

# Environmental Report 2002



食物環境衛生署  
Food and Environmental Hygiene Department

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# Chapter 1

## INTRODUCTION

The Food and Environmental Hygiene Department, set up on 1.1.2000, is responsible for the provision of environmental hygiene services and facilities, food safety control, import control on live food animals, management of food incidents and other public health issues like combating dengue fever or avian flu. Our work affects everyone in the community and has a direct impact on the environment. To help maintain a clean and healthy environment, we are mindful of the need to ensure that all our services are delivered in an environmentally responsible manner.

In the past year, we continued our efforts in adopting green management in our work. We have also reviewed our environmental objectives and incorporated new techniques that bring about good environmental impact when delivering our services.

This is our third environmental report. In this report, we aim to cover the green measures adopted and our performance in 2002 and also set out plans for 2003 for continuous improvement. We hope that through this report, our staff and stakeholders could have a better idea on our efforts in protecting the environment.

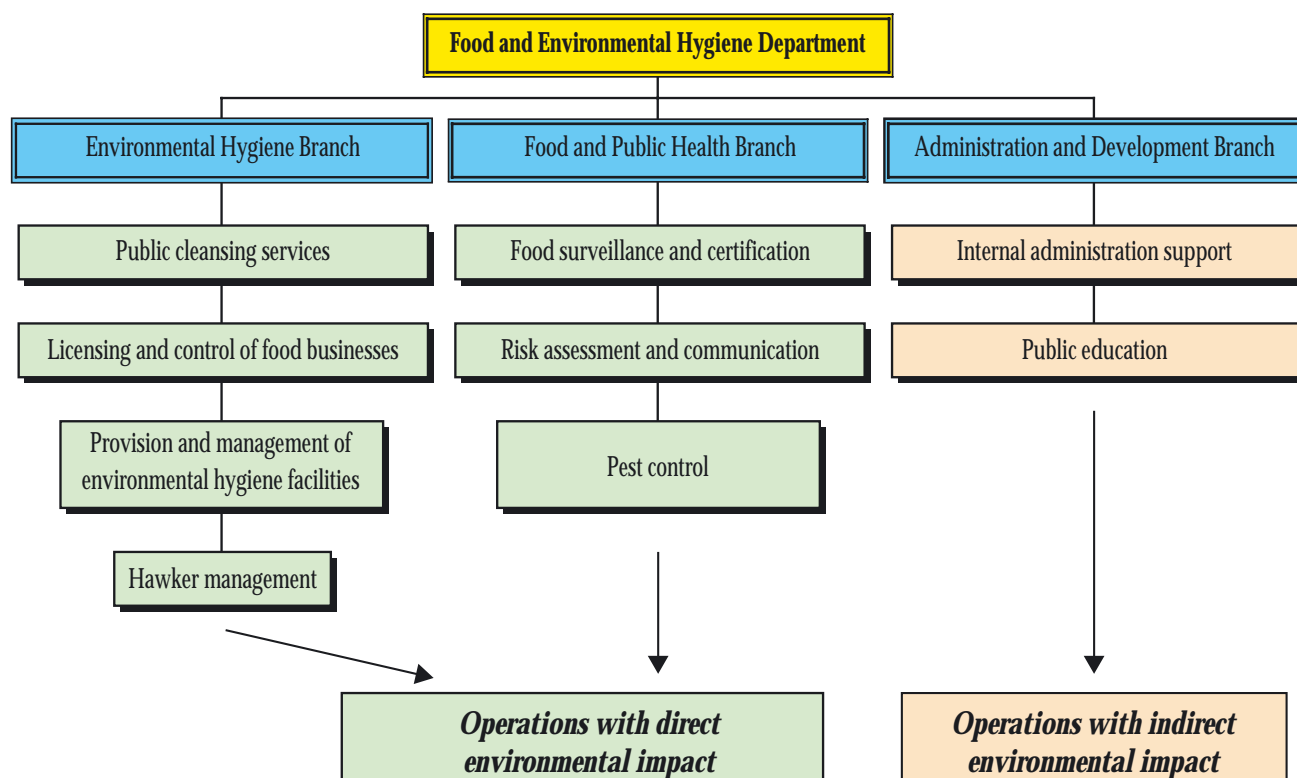


# Chapter 2

## PROFILE OF KEY RESPONSIBILITIES

Our department comprises three branches — Environmental Hygiene, Food and Public Health, and Administration and Development.

