation on continuous emission monitoring of stationary pollution sources and enhance reliability of the systems and the comparability of data on both sides.

International Developments on AQO Reviews

Recent scientific research findings have suggested that particulate matters (PM) smaller than 2.5 microns have more direct adverse health effects than PM of larger sizes. In view of such findings, a number of countries, such as the US, the member states of the EU, and the WHO, have been examining the need to revise the air quality standards for PM smaller than 2.5 microns.

It is expected that WHO will publish full documents on the new WHO AQOs later this year, which will provide a scientific basis for supporting the development of air quality policies and management strategies in various parts of the world for the purpose of protecting human health. As consideration of risks to health, technological feasibility and other socio-economic concerns vary for different countries, WHO advises that individual governments should consider their

own local circumstances carefully when using the WHO air quality guidelines.

Proposal

The new WHO AQOs are much more stringent than our current AQOs. The achievement of the new AQOs will thus require very drastic measures to be taken, not only by Hong Kong, but also in the Mainland over the long term.

The measures required will include the extensive use of clean power generation technologies and fuels, clean transportation systems and production technologies, very efficient energy saving technologies, and an urban form designed to permit and promote the use of these technologies.

Some of these measures are very costly or are still being developed overseas. Therefore, the finalisation of a set of the revised AQOs and the implementation plans for their achievement in the long term would be possible only with a thorough public engagement process. This process should be supported by detailed information on the options and implications from a comprehensive study of: current air quality in Hong Kong; the specific measures required and options available for achieving interim targets; assessment of the implications of implementing measures identified under different options; and devising practical and achievable options for revising Hong Kong's AQOs.

The study will be commissioned in 2007 and will be completed by the third quarter of 2008. The public engagement process is expected to be launched in late 2008 for finalising action on the new AQOs and the required long-term strategy on air quality during 2009.

Update on the progress of the key initiatives in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)"

(ACE Paper 17/2006)

Background

In December 2005, the government published the Policy Framework to set out a comprehensive strategy to tackle our serious waste disposal problem in the next ten years. The ACE has tasked its Waste Management Subcommittee to monitor the progress of the key initiatives in the Policy Framework.

Key initiatives in the Policy Framework

Source separation of domestic waste programme

As of June 2006, 361 housing estates have signed up to join the programme. Out of these estates, 180 have committed to implementing a floor-to-floor mode of waste separation, whilst the others have set up waste separation facilities at ground floor level to collect different types

of recyclables. Of the housing estates that have implemented floor-to-floor waste separation, more than half have reported encouraging results, with an overall 54% increase in the quantity of recyclables collected and a 3% to 4% reduction in the waste disposed of.

Producer Responsibility Schemes (PRSs)

With regard to the PRS on plastic shopping bags, the Financial Secretary proposed in his latest Budget Speech to introduce legislation to levy a tax to deter their indiscriminate use and to limit the distribution of plastic shopping bags. A consultant will conduct a regulatory impact assessment of such a scheme and will consult the public in due course. Eight major retail chains have respectively entered into a Voluntary Agreement on Plastic Bag Reduction with the government and they have pledged to reduce usage of bags by over 100 million plastic shopping bags per year.

Municipal Solid Waste (MSW) Charging

The proposed MSW charging scheme is a key policy initiative for waste reduction. Twenty housing estates will be invited to join the trial variable rate charging scheme, and "designated bags" will be distributed to the households. "Food wastes bags" will also be used in the trial scheme for a few selected housing estates to examine the feasibility of source separation of food waste. The trial scheme will commence in late 2006

EcoPark and land policy

Construction of the basic infrastructures and facilities for the Ecopark began in July 2006 under a contract worth \$257 million. Tenders for the management and maintenance of the EcoPark are now being called and an operator will be appointed in the near future. In addition, tenancy agreements are being drafted for priority recycling and environmental industries in the Phase I lots, which will be leased out towards the end of this year.

Funding for recycling technology projects

The Waste Management Subcommittee has issued letters to the vetting committees of the Small and Medium Enterprises Development Fund, the Innovation and Technology Fund, the Environment and Conservation Fund, the Sustainable Development Fund and the Quality Education Fund to appeal for their support on waste management projects. Some vetting committees have responded positively.

