

## Environmental Goal

Our policy objective is to provide a safe and humane environment for the custody of prisoners and to facilitate their re-integration into the community upon their release. Within the framework of this policy objective, we are committed to be an environmentally responsible department which strides for continuous improvement in its environmental performance through green management and operational measures.

Planting of greens contributes to inner tranquillity of prisoners.



## Environmental Policy

In pursuance of our commitment to environmental protection, we adopt the following principles:

1. To fully comply with environmental legislation and regulations in the design and construction of new penal institutions and to reduce their environmental impact to a minimum.
2. To meet, and where possible to exceed, the statutory environmental requirements in the operations of all penal institutions. In some institutions where old buildings and outdated facilities no longer meet with environmental standards, to redevelop or to upgrade their facilities accordingly.
3. To adopt green management principles in all activities and operations such as:
  - Conservation of energy and natural resources;
  - Waste reduction;
  - Reduction of paper consumption;
  - Recycling;
  - Procurement and usage of environmental friendly products and raw materials.
4. To increase the environmental awareness of staff and see to it green measures are put into practice.
5. To take stock of, set targets for, assess and report on the environmental performance of the Department.

## Environmental Management

### Green Manager's Committee

In 1999, we set up a Green Manager's Committee, chaired by the Civil Secretary and comprised representatives of staff at different levels, to co-ordinate the environmental efforts of the Department. The terms of reference of the Committee are:

1. To identify green initiatives in the Department;

2. To source, study and experiment green initiatives; to consider staff suggestions on green management; and
3. To formulate green policies, seek endorsement from the Directorate and implement the initiatives.

The Committee disseminated information concerning service-wide green policies formulated by Environment, Transport and Works Bureau to our staff. It set out environmental targets at departmental and institutional levels for the year. It kept track of the energy and paper consumption patterns and provided a forum for experience-sharing. Professions from the environmental protection discipline were invited to give talks at the Committee meetings to enhance staff awareness of green management.

### **Environmental Auditing**

Since 1999, we have set up Environmental Audit Team to inspect selected penal institutions with a view to identifying areas where environmental performance can be improved. In 2006, the Team conducted environmental audits for Chi Ma Wan Correctional Institution and Chi Sun Correctional Institution. Aspects such as waste management and disposal, material management, energy and water management, and staff awareness and participation are covered in the audit inspection. The findings and recommendations of the Environmental Audit Team will be shared at the Green Manager's Committee meeting.

### **Environmental Management Initiatives**

#### **Energy Conservation**

1. *Reduction of energy consumption*

##### Monitoring system

Institutions were required to submit Quarterly Returns on Electricity Consumption to the Green Manager for monitoring purpose. They had to justify any increase in consumption. The Administration Section would keep track of the departmental performance in energy saving and benchmark results against set targets. In 2006, there was an increase of 0.49% in electricity consumption over 2005. The increase was caused by new activities undertaken by the Department. The inauguration of the new Lai Chi Kok Correctional Institution, the mounting of large-scale recruitment exercises and training courses for the new recruits in Staff Training Institute and the change in operational mode of Lai Sun Correctional Institution to a Vocational Training Centre which operated courses involving the intensive usage of Bakery Workshop, Mechanical Craft Workshop and computers led to greater demand for electricity in 2006.

##### Green Housekeeping Measures

Institutions set up surveillance teams and appointed green executives to conduct routine checking on office premises to ensure that these measures were effectively implemented.

##### Replacement Programmes

To achieve energy savings in the long run, we had taken every opportunity to upgrade the lighting and air-conditioning installations to an energy efficient level, to replace the conventional electrical appliances by energy efficient appliances, to modify group lighting switches to individual switches, to install automatic time switches for perimeter fences and occupancy sensor control in staff changing rooms and to improve the building structure during refurbishment programmes. In 2006, we replaced 7 969 conventional fluorescent tubes by T8 type with electronic ballasts in 13 institutions.