An overview of our operations that may have an impact on the environment is as follows —



### Environmental Hygiene Services

We strive to provide and maintain a clean and hygienic living environment for the people of Hong Kong. The range of environmental hygiene services we provide includes public cleansing service, licensing and control of food businesses, provision and management of environmental hygiene facilities and hawker management.

#### Public Cleansing Services

We are committed to keeping public places clean, tidy and free from litter. Direct public cleansing services range from street sweeping and washing, collection of household waste and on-



street litter, gully emptying, desludging, to managing public cleansing facilities like refuse collection points(RCPs). These services are provided by our 4 000 cleansing staff and our private contractors whose services are under our close supervision.

We provide more than 18 000 litter containers and 556 dog excreta collection bins throughout Hong Kong. There are 2,924 RCPs in Hong Kong for the temporary storage of street waste and household waste pending collection. Household waste is collected at least once a day at these RCPs and about 5 955 tonnes of household waste are collected daily by refuse collection vehicles managed either by ourselves or contractors.

## **Licensing and Control of Food Businesses**

We license food businesses to safeguard public health and safety and conduct regular inspection to ensure hygiene standards of licensed food premises are met. We also take law enforcement actions such as prosecutions, summary arrests, imposition of court orders, daily fines and suspension or cancellation of licences against unhygienic premises.

## **Provision and Management of Environmental Hygiene Facilities**

We are responsible for the management of a wide variety of environmental hygiene facilities for public convenience. In total, we manage 38 cooked food centers, 24 free-standing cooked food markets and 81 public markets, 306 public toilets, 33 public bathhouses, 11 public cemeteries, six crematoria and eight gardens of remembrance. In line with our commitment in providing a clean and hygienic environment for the people of Hong Kong, we will continue to improve and upgrade these facilities where necessary and resources permitting.

## **Hawker Management**

On-street hawking is a social and economic activity with a long history and has become part of Hong Kong's way of life. Through licensing and enforcement of legislation, we wish to minimize the environmental nuisance caused by street trading activities.

## **Food and Public Health Services**

We monitor the safety of imported and locally produced food to ensure that food available for human consumption is wholesome, unadulterated and properly labelled. We also aim to safeguard public health through testing and control of live food animals; to prevent vector-borne diseases and provide advice to the public on proper food and environmental hygiene practices. Our major areas of work having environmental impact include food surveillance and certification; risk assessment and communication; and pest control.



## **Food Surveillance and Certification**

To ensure safety of food supply in Hong Kong, we undertake continuous monitoring, testing and enforcement action. Food samples are taken at import, wholesale and retail points for chemical, microbiological, radioactivity and toxicological tests to ascertain their fitness for human consumption. Pre-packaged food is also checked for compliance with food labelling laws.

## **Risk Assessment and Communication**

We conduct risk assessment on food safety, set food standards and recommend food safety control measures. On risk communication, we introduce and promote the Hazard Analysis Critical Control Point (HACCP) approach to ensure food safety and provide food safety information to the public and the food industry on a regular basis.



### **Pest Control**

We give advice on pest control and prevention to government departments and the general public. Our work includes surveillance and monitoring of pest problems to prevent local transmission and investigation of vector borne diseases. Operational services on pest control are carried out by district pest control sections.

## **Administration and Development Services**

### **Planning of Capital and Minor Works Projects**

We are responsible for the planning of new capital works projects and minor improvement works to existing departmental facilities such as markets, refuse collection points, public toilets and crematoria. We will continue to do our best in reducing the environmental impact during the construction and operational phases of these projects and include environmental friendly facilities to minimize any adverse environmental impact as far as possible.

### **Public Education and Campaigns**

We operate a Health Education Exhibition and Resource Centre at Tsim Sha Tsui, organising publicity and educational programmes, and arranging exhibitions, outreaching programmes and seminars as part of the department's integrated approach to promote food safety and environmental hygiene. Awareness on environment protection is covered in our programme. Besides, we take the lead in organising the Clean Hong Kong Programme to address environmental hygiene conditions in the territory.



# Chapter 3

## ENVIRONMENTAL POLICY

Our statement on environmental policy is as follows -

The Food and Environmental Hygiene Department is committed to ensuring that all our services are delivered in an environmentally responsible manner, particularly in the collection, recycling and reduction of household waste, conservation of energy and water, and prevention of air, noise, water and soil pollution. We will also promote green housekeeping in premises under our management.