Landfill extensions and landfill disposal bans

Feasibility studies for North East New Territories (NEET) and South East New Territories (SENT) Landfill extensions are in progress. For NEET, the study is at a late stage. A consultancy brief for the feasibility study for West East New Territories (WENT) Landfill extension is being finalised. It is envisaged that the study could be

commissioned in early 2007. The introduction of landfill disposal bans for specific types of waste and untreated municipal solid waste will tie in with implementation of PRSs and commissioning of the Integrated Waste Management Facilities respectively.

Integrated Waste Management Facilities (IWMF)

An ACE delegation conducted a study tour in the Netherlands and Germany in March this year to obtain first hand knowledge of the experience of these countries in MSW management. Based on the recommendations of the delegation, the proposed technologies to be adopted for developing the IWMF have been refined. Treatment technologies will include: biological treatment for source-separated biodegradable waste; mechanical sorting and recycling of clean mixed recyclables; and thermal treatment with state-of-the-art incineration, which will have waste-to-energy opportunities.

REGIONAL & INTERNATIONAL

China

Drought

Chongqing has become the first local authority on the Mainland to issue a red alert over a worsening drought. Nearly 80% of the area is suffering from drought and economic losses have already reached 2.2 billion yuan.

[SCMP, 14/08/2006]

Harmful dioxide emissions

Experts warn that the far-reaching impact of the Mainland's sulfur dioxide emissions has made China the world's largest producer of sulfur dioxide pollution, which highlights the environmental cost of breakneck economic growth and the weakness of government enforcement of pollution standards. The revelation also has implications for Hong Kong and Japan, as sulfur dioxide is a main cause of acid rain.

In China, most sulfur dioxide emissions originate from coal-burning power plants and the use of coal by industry, such as steel and cement plants, and from motor vehicle emissions. Xu Kezhu, professor of environmental law at the China University of Political Science and Law, said that China is the world's largest coal producer, and the problem is that environmental standards are not well implemented and the laws are not effective when pollution incidents occur. Power plants are required to install equipment to reduce emissions. However, the large number of plants scattered across the country and local protectionism have obstructed implementation of this prevention measure.

Local governments do not fulfill their duties as watchdogs or do not punish polluters strictly according to laws. Professor Xu said penalties for polluters should be increased and local governments should strengthen implementation of the law. The Director of the Climate Change and Energy Programme for China said that difficulty making local authorities enforce the laws and regulations was a common hurdle for environmental policies. The central government wants to do it, and realises the importance, but there are still differences at the local level.

An effective way to cut sulfur dioxide emissions would be for the government to support only larger power plants with high efficiency or using alternative energy sources. Sulphur dioxide emissions caused economic losses of about 510 billion yuan last year. Air pollution has caused Shanghai alone losses of more than 8 billion yuan a year in health care costs.

[SCMP, 04/08/2006]

China's migrating pollution

China has denied it is polluting US cities. American officials have said that China is responsible for up to 25 percent of pollution in some US cities. The chief of China's State Environmental Protection Administration said such allegations are groundless and irresponsible. He said it is very doubtful that you could calculate such an accurate figure, as there are so many variables as to where and how far China's air pollution moves.

US Environmental Protection Agency's administrator said that it was unfair to allege that the source of mercury pollution in water was China and India, because about 2000 tonnes of mercury were discharged every day around the world, including 48 tonnes from the US. They also recognised that pollution is a complicated issue, and called on US media to report more objectively on China.

In a positive anti-pollution move, the International Finance Corporation, the World Bank's private sector lender, has signed an equity and loan deal with mainland gas distributor Xiano Group to convert coal into a clean fuel. This project will use coal to produce clean-burning dimethylether which is used for cooking and heating or as a substitute for diesel fuel. The project will help to develop new sources to meet China's energy demands in an environmentally friendly way.

[SCMP, 04/08/2006]

Hydrogen-powered cars

Shanghai aims to become the first Mainland city to put hydrogen-powered cars on its roads within the next five years, as the government tries to reduce air pollution. The Ministry of Science and Technology and the Shanghai government are backing the project, which envisions 1000 "green cars" on the streets for the 2010 World Expo.

