ENVIRONMENTAL REPORT 2001



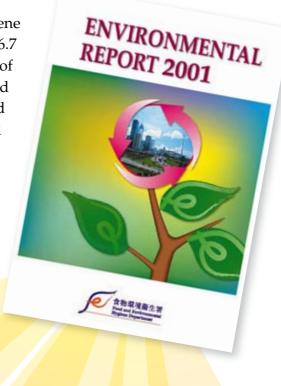


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Chapter 1 Introduction

The Food and Environmental Hygiene Department, set up on January 1, 2000, serves the 6.7 million people in the city with a wide spectrum of services, ranging from food surveillance and certification to the planning, co-ordination, and delivery of environmental hygiene services and public education on safe food and environmental cleanliness.

With an establishment of some 15 000 staff members, the Department delivers the services through three branches - Food and Public Health Branch, Environmental Hygiene Branch as well as Administration and Development Branch.





PROFILE OF KEY RESPONSIBILITIES

Our department is responsible for food safety control, import control on live food animals, management of food incidents and environmental hygiene services and facilities.

We have two major areas of responsibilities: environmental hygiene services and food and public health services.

Environmental Hygiene Services

We strive to provide and maintain a clean and hygienic living environment for the people of Hong Kong through organising and delivering high standard environmental hygiene services in the following major areas -

- Public cleansing services;
- Licensing and control of food businesses;
- Provision and management of environmental hygiene facilities; and
- Control of street trading activities.

Public Cleansing Services

We are committed to keeping public places clean, tidy and free of litter. Direct public cleansing services range from street sweeping and washing, collection of household waste and onstreet litter, gully emptying, desludging, to providing toilets for public convenience. These services are provided by our 5 300 cleansing staff or by our private contractors whose services are under our close supervision.

We provide more than 16 000 litter containers and 400 dog excreta collection bins throughout Hong Kong. These containers are emptied at least once a day. On household waste, we collect about 5 940 tonnes of household waste daily by a fleet of 387 modern refuse collection vehicles.



Licensing and Control of Food Businesses

We license food businesses to safeguard public health and safety and conduct regular inspections 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 unlicensed and unhygienic premises.

Provision and Management of Environmental Hygiene Facilities

We manage 36 cooked food centers, 24 free-standing cooked food markets and 81 public markets where some 13 000 stalls offer a wide variety of commodities ranging from fresh produce, meat and poultry to household items. We are also responsible for the management of 11 public cemeteries, six crematoria and eight gardens of remembrance.

Control of Street Trading Activities

On-street hawking is an accepted social and economic activity and has become part of Hong Kong's way of life. We are the authority responsible for hawker management. Through licensing and enforcement of legislation, environmental nuisance caused by street trading activities is minimised.

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. The major areas of work include –

- Food surveillance and certification;
- · Risk assessment and communication; and
- Pest control.

Food Surveillance and Certification

We take samples 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.



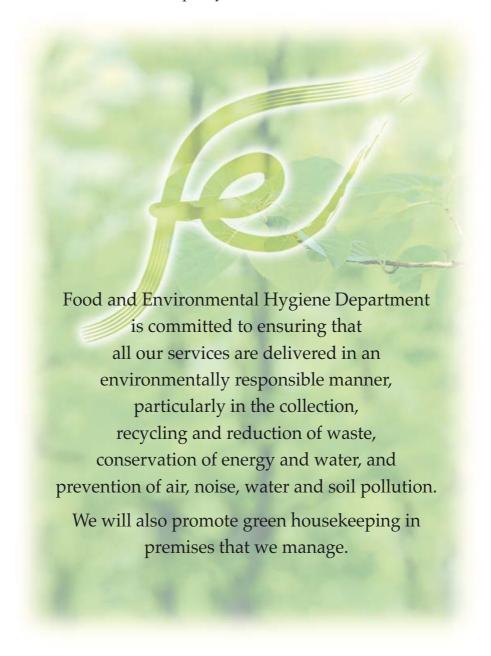
Risk Assessment and Communication

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.