# Chapter 4

## ENVIRONMENTAL OBJECTIVES AND PERFORMANCE

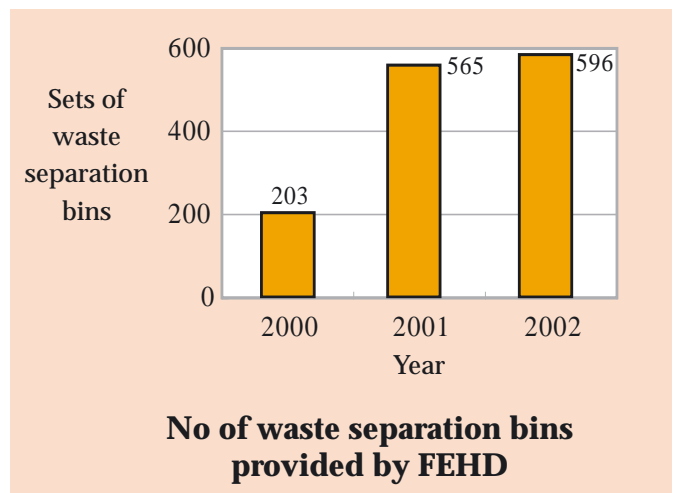
In line with Government's efforts to protect the environment, we have incorporated environmental considerations in the formulation of our policy and the delivery of our services to ensure that all our operations are conducted in an environmentally responsible manner. The following is an account of our main objectives and performance in 2002.

### OBJECTIVE: TO ACHIEVE WASTE REDUCTION IN OUR OPERATIONS

#### Our Performance

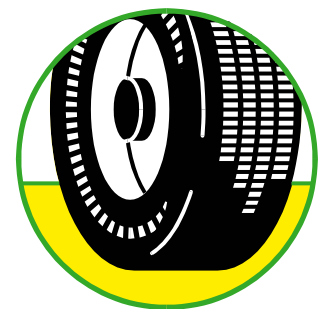
##### Household Waste Recycling in Waste Collection Programme

In support of the Government's 1998 Waste Reduction Framework Plan, we have increased the provision of waste separation bins for the collection of waste paper, aluminum cans and plastic bottles from 565 sets in 2001 to 596 sets in 2002. The sets of three waste separation bins are placed at convenient public locations including MTR exits, KCR exits, bus termini, ferry piers, markets and refuse collection points. Besides, we have also provided collection services to 1,027 recycling points in public places, government venues, and schools for the collection of waste paper, aluminium cans and plastic bottles. All recyclables collected are delivered to waste recyclers for recycling.



##### Use of Retread Tyres

In response to the Government's initiative on waste reduction and environmental protection, retread tyres are used on the departmental vehicle fleet whenever possible.



##### Clean Hong Kong Programme

We have launched since December 2000 a three-year Clean Hong Kong Programme with a view to bringing about visible and sustainable improvements on the ground through active cleansing operations, public education and publicity efforts, and to instilling a sense of belonging and pride in the community for the clean environment. In 2002, we have carried out a series of enhanced clean-up action. Examples include regular cleansing services to over 1,300 "grey area" locations, cleaning some 100 hygiene black spots, deploying static street cleaners at

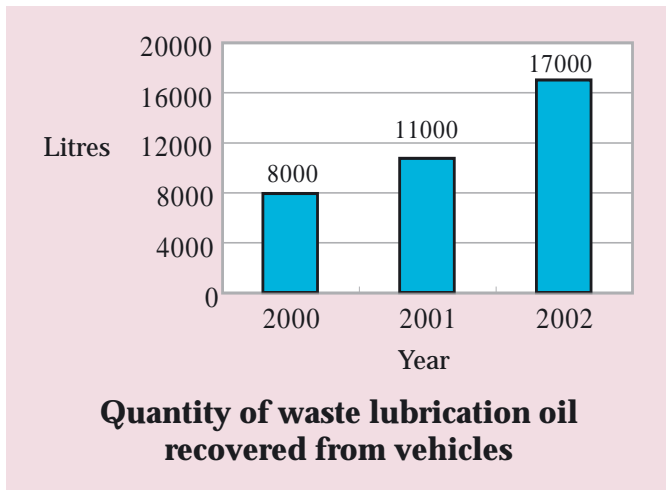


over 400 public spots and removing gum marks and providing intensive street washing services. All these aim at improving the overall cleanliness of Hong Kong.



