



Environmental Protection

The Secretary for the Environment, Transport and Works, who has overall policy responsibility for environmental protection, receives assistance on the formulation of new policies as well as on specific environmental issues from the Permanent Secretary for the Environment, Transport and Works (Environment), who is also the Director of Environmental Protection. The Advisory Council on the Environment advises the Government on measures for the prevention and abatement of pollution.

The Environmental Campaign Committee organises events to promote environmental awareness and administers part of the Environment and Conservation Fund.

The Environmental Resource Centres in Wan Chai, Tsuen Wan and Fanling and the Mobile Environmental Resource Centre provide the public with easy access to environmental information. The Environmental Education and Information Counter provides on loan service of environmental education materials for the public.

Planning Against Pollution: Considerable emphasis is placed on preventing environmental problems by applying environmental impact assessment (EIA) procedures to ensure that environmental factors are considered at all stages of project planning and development.

At strategic level, key environmental information, such as territorial land use as well as transport strategies, has to be provided in submissions to the Executive Council and Policy Committee to facilitate decision-making.

At local level, the environment is safeguarded through the application of the guidance provided in the Hong Kong Planning Standards and Guidelines.

The Environmental Impact Assessment Ordinance provides the legal framework for conducting EIA on designated projects and implementation of agreed environmental measures through Environmental Permits.

To lead by example, all government bureaux and departments are required to publish annual environmental reports starting 2000. Private and government owned public corporations are encouraged to do likewise.

The EPD has been actively promoting environmental audit, environmental management system and environmental reporting to improve corporate environmental performance in both private and public sectors. To assist organisations in pursuing environmental management, useful guidelines are available at the EPD's website at <http://www.epd.gov.hk>.

Legislation and Pollution Control: The EPD is responsible for the enforcement of most of the measures contained in the seven main pollution control legislation.

Air: The control on air pollution is effected under the Air Pollution Control Ordinance. Major emitters, such as power plants and cement plants, are categorised as

Specified Processes and subject to stringent licensing control. For other processes, the installation and alteration of fuel burning equipment need prior approval from the EPD. To reduce air pollutants, limits are imposed on the sulphur content of fuels sold in Hong Kong. Subsidiary regulations are in place to control emissions from various pollution sources, such as smoke from furnaces, open burning, construction dust, volatile vapour from petrol filling stations and dry-cleaning machines. The Government is also working on regulations to control volatile organic compounds emitted from certain consumer goods, paints and printing industry.

Specific control on asbestos work requires registration of asbestos consultants, laboratories, contractors and supervisors. Import and sale of blue and brown asbestos are banned. To promote good indoor air quality (IAQ), an IAQ Management Programme has been introduced. An important part of the programme is the IAQ Certification Scheme for Offices and Public Places.

To tackle air pollution caused by vehicle emissions, the Government is implementing a number of programmes. These include introducing the most stringent vehicle fuel and emission standards that are practical and commercially viable, exploring clean alternatives to diesel vehicles, stepping up vehicle inspection and maintenance standards and tightening the control on smoky vehicles. The Government is now tightening the emissions standards for newly registered vehicles to Euro IV. To reduce emission from diesel vehicles, all newly registered taxis must use liquefied petroleum gas (LPG). Almost all taxis are now fuelled by LPG. In August 2002, the Government started offering incentives to encourage diesel light buses to switch to LPG or electric light buses. Advanced smoke test by a chassis dynamometer has been extended to cover all diesel vehicles. Ultra low sulphur diesel has become a statutory standard. It is a mandatory requirement to install particulate reduction devices for light pre-Euro diesel vehicles. The Government is planning to make such installation mandatory for heavy pre-Euro diesel vehicles. Joining the global effort to protect the ozone layer, Hong Kong has honoured the full obligations of the Montreal Protocol and its subsequent amendments through the enforcement of the Ozone Layer Protection Ordinance.

Waste: The Waste Disposal Ordinance provides a framework for control on the collection, treatment and disposal of all waste types. More than 90 per cent of livestock waste is being disposed of by environmentally acceptable means. There is cradle-to-grave control on chemical waste. The ordinance enables permit control on import and export of waste in line with the requirements under the Basel Convention from September 1996.