Our statement on environmental policy is as follows -



Chapter 4

ENVIRONMENTAL OBJECTIVES AND PERFORMANCE

In line with the 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 for our operations and services in 2001.

OBJECTIVE: TO REDUCE WASTE IN OUR OPERATIONS

Our Performance

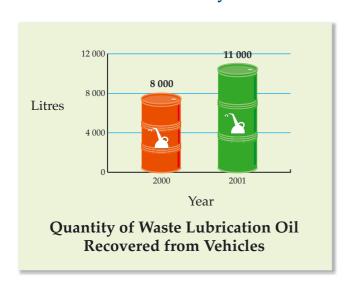
Waste Recycling in Waste Collection Programme

In support of the Government's Waste Reduction Framework Plan 1998-2007, we have increased the provision of waste separation bins for the collection of waste paper, aluminum cans and plastic bottles from 203 sets in 2000 to 565 sets in 2001. The sets of three waste separation bins are placed at convenient public locations including MTR exits, KCR exits, bus termini, ferry piers and refuse collection points. Our contractors collect and deliver the recyclable waste to recyclers for recycling purpose.





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 11 000 litres per annum, compared to 8 000 litres per annum in 2000. 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).

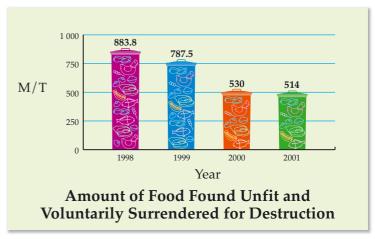
Food Safety and Control

The amount and the way in which unwholesome food is 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 1998, 1999, 2000 and 2001 was

883.8 M/T, 787.5 M/T, 530 M/T and 514 M/T respectively. We would closely monitor the disposal of unfit food to ensure that it is in strict compliance with EPD guidelines.





OBJECTIVE : TO MINIMISE POLLUTION IN THE DELIVERY OF OUR SERVICES

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 inspections 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 compiling with the licensing conditions. In 2001, we conducted 403 408 inspections to food premises and took 7 229 prosecution actions against food premises.

Cremation Services

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

- ensure regular servicing and maintenance of the cremators by Electrical and Mechanical Services Department (EMSD);
- install a Telemetry and Monitoring System with online computerised network supplying information to EPD for monitoring the pollution level. Monitoring system with temperature recorders are installed in major crematoria;
- use the less sulphur content (0.05%) diesel for cremation; and
- enlist the support of the public and funeral service operators to use environmentalfriendly 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 has started in early 2001. The works are expected to be completed in late 2002.

Environmental Hygiene Facilities

Efforts are made to improve the drainage systems in our venues 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 excessive pollutants into surface channels.

To prevent odour and pollution from RCPs, newly built RCPs will be 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.

OBJECTIVE: TO MINIMISE THE ENVIRONMENTAL IMPACT OF PEST CONTROL OPERATIONS

Our Performance

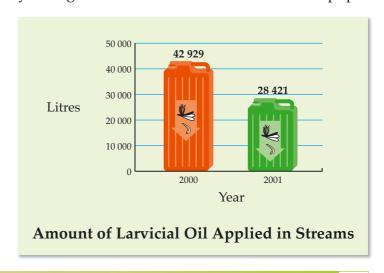
In the prevention and control of public health pests, we have adopted an Integrated Pest Management approach to rationalise the work to minimise the impact of pest prevention and control on non-target animals and the environment. It includes finding out the causes of pest infestation and then determining the choice of control method(s). 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 parties concerned.

Environmental-friendly methodologies, technologies and products are used. Nonchemical means 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. Pests and nuisance causing animals are disinfested judiciously to avoid unnecessary disturbance to the ecological system.