## Chemical Waste Recovery and Waste Water Drainage at Vehicle Depots

Waste lubrication oil, spent batteries and air conditioning refrigerants from vehicles are properly recovered and collected by approved contractors. During the year, we have increased the



quantity of waste

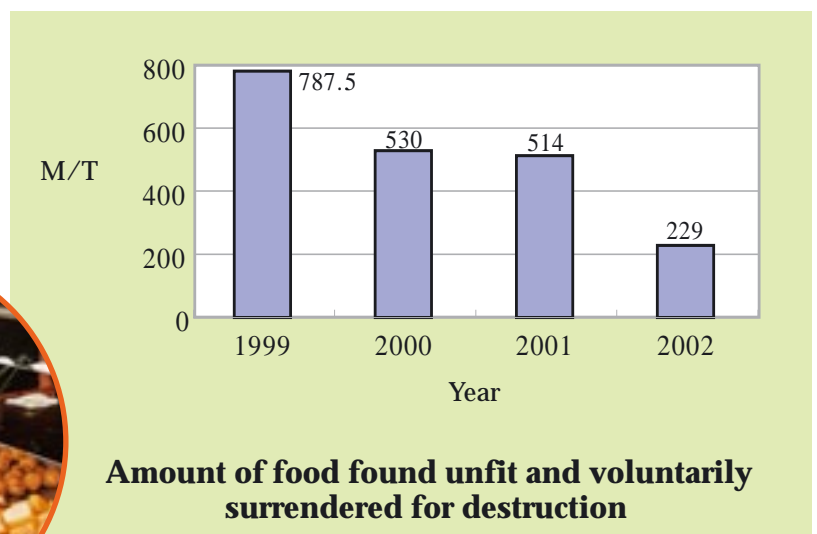
lubrication oil recovered from vehicles to 17 000 litres per annum, compared to 11 000 litres per annum in 2001. Proper drainage systems are also provided for vehicle washing bays to avoid pollution to storm water drainage.

All the departmental depots are in compliance with the requirements under the Waste Disposal (Chemical Waste) (General) Regulation and Water Pollution Control Ordinance and are issued with relevant licences by the Environmental Protection Department (EPD).

## Food Safety and Control

The amount and the way in which unwholesome food destroyed is interrelated with the overall environmental objective of producing less waste and mitigating nuisances arising from waste disposal. To this end, we exercise tight control on the import of certain categories of high-risk food including game, meat, poultry, milk and frozen confections. We also conduct food surveillance programme through sampling at different stages of the food supply chain - from import and manufacture to the wholesale and retail stages.

The amount of food found unfit and voluntarily surrendered for destruction in 1999, 2000, 2001 and 2002 was 787.5 metric ton(M/T), 530 M/T, 514 M/T and 229M/T respectively. We would continue to closely monitor the disposal of unfit food to ensure compliance with EPD guidelines.



# OBJECTIVE : TO MINIMISE ENVIRONMENTAL IMPACT IN THE DELIVERY OF OUR SERVICES

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## Our Performance

### Licensing Control and Enforcement on the Operation of Food Premises

To ensure that waste generated from the operation of food premises is properly handled, we conduct regular inspection to licensed food premises to check that -

- grease traps installed in food premises are functioning properly to prevent discharge of oil or grease into public drains or sewers;
- plumbing systems in food premises are properly maintained to prevent discharge of offensive or noxious effluents into public places;
- fumes and hot air are discharged in such manner as not to be a nuisance. Metal hood, air-ducts, extraction fans, grease filters/water scrubbers of exhaust systems are maintained in good order;
- waste is properly stored in dustbins for collection; and
- no smoking area together with sufficient and proper no smoking signs are provided in restaurants having more than 200 seats for customers.

Enforcement action will be taken on those food premises not complying with licensing conditions. In 2002, we conducted 429 269 inspection to food premises and took 5 981 prosecution actions against food premises.



### Cremation Services

To control the quality and volume of emissions generated from cremation services, we have

- regularly serviced and maintained cremators through Electrical and Mechanical Services Department (EMSD);
- installed a Telemetry and Monitoring System with online computerised network supplying information to EPD for monitoring the pollution level to make sure that it is operating within the statutory limit. Monitoring systems with temperature recorders are installed in major crematoria;
- used the less sulphur content (0.05%) diesel for cremators using diesel; and
- enlisted the support of the public and funeral service operators to use environmental-friendly coffins through the issue of pamphlets and regular meetings with the funeral trade.