URBAN PLANNING AND ENVIRONMENTAL LAW QUARTERLY

Spokesman for the company, Shanghai Shen Li Hi-Tech, said that the company would complete the development of its fourth generation of hydrogen fuel cells and there will be at least 1000 hydrogen cars in use in Shanghai during the 2010 World Expo for public transportation and individual use. The company is cooperating with carmaker Shanghai Automobile Industry Corporation to design fuel cells to fit into the cars. The new generation of fuel cells is lighter and provides enough power to reach the speed of cars which use regular fuel. However, the purchase price is very expensive for buyers.

The Shanghai government hopes to boost production to 100 such vehicles by 2008 and 1000, which will include taxis and buses, by 2009. If Shanghai realises mass production and individual use, it could lead the world in this field. Hydrogen-powered cars are still in the testing or conceptual phase in most countries. However, some foreign experts said hydrogen is not economically feasible for use in vehicular transportation.

[SCMP, 01/08/2006]

Indonesia

Mud flows

Hot mud oozing from a gas well has inundated 25 square kilometres of Java Island, damaging homes and a key rail line. The chairman of Indonesia's oil and gas regulator said that efforts to stop the mud have so far been ineffective and workers might have to channel the mud into a river which would take it to the sea.

An exploratory oil well outside the major industrial city of Surabaya has been spouting mud since May 29, which has forced 8000 people from their houses. The flow has closed the highway and caused breathing difficulties for scores of villagers. The mud has already breached a specially built dam, damaged homes and threatened the main Surabaya to Jakarta rail link. The well is 50% owned by local company PT Lapindo Brantas.

[SCMP, 11/08/2006]

Australia

Recycling innovation

A good recycling idea from car-parts maker Australian Arrow Limited has turned into a national waste recycling project backed by the Samoan Government. The plan involves Australian Arrow importing plastic waste from Samoa and converting it into outdoor tables, chairs, signs and other useful goods. This initiative will help Samoa tackle a particularly intractable waste-disposal problem and boost Australian exports, as well as consolidating the state of Victoria's status as a centre of environmental expertise.

This project was sparked by Australian Arrow, a member of Japan's Yazaki group, which some time ago began started sending its plastic waste to Corporate Recycling and bought some of Corporate Recycling's furniture. The managing director, Kan Ito, said they had a plant in Samoa and would like to take that waste too. When the Samoan Government saw what was happening, it got involved and started collecting plastic through schools and from businesses.

Australian Arrow and Corporate Recycling are joint partners in the venture and both are subsidising the project to get it up and running. Corporate Recycling and its sister company, Repeat Signs, generate approximately \$2 million in revenue each year selling outdoor furniture and signs made from recycled plastic.

[The Age, 21/06/2006]

Bluefin tuna threatened

Japan has illegally taken \$2 billion worth of southern bluefin tuna from waters surrounding Australia in the past 20 years. An independent international investigation into the high-end but at-risk fishery has found that Japanese fishers and their suppliers have caught up to three times Japan's quota each year and hidden it from monitoring agencies.

The Australian Fisheries Management Authority has described Japan's actions as an enormous international fraud. These revelations raise the prospect that other fisheries in the Pacific and Indian oceans have been pilfered, and have put increased pressure on Japanese attempts to resume whaling. The Japanese overcatch was uncovered by Australian industry personnel, who scrutinised publicly available market documents. After the Federal Government put its concerns to Japan at a meeting of the Commission for the Conservation of Southern Bluefin Tuna, an independent review was ordered. The Japanese also sought a review of Australia's tuna farming operations.

The Humane Society International said that the findings raised warning signals about Japan's attempts to lift a moratorium on commercial whaling. They said that any countries which are contemplating letting Japan go whaling must be concerned about the probability that harvest catches will be misreported as well. They also said that the Commission for the Conservation of Southern Bluefin Tuna had proved itself many times over and it was time the Australian Government nominated the fish for inclusion in the Convention on International Trade in Endangered Species.