Non-chemical Prevention and Control

Mosquito breeding can be forestalled by killing the insect at its adult or/and larval/pupal

stages. Application of pesticides has an immediate effect but kills other insects as well. We strive to improve the environment so that it becomes unfavourable for mosquitoes to breed. We shall apply larvicidal oil or pesticide strictly on a need basis and to specific spots only. In 2001, the amount of larvicidal oil applied in streams was 28 421 litres, representing a 34% decrease as compared to the amount used in 2000.



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 larvae. The toxins act on larvae of limited species including mosquitoes, blackflies and non-biting midges.

Pesticides

The use of pesticides is sometimes unavoidable in pest prevention and disinfestations but they are usually also harmful to non-target animals and plants. To minimise the detrimental effect to non-target living organisms, we choose synthetic pyrethroid insecticides which generate less hazards to human beings.

In rodent disinfestations, anticoagulants are used although it takes a longer time to kill the animal. 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. In drawing up rodent disinfestation programmes, we always take into account the environmental concern. During the year, we laid poison baits at 58 724 points and 3 247 traps, disposing of 48 944 rodents.

Judicious Disinfestations

Although some arthropods such as wasps, wild bees, ants, millipedes, motes, etc. are harmful or cause nuisance to human beings, they are not killed unless they pose a threat. When these insects have to be disinfested, non-chemical means will be considered before resorting to pesticides. The control measures include a choice of physical, environmental, biological, legal or chemical methods.

Chapter 5

PROMOTION OF ENVIRONMENTAL AWARENESS

To promote a green office environment and to achieve continual improvement in the efficient use of resources, we constantly remind our staff of good green housekeeping measures and organise education programmes and campaigns.

OBJECTIVE : TO PROMOTE GREEN HOUSEKEEPING WITHIN THE DEPARTMENT

Our Performance

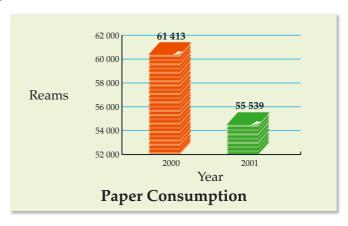
To Use More Green Products

We continue our efforts to use and purchase more green products. In 2001, we have established a list of green products such as recycled photocopying and duplicating papers, 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. In the near future, we plan to replace the conventional black lead pencil with green products like Clutch Pencil and Lead Refill. They will become our standard stock range.

To Reduce Consumption of Paper

We constantly remind our staff on paper-saving measures such as -

- keeping photocopying to the minimum;
- sharing copies of circulars, memoranda or publications on a team or division basis instead of making personal copies;
- reviewing distribution lists regularly to keep duplication to the minimum;
- not sending a covering memorandum and fax leading page when forwarding a document without additional message;



- using A5-size paper for short letters and memoranda; and
- using paper on both sides.

In 2001, we have successfully reduced the consumption of paper by 9.6 % when compared with the consumption in 2000.

To Promote the Use of Electronic Communication

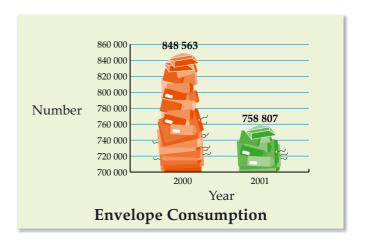
We provide PCs and email facilities to all officers with operational needs to promote electronic communications. In 2001, the number of email users has increased to over 1 750. We encourage our staff to communicate through electronic mail as far as practicable. We post notices, circulars, telephone directories and other information that require wide circulation on the department's electronic bulletin board for sharing.

To Reduce Consumption of Other Stationery

We remind our staff to exercise economy in other stationery such as -

- not using envelopes for unclassified documents;
- reusing envelopes or using transit envelopes;
- monitoring the number of brochures/forms requiring printing or reprinting to keep the requirement to the minimum; and
- encouraging the use of ball pen refills.

In 2001, the number of envelopes used was reduced by 10% when compared with the consumption in 2000.