#### Use of Solar Energy

Institutions adopted energy efficient features and renewable energy technologies in daily operation. We have invited Electrical and Mechanical Services Department (EMSD) to conduct a feasibility study on the installation of photovoltaic panels in our premises. Installation works will start in Cape Collinson Correctional Institution, Hei Ling Chau Addiction Treatment Centre and Tung Tau Correctional Institution. The Solar Hot Water System to be installed will provide these institutions with hot water through solar energy.

#### *2. Reduction of transport requirements*

To reduce transport requirements, Escort and Support Group adopted a grouping arrangement in discharging escort duties to reduce the number of journeys required. Institutions also set a schedule on the use of transport facilities as a means to reduce fuel consumption.

### **Water Conservation**

The surveillance teams in institutions conducted routine inspections on water taps and shower heads so as to rectify water leakage problems at an early stage. New washing machines with increased productivity and water saving features were installed. Automatic switch-off device was added on water taps. Water flow was adjusted. Buckets instead of water hoses were used for washing floors. Rain water and water used for washing vegetables was saved for watering plants. In Tai Lam Correctional Institution, a waste water recycling system was set up in the Kerbstone Workshops. Water collected from the sedimentation tanks was used for floor cleaning purpose. Save water stickers were posted near the water taps. Staff and inmates were constantly reminded of the need to save water through education and motivation.

### **Waste Management**

#### *1. Reduction of paper consumption*

We were committed to reducing paper consumption. Green executives of institutions promoted green practices in the offices and monitored performance on paper consumption on an on-going basis. Used paper, magazines and newspapers were collected for recycling.

Information technology was used extensively to achieve effective communication and reduction in paper consumption. The departmental web-based Intranet served as the departmental information

portal for a wide variety of useful documents. This significantly reduced the need for hard copy circulation. The e-Leave system and server fax services also helped reduce paper consumption. Starting from September 2006, the Department issued e-Pay slips to all staff through their e-mail accounts. This further saved the need to print hard copies of monthly salary slips.

In 2006, there was a slight increase of 0.6% in paper consumption as compared with 2005. The increase was very moderate. There were new activities in 2006 generating more demand for paper, for instance, Castle Peak Bay Immigration Centre and Lai Chi Kok Correctional Institution had come into full operation, Lai Sun Correctional Institution had been transformed into a Vocational Training Centre and large-scale recruitment exercises had been conducted in 2006. With the concerted efforts of the staff members, the new demand was offset by savings in many penal institutions.

## 2. *Reuse and recycling of solid waste*

Scrap materials from various workshops of garment-making, bookbinding and carpentry were reused. Aluminum and paper off cuts generated from the sign-making and envelope-making workshops were saved and sold to contractors for recycling. Rags of linen were used for cleaning, cloth pieces for making environmental bags, adhesive films for sealing of cardboard boxes and scrap wood for carpentry training. Condemned furniture was reused for making souvenirs for sale at Autumn Fair. The Correctional Services Industries also collected used cardboard boxes from the Post Office for reuse as the outer containers of smaller boxes containing the envelopes.

Recycle bins for collection of aluminum cans, plastic bottles, paper waste and used computer discs were set up in Headquarters and many institutions to foster staff awareness of green practice.

## 3. *Composting of food waste*

4. Institutions had implemented the programme of 'Backyard Composting' by transforming the food waste into a soil-like substance through micro-organisms. The products were used as plant fertiliser and for sale at the Autumn Fair.

## 5. *Handling of chemical waste and clinical waste*

A total of 11 penal institutions had been registered as the Chemical Waste Producer under the Waste Disposal (Chemical Waste) (General) Regulation of the Waste Disposal Ordinance. Chemical wastes were collected by registered contractors. In 2006, some 600 kg solid chemical waste and 31 840 litres of liquid chemical waste were collected by the contractor for disposal and recycling.

The organic fertiliser workshop in Hei Ling Chau Correctional Institution employs wastes such as unconsumed food.