Australia's Threatened Species Scientific Committee last year said that southern bluefin might not recover even if global catches were reduced to zero. However, the Environment Minister decided against listing it as endangered. The Japanese embassy in Canberra declined to comment on the matter. A spokesman for the Fisheries Minister said the findings were being

considered by the Commission's scientific panel, which would report back to the next meeting of the organisation and all appropriate courses of action will be formulated.

[The Age, 21/06/2006]

Argentina

Environmental impacts of ammunition

Environmentalists and lawyers based in Cordoba, Argentina, are campaigning for a law to ban the use of lead-based ammunition by hunters.

Hunting is a lucrative tourist activity in the province of Cordoba. Hunters from around the world come to shoot native birds, particularly doves, in season. It is estimated that each hunter shoots from 1000 to 1500 lead pellets per day. These pellets are absorbed into the ecosystems, causing significant harm.

The University of Cordoba has carried out research which has established that use of lead-based ammunition has caused lead contamination in Cordoba's air and water.

The environmental group CEDHA has drafted a regulation banning lead-based ammunition, but the proposed ban is strongly opposed by hunting and tourism operators.

[Elaw Bulletin, 19/09/2006]

World

Warning on weather and emissions

The world's top polluting nations were told yesterday to prepare for decades of weather turmoil, even if they acted now to curb emissions and pursue green energy sources.

Environment ministers meeting in Monterrey, Mexico, vowed to work faster to control global warming. Scientists told them each year wasted, in terms of curbing emissions, would cost them dearly. The talks did not set emissions-cutting targets, but delegates agreed on the need to expand the global carbon trading market to provide investment for green initiatives.

The British Environment Secretary said that if no action was taken carbon dioxide emissions would more than double by 2050.

[The Advertiser, 06/10/06]

This Quarterly Report does not constitute legal advice given on any particular matter. Whilst all effort has been made to ensure completeness and accuracy at the time of publication, no responsibility is accepted for errors and omissions. Further information and enquiries in respect of this quarterly should be directed to Fred Kan & Co. or any of our following associate firms:

Hong Kong

FRED KAN & CO.

Suite 3104-07, Central Plaza 18 Harbour Road, Hong Kong Tel: (852) 2598-1318

Fax: (852) 2588-1318

Paris, France

THOMAS, HERBECQ & ASSOCIÉS

3 Square Pétrarque 75116 Paris, France Tel: (331) 4755-4400 Fax: (331) 4704-5131 Tokyo, Japan GINZA 1-CHOME LAW OFFICE

4th Floor, Ginza B Building, 1-6-5, Ginza, Chuo-ku, Tokyo 104-0061 Japan

Tel: (81) 3-3538-7561 Fax: (81) 3-3538-7562 Wenzhou, China

ZHEIJIANG PINGYU LAW FIRM

Add.2F, Xingtai Mansion, Xincheng Avenue, Wenzhou,

China

Tel: 86-577-88929600 Fax: 86-577-88929615

In addition to Fred Kan & Co. the following are members of ADVOCASIA



An Association of Asian Commercial Law Firms

Adelaide, Australia

NORMAN WATERHOUSE

Level 15, 45 Pirie Street, Adelaide 5000

South Australia Tel: (618) 8210-1200 Fax: (618) 8210-1234

Beijing, China

JINCHENG & TONGDA LAW FIRM

11th Floor, 22 JianGuoMenNei Avenue

Huaxia Bank Building Beijing 100005, P.R. China Tel: (86) 10-8523-7766 Fax: (86) 10-6526-3519

Brisbane, Australia

BIGGS & BIGGS

Level 16, Commonwealth Bank Building

240 Queen Street, Brisbane Queensland, Australia 4000 Tel: (617) 3331-1950

Fax: (617) 3221-0329

Colombo, Sri Lanka

D.N. THURAIRAJAH & CO.

2nd Floor, Don Carolis Building

Part Pay 1464 No. 64 Vayyan Street Colombi

Post Box.1464, No. 64, Keyzer Street Colombo-11,

Sri Lanka

Tel: (94)(1) 439-798 Fax: (94)(1) 448-002

Dubai, United Arab Emirates

LUTFI AL BAHAR & CO.