To Economise on Electricity Consumption

We constantly remind our staff of energy saving practices such as -

- reducing lighting for illumination to the minimum;
- switching off lights when not needed;
- switching off lights/air conditioners, communal facilities (e.g. photocopiers) outside office hours;
- switching on computers only when required;
- using Venetian blinds to reduce direct sun heat;
- closing doors to separate an air-conditioned area from a non-conditioned one;
- controlling the use of personal electrical appliances in the office;
- urging staff to use staircase for inter-floor traffic;
- reducing water consumption as the treatment and distribution of water consume energy;
 and
- ensuring that the indoor temperature of air conditioned offices and public waiting areas is not lower than 23°C in the summer months.

To Collect Waste Paper for Recycling

In 2001, we collected 18 372 kg of waste paper in our offices/venues for recycling, compared to 20 409 kg in 2000. The decrease was probably due to our efforts in reducing paper consumption.

To Maintain No-smoking Workplace Policy

We maintain a smoke-free workplace policy in all offices as well as government vehicles. In 2001, we re-issued the circular on smoke-free workplace policy and distributed no-smoking signs to remind all staff to maintain a healthy and smoke-free workplace.

To Incorporate Environmental Considerations in Using Departmental Vehicles

We procure vehicles with engines that meet the latest legislative environmental standard. During the year, we planned for the procurement of vehicles running on cleaner energy. Forty-

six light buses using liquefied petroleum gas will be put into service in 2002.

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

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 Land Transport Agency to explore the feasibility of using pollutant reduction devices to protect the environment.



OBJECTIVE : TO PROMOTE ENVIRONMENTAL AWARENESS THROUGH EDUCATIONAL PROGRAMMES AND CAMPAIGNS

Our Performance

Internal

We support green initiatives launched by other government departments and organisations. In 2001, we encouraged our staff to join the "No Plastic Bag, Please" and the "No Smoking Day in Workplace" Campaigns.

External

The Health Education Exhibition and Resource Centre organises talks for kindergarten and primary school students throughout the year. Apart from messages on personal hygiene, food hygiene and environmental hygiene, the economical use of paper and the reduction of waste are also covered. A total of 100 school talks were organised in 2001.



During the year, in collaboration with other government departments, we organised the "Anti-rodent Campaign" and the "Anti-mosquito Campaign" with the theme of "Let's Remove Stagnant Water, Eliminate Mosquitoes for Healthy Living". The campaigns have enhanced public awareness of the importance of rodent and mosquito control.

Chapter 6

Our senior management places great importance on environmental issues and initiatives and monitors related performance and achievement closely. To strive for continuous improvement, we will -

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

Future Activities

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

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 will intensify our efforts in Clean Hong Kong and take the following actions -

- implement new action-oriented initiatives addressing district concerns such as clean-up
 - actions all over the territory, face-lifting work to village-type refuse collection points and aqua privies, and public toilet refurbishment programme;
- implement 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

To enhance efficiency and minimise environmental nuisances, we are actively planning for the replacement of cremators at the Fu Shan Crematorium and the Diamond Hill Crematorium, which allow us to increase the capacity and speed for cremation for the provision of a better service.

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. In addition to these, upgrading works to another 49 RCPs in the New Territories to enhance pollution control are under active planning.

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 2002, 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 is installing electronic vehicle monitoring devices to its special purpose vehicles to monitor the performance of the vehicle fleet. This can help maximise the utilisation of the vehicles and in turn reduce the fuel consumption and pollutants as a result.



Use of Retread Tyres

In support of the Government's initiative on waste reduction and environmental protection, we are exploring the feasibility of using retread tyres for our vehicle fleet. In the initial stage, refuse collection vehicles are selected for trial. If the trial is successful, it will be extended to other types of vehicles.

Comments and Suggestions

This report can be viewed at our homepage at *www.fehd.gov.hk*. Comments and suggestions on the report are most welcome. Please write to our Green Manager at 45/F, Queensway Government Offices, 66 Queensway, Hong Kong or email us at *fehdhqgen@fehd.gov.hk*.