On cremation facilities, the construction of a new crematorium in Kwai Chung with four cremators to replace the existing one was completed in late 2002. The new cremators are equipped with modern device to minimize emission of air pollutants.

## Environmental Hygiene Facilities

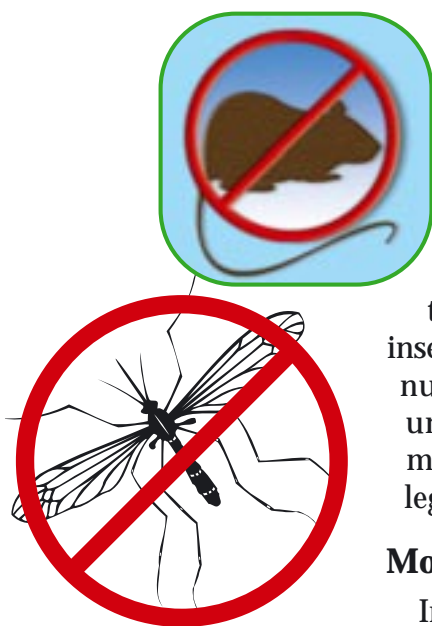
Efforts are made to improve the drainage systems in our facilities including markets, hawker bazaars and refuse collection points (RCPs). All cooked food markets have proper drainage systems with grease traps to prevent the discharge of pollutants into surface channels.

As part of the on-going efforts to improve the living environment, we continue to replace temporary roadside RCPs with off-street facilities in enclosed buildings equipped with modern deodorizing installations. The RCP at Ma Tau Kok Road came into service at end 2002. To prevent odour and pollution from RCPs, newly built RCPs are installed with a water scrubber system, while existing RCPs will be retro-fitted with water scrubber system or activated carbon filtration system in phases if circumstances permit.



## Pest Control

In the prevention and control of public health pests, we have adopted an Integrated Pest Management approach to rationalise the work to minimise the impact of pest prevention and control on non-target animals and the environment. It includes finding out the causes of pest infestation and then determining the choice of control methods. Pest control operations are evaluated regularly and will be terminated if no longer necessary. Advice on environmental improvement for solving pest problems is given to the parties concerned.



Environmental-friendly methodologies, technologies and products are used. Non-chemical agents will be considered before adopting the use of pesticides. We are also very cautious in the choice of pesticides so that pest disinfestations are carried out effectively and with the least impact on the environment. To minimise the detrimental effect to non-target living organisms, we choose synthetic pyrethroid insecticides which generate less hazards to human beings. Pests and nuisance-causing animals are disinfested judiciously to avoid unnecessary disturbance to the ecological system. The control measures include a choice of physical, environmental, biological, legal or chemical methods.

## Mosquito Control

In mosquito control, we continue to adopt non-chemical means as far as possible. Mosquito breeding can be forestalled by killing the insect at its adult or/and larval/pupal stages. We strive to improve the environment so that it becomes unfavourable for mosquitoes to breed. We apply larvicidal oil or pesticide strictly on a need basis and to specific spots only. In 2002, the amount of larvicidal oil applied in streams was 3 320 litres, representing a 88% decrease as compared to the amount used in 2001.

In preventing malaria transmission, an environmental control approach has been adopted and found to be successful. The prevention programme is mainly confined to densely populated areas with a high risk of malaria transmission. In the year, we have put in place a control programme against malaria transmissible mosquitoes, covering a total of 647 streams.

In areas where malaria vector mosquitoes are detected but with a low population, mosquito larvae eating fishes are released to abate mosquito breeding. To further reduce the impact on the environment, *Bacillus thuringiensis israelensis* are used for killing mosquito larvae. *Bacillus thuringiensis israelensis* produce crystal proteins which can be converted into toxins in the gut of the mosquito larva. The toxins act on larvae of limited species including mosquitoes, blackflies and non-biting midges.

## Rodent Control

We continue our efforts in containing rodent problems through regular inspection and disinfestations and organising theme talks, exhibition. In drawing up rodent disinfestation programmes, we always take into account the environmental concern. Anticoagulants are used although it takes a longer time to kill rodent. With the right dosage, chosen bait, selected baiting locales and a well-designed baiting programme, the use of anticoagulants is considered much safer than acute rodenticides. Trapping of rodents is preferred to using chemicals. During the year, we laid poison baits at 353 820 points and 2 965 traps, disposing of 48 297 rodents.