Suite 804 A City Tower 2

PO Box 8812, Dubai, United Arab Emirates

Tel: (97) 14-321117 Fax: (97) 14-311455

Jakarta, Indonesia

MAKES & PARTNERS

Menara Batavia, 7th Floor, Jl K.H.

Mas Mansyur, Kav. 126, Jakarta 10220, Indonesia

Tel: (6221) 574-7181 Fax: (6221) 574-7180 Kuala Lumpur, Malaysia

CHEANG & ARIFF

39 Court, 39 Jalan Yap Kwan Seng 50450 Kuala Lumpur, Malaysia

Tel: (603) 2161-0803 Fax: (603) 2161-4475

Macau

THE LAW OFFICE OF DR ANTONIO RIBEIRO BAGUINHO & DR JOAO MIGUEL BARROS

Suite 1308, 13th Floor, Landmark Building, No 555

Avenida da Amizade, Macau

Tel: (853) 705352 Fax: (853) 705351

Manila, Philippines

HERRERA TEEHANKEE & FAYLONA

5/F., SGV II Building, 6758 Ayala Avenue Makati Metro Manila 1200, Philippines

Tel: (632) 815-8846 Fax: (632) 815-8828

Melbourne, Australia

MADDOCKS

140 William Street, Melbourne

Victoria 3000, Australia Tel: (613) 9288-0555 Fax: (613) 9288-0666

Mumbai - India

DHRUVE LILADHAR & CO.

13-A/B Ismail Building, 381 Dr D..N..Road, Flora Fountain, Mumbai – 400001, India Tel: (9122) 22852362/3

Fax: (9122) 22855787

New Delhi, India

O.P. KHAITAN & CO.

Khaitan House B-1,

Defence Colony, New Delhi-110 024, India

Tel: (9111) 2433 7516 Fax: (9111) 2433 7958 Perth, Australia

KOTT GUNNING

Level 8, AMP Building 140 St Georges Terrace WA 6000, Australia

Tel: (618) 9321-3755 Fax: (618) 9321-3465

Shandong, China

SHANDONG QINDAO LAW FIRM

22/F, Northern Tower, Golden Square, 20 Hong Kong Road(M),

Qingdao P.R.China P.C. 266071 Tel: 86-532-85023128

Fax: 86-532-85023080

Singapore

MADHAVAN PARTNERSHIP

80 Robinson Road #08-01/02

Singapore

Tel: (65) 6225-5111 Fax: (65) 6224 3594

Sydney, Australia

COLIN BIGGERS & PAISLEY

Level 42, 2 Park Street Sydney, NSW 2000

Australia

Tel: (612) 8281-4555 Fax: (612) 8281-4567

Printed Matter

Convictions under environmental legislation: July to August 2006

[Note: the EPD no longer classifies second (and subsequent) offences.]

The EPD's summary of convictions recorded and fines imposed during the above period is as follows:

July 2006

Twenty-four pollution convictions in July 2006

Nine of the convictions were under the Noise Control Ordinance, seven under the Air Pollution Control Ordinance, five under the Waste Disposal Ordinance and three under the Water Pollution Control Ordinance.

The heaviest fine in July was \$50,000, assessed against a company that imported controlled waste without a permit.

August 2006

Thirty-five pollution convictions in August

Sixteen of the convictions were under the Waste Disposal Ordinance, fourteen under the Air Pollution Control Ordinance, four under the Noise Control Ordinance and one under the Water Pollution Control Ordinance.

The heaviest fine in August was \$80,000, assessed against a company that imported controlled waste without a permit.

September 2006

Thirty-nine pollution convictions in September

Twenty-three of the convictions were under the Air Pollution Control Ordinance, nine under the Noise Control Ordinance, four under the Waste Disposal Ordinance and three under the Water Pollution Control Ordinance.

The heaviest fine in September was \$80,000, assessed against a company that imported controlled waste without a permit.

Fred Kan & Co. Solicitors Suite 3104-07 Central Plaza 18 Harbour Road Wanchai, Hong Kong