Clinical wastes generated by institutional hospitals were disposed of in accordance with the Draft Code of Practice for the Management of Clinical Waste for Small Clinical Waste Producers issued by Environmental Protection Department.

## **Preservation of the Natural Environment**

Green houses for nursery of various species of plants had been set up in many institutions. Penal institutions beautified the environment by planting trees and flowers in their premises. Lai King Training Centre operated hobby classes in gardening to educate the inmates on the importance of preservation of natural environment.

## **Procurement and Use of Environmental Friendly Products and Raw Materials**

We had signed an agreement with an electricity company to produce concrete cable covers using furnace bottom ash (FBA). FBA was one of the by-products left in furnaces of coal-fired power stations. It had been labelled as waste until 1950s when researches found that it could be used for production of lightweight aggregate concrete blocks. In Tai Lam Correctional Institution (TLCI), production of FBA cable covers took place at a precast concrete plant where FBA substituted sand and silt in mixing with cement to produce concrete cable covers. These covers were easier to be carried and processed as they were lighter in weight when compared to traditional concrete covers. TLCI also set up a production line using recycled aggregates to make paving blocks.

In other institutions, recycled paper was used for production of name cards and envelopes for the Government.

Institutions had been reminded to include environmental-friendly elements in tender specification and evaluation process of procurement as far as possible. Our supplies store had ensured that the consumable items were procured from the Green Products List of Government Logistics Department.

## **Pollution Prevention**

### *1. Water pollution*

We implemented a series of projects to upgrade and improve the sewage treatment facilities in various penal institutions to ensure compliance with statutory requirements. Samples of waste water were tested on a regular basis to monitor the quality of the effluents. Discharge of chemical wastes and contaminated water into the sewer was prohibited.

### *2. Air pollution*

In line with the Government's smoke-free workplace policy, smoking had been prohibited in both office and non-office environments except in designated smoking areas since 1996. Anti-smoking Committee was set up in some institutions to educate staff and prisoners on the hazards of smoking. To improve the air quality, the burning of grass and construction wastes in open areas of

institutions was prohibited. At kerbstone workshop and concrete plant in Tai Lam Correctional Institution, water was sprayed on the sand piles and concrete mixing machines to suppress the suspended dust particles. The green executive of Hei Ling Chau Correctional Institution conducted spot checks on vehicles to ensure that the engines were off while the vehicles were not in motion.

### 3. *Noise pollution*

Institutions were alert to the need for controlling the noise level. The volume of television in the dayrooms was kept at an appropriate level. The use of loud hailer in workshops was reduced. Ear-phones were provided to the staff and prisoners in the carpentry workshops. Machines generating noise were governed by guidelines on Occupational Safety and Health.

## **Staff Awareness Training**

### **Training of staff on environmental protection**

To foster the environmental awareness of staff, environmental protection topics were covered in the in-service training sessions for disciplined staff on a regular basis. In 2006, the Green Manager's Committee invited representatives from Environmental Protection Department to brief members on "Regional Air Pollution" and "Benefits of Recycled Paper and Problems with Woodfree Paper". The green executives of the institutions were also invited to attend Green Management Workshop for Green Managers and Experience Sharing Workshop organised by EMSD and a visit to Stonecutters Island Sewage Treatment Works organised by Hei Ling Chau Addiction Treatment Centre. Posters on energy conservation and "Ten Tips for Good Housekeeping" were posted on notice boards. Green corners were set up in the institutions to promote green consciousness.

### **Participation in the Hong Kong Flower Show**

To promote the staff's interest and awareness of conservation of the natural environment, we took part in the Hong Kong Flower Show organised by Leisure and Cultural Services Department. In the 2006 Flower Show, a total of 18 prizes were won by our staff.

CSD wins a design gold award in the Hong Kong Flower Show.

## **The Way Forward**

The Department will make continuous efforts in promoting environmental protection and explore new initiatives to achieve our environmental goal.