## OBJECTIVE : TO PROMOTE GREEN HOUSEKEEPING WITHIN THE DEPARTMENT

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Apart from delivering our services in an environmentally responsible manner to the public, we are also aware of the importance of good green housekeeping and raising environmental awareness. To promote a green office environment and strive for continual improvement in the efficient use of resources, we regularly remind our staff of good green housekeeping practices and organise education programmes and campaigns.

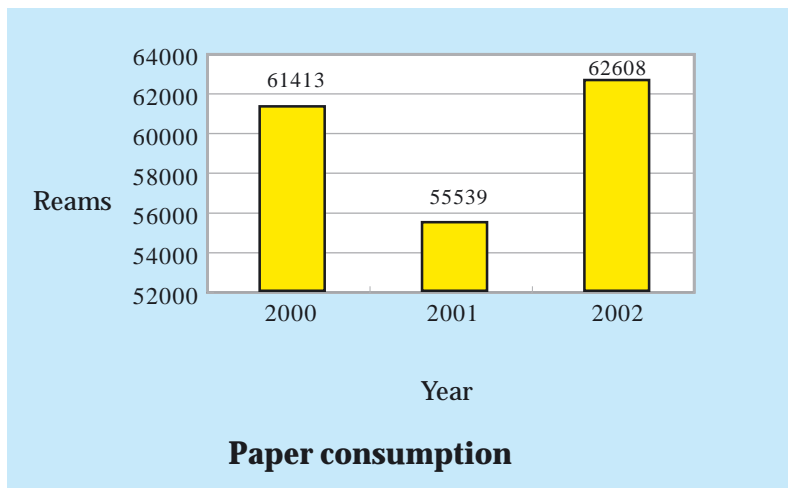
## Our Performance

### Managing Paper Consumption

We continue practising paper-saving measures like asking our staff to use paper on both sides and keep photocopying to the minimum. Besides, we review our work procedures regularly to look for green improvement opportunities. During the year, we have taken the following measures and made every effort to ensure the efficient use of paper-

- we ceased distributing hardcopy of our departmental telephone directory;
- we introduced a training corner in each office for posting training information; thus reducing the copies of training circulars; and
- we used more electronic communication like e-memo in daily work and disseminated information through email or by posting it onto the department's electronic bulletin board.

However, we noted that our paper consumption in 2002 has increased by 12.7% as compared to the consumption in 2001. This was mainly due to operational need and increase in workload during the past year. We will closely monitor the pattern of paper consumption in the coming year to identify areas for improvement.

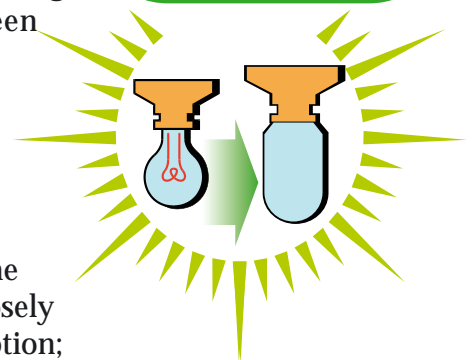
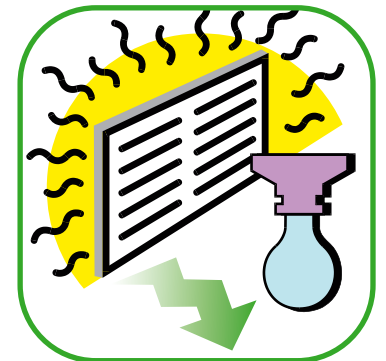


## Managing Electricity Consumption

During the year, we noted that the overall electricity consumption in the department has increased by 9.5% as compared to the consumption in 2001. The increase was probably due to the operation of new air-conditioned markets commissioned in the year.

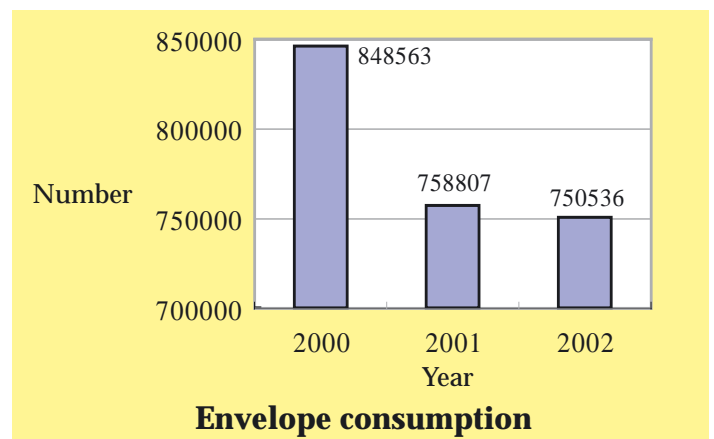
To continue our efforts in looking for energy saving opportunities, the following actions and measures have been taken in 2002-

- we reminded our staff of energy saving practices including switching off unnecessary lightings, air-conditioning and equipment when not in use;
- we conducted an analysis on electricity bills for the major departmental venues in late 2002 to identify the heavy users and asked the responsible venue staff to closely monitor and take every effort to control power consumption;
- we convened working level meetings with EMSD staff regularly and energy saving opportunities was one of the standing items in our meetings. We also followed up the recommendations on energy audits conducted by EMSD to our departmental venues. Various improvements such as replacing conventional ballast with electronic ballast in markets and readjusting the temperature set point had been initiated; and
- we already used energy saving lightings in common parts of our facilities and will promote the use of energy saving bulbs instead of tungsten light bulbs by stallholders in our markets and cooked food centres.



## Promoting 3-R Principle

We promote the principle of “Reduce, Reuse and Recycle” to our staff and encourage them to practise it in daily work. We remind our staff to reduce consumption and reuse stationery like envelopes. In 2002, we recorded a slight decrease of 1.1% in the amount of envelopes used when compared with the consumption in 2001.

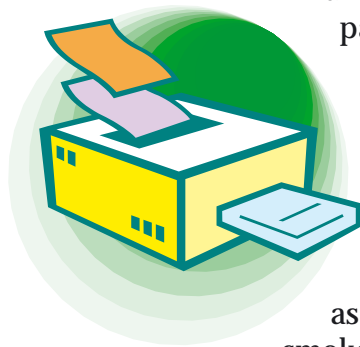


We support recycling to ensure efficient use of resources. During the year, we collected used toner cartridges and waste paper in our offices /venues for recycling. We also supported the CompuAid Project (a computer recycling programme organized by the Hong Kong Council of Social Services) and joined some 50 bureaux/ departments who had altogether donated more than 1200 computers and accessories to those people in need, including the elderly and the disabled.



### **Using More Green Products**

We continue our efforts in using and purchasing more green products. In 2002, we introduced green products like Clutch Pencil and Lead Refill as our stock items. We have also maintained a list of green products such as photocopying and duplicating papers made from recycled material / renewable forests, recyclable toner cartridges for printers and photocopiers, mercury-free batteries and environmental-friendly soap and liquid detergent as our standard stock items to meet the daily operational requirement.



### **Maintaining No-smoking Workplace Policy**

We maintain a smoke-free workplace policy in all offices as well as government vehicles. To remind all staff to maintain a healthy and smoke-free workplace, we re-circulate the circular on smoke-free workplace policy regularly.

### **Incorporating Environmental Considerations in the Use of Departmental Vehicles**

We procure vehicles with engines that meet the latest legislative environmental standard. The vehicles we procured since 2001 were of Euro III emission standard. During the year, we continued to adopt the policy in procuring vehicles running on cleaner fuel. A total of 80 light buses running on LPG were put into use to replace the diesel engine vehicles.

Our vehicles are maintained on schedule to minimise the emission of excessive fumes and particles.

We instruct our drivers to comply with the air control guidelines such as switching off the engine while waiting.

We participate actively in trials that facilitate assessment of pollutant reduction devices on vehicles, especially those for heavy-duty vehicles like refuse collection vehicles. We will continue to work together with EMSD and Government Logistics Department to explore the feasibility of using pollutant reduction devices to protect the environment.



# OBJECTIVE : TO PROMOTE ENVIRONMENTAL AWARENESS THROUGH EDUCATIONAL PROGRAMMES AND CAMPAIGNS

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## Our Performance

### Internal

We support green initiatives launched by other Government departments and organizations. In 2002, we encouraged our staff to participate in the “Community Chest Green Day”, “No Plastic Bag, Please” and the “No Smoking Day in Workplace” Campaigns.

### External

The Health Education Exhibition and Resource Centre organises talks and health education activities for primary and secondary school students, the elderly, new arrivals and members of the public. Apart from messages on personal hygiene, food hygiene and environmental hygiene, the economical use of paper and waste reduction are also covered. A total of 1,735 talks and activities were organised in 2002.

During the year, in collaboration with other Government departments, we organised the “Anti-rodent Campaign” and the “Anti-mosquito Campaign” carrying respectively the themes of “Prevent Disease, Eliminate Rodent Nuisance” and “Beware of Dengue Fever. Act Now”. The campaigns have enhanced public awareness of the importance of rodent and mosquito prevention.



# Chapter 5

## THE WAY FORWARD

Our management and staff place great importance on environmental issues and initiatives and monitors related performance and achievement closely. To strive for continuous improvement, the management will —

- monitor the effectiveness of the green measures we have put in place, and modify and improve them as and when necessary.
- review our environmental objectives regularly and incorporate new techniques that bring about good environmental impact when delivering our services; and
- promote staff awareness and knowledge on environmental issues and support green initiatives and campaigns organised by other organizations.

### Future Activities

Looking ahead, we plan to take forward the following environmental initiatives, which will bring about good environmental impact.

#### Clean Hong Kong Programme

In 2003, to support the Team Clean's initiatives to achieve quick and visible improvement in the living environment, we will intensify our efforts in Clean Hong Kong and take the following actions -

- implement action-oriented initiatives addressing district concerns such as clean-up actions all over the territory, (including hygiene blackspots and common areas of old private tenement buildings), thorough cleansing and limewashing of public and private rear lanes, collection of bagged refuse in old districts, and continuing the public toilet refurbishment programme;
- stringent enforcement of the fixed penalty system against minor cleanliness offences; and
- continue the seasonal thematic activities for clean-up operations (harbour and beaches in summer, country parks and countryside in autumn and year-end operations in winter/spring).



#### Upgrading of Cremation Facilities

We are arranging for the replacement of cremators at the Fu Shan Crematorium and actively planning for re-provisioning of cremators at the Diamond Hill Crematorium, which amongst other improvements, will also help minimize environmental nuisances.



## Improvement of Refuse Collection Points

To further improve waste collection services, we plan to build more off-street RCPs equipped with features to minimise environmental nuisance to nearby residents. New RCPs, which are designed to be visually attractive as well as odourless, are equipped with water scrubber systems, vehicle exhaust extraction systems and high pressure water jet cleaners. Besides, upgrading works to 48 RCPs in the New Territories to enhance pollution control are actively in progress with 8 projects completed in 2002.



## Pest Control

We will continue to adopt an integrated approach in pest control operations, putting equal emphasis on effective use of pesticides and continuous improvement of environmental hygiene. We update pest control methodologies and technologies regularly, making reference to the World Health Organisation's latest recommendations. In 2003, we will continue to organise the “Anti-mosquito Campaign” and “Anti-rodent Campaign” to promote public awareness of mosquito and rodent prevention for a better living environment.

## Using Transport Efficiently

The department has installed electronic vehicle monitoring devices to its 200 special purpose vehicles to monitor the performance of the vehicle fleet in 2002. This can help maximise the utilisation of the vehicles and in turn reduce fuel consumption and pollutants as a result. More vehicles will be equipped with the device in 2003.

## Retrofitting of Diesel Oxidation Catalysts (DOC) on Diesel Vehicles

With a view to minimizing the environmental impact of diesel vehicles, we will retrofit Diesel Oxidation Catalysts (DOC) on the Euro I & II emission standard diesel vehicles of our vehicle fleet in 2003.

## Green Drive

To sustain the momentum and the effort that has been put into green management and to raise the awareness of staff towards good green housekeeping practices, we will launch a large-scale “Green Drive” and organize seminars on green management in the department in 2003 to further promote and implement green housekeeping measures. The Green Drive has the full support of our senior management and we will also appoint designated “Green Ambassadors” in each section to assist in the implementation.

## Comments and Suggestions

This report can be viewed at our homepage at [www.fehd.gov.hk](http://www.fehd.gov.hk). Comments and suggestions on the report are most welcome. Please write to our Green Manager at Food and Environmental Hygiene Department, 45/F, Queensway Government Offices, 66 Queensway, Hong Kong or email us at [fehhdhqgen@fehhd.gov.hk](mailto:fehhdhqgen@fehhd.gov.hk).