To create economic incentives for waste minimisation, waste producers are required to pay for part of the treatment cost for waste delivered to the Chemical Waste

Treatment Centre. Private sector users of refuse transfer stations are required to pay for the service. Under the same polluter pays principle, the Ordinance also requires private sector users of the government's construction waste disposal facilities to pay for the service. The new charging scheme was implemented in December 2005.

The Dumping At Sea Ordinance controls marine dumping activities in line with the requirements under the London Convention.

Water: The Water Pollution Control Ordinance provides for declaration of 10 Water Control Zones and four supplementary Water Control Zones to cover the whole area of Hong Kong. All discharges into these zones have been subject to licensing control. A Technical Memorandum of Effluent Standards provides transparency in setting licence limits. They are designed to enable achievement of the Water Quality Objectives.

Noise: The Noise Control Ordinance provides for the control on noise from construction sites, domestic premises and public places, industrial and commercial premises, motor vehicles, intruder alarm systems as well as specified noisy equipment. Noise from general construction works at night and on public holidays is controlled through a permit system which has essentially banned non-essential noisy construction works in built-up areas. All percussive piling works require a permit and are prohibited at night and on public holidays. Noisy diesel, steam and pneumatic piling hammers have been phased out in built-up areas. Hand-held breakers and air compressors must comply with stringent noise emission standards and be fitted with noise emission labels. The management of bodies corporate is held personally liable for repeated noise offences.

Noise from domestic premises and public places is controlled by the police on a reasonableness approach, whereas noise from industrial or commercial premises is controlled by the EPD through noise abatement notices. To minimise traffic noise, newly registered vehicles including motor cycles are required to comply with stringent noise emission standards.

Enforcement of the above pollution control ordinances is undertaken by four Regional Offices and the Territorial Control Office of the EPD through investigation of pollution complaints, inspection and licensing of pollution sources, issuing pollution abatement notices and prosecution of offenders. The offices have proved to be very effective in tackling local pollution concerns and strengthening communication with the local communities on the government's environmental protection work. In parallel, the Business Facilitation Office also develops partnership with the trade and industry to assist in law compliance, promote corporate environmental management as well as raising environmental awareness of the general public.

Waste Collection, Treatment and Disposal: An extensive sewerage system serves most urban areas but has not kept pace with population growth. There are significant deficiencies in the rural village areas.

A sewage disposal strategy has been adopted by the Government and 16 sewerage master plans (SMPs) devised to cover the whole territory. Most of these SMPs have been reviewed in the light of the changing population projections and associated project developments proposed for the HKSAR.

A major deep tunnel collector system and treatment works handle sewage generated from all districts around the Victoria Harbour Area. So far, 24 kilometres of large tunnels under the central urban area and a sewage treatment works at Stonecutters Island with a capacity to provide chemically enhanced primary treatment to an average dry weather flow of up to 1.7 million cubic metres of sewage per day, have been commissioned since late 2001.

The EPD is the waste disposal authority responsible for planning and development of waste treatment and disposal facilities.

A daily total of about 9 380 tonnes of municipal solid waste, including domestic, commercial, and industrial waste, is collected by the Food and Environmental Hygiene Department and private waste collectors for disposal at three large modern landfills in the New Territories. Construction waste disposed of at landfills amounted to a further 6 560 tonnes per day in 2005.

The EPD published "A Policy Framework for the Management of Municipal Solid Waste (2005-2014)" in December 2005. The Policy Framework sets out a comprehensive strategy consisting of a series of tried and proven policy tools and measures to tackle the waste problem head on. The driving force of the strategy comes from the policy tools of waste charging, producer responsibility schemes (PRS) and landfill disposal bans. PRS require manufacturers, importers, retailers and consumers to recover and recycle products that otherwise end up in the waste stream. A Bill providing a legal framework for mandatory PRS will be introduced to the Legislative Council in 2006.

New large-scale waste treatment facilities are required to treat the unavoidable municipal solid waste and reduce its volume before final disposal.

According to the current trend of waste growth, the three existing landfills will be filled up in six to 10 years' time.

The EPD has identified some extension schemes for the existing landfills for the final repository of waste that cannot be recycled or treated such as mixed construction waste and for the residues after treatment.

Seven refuse transfer stations are now in operation. They process about 5 400 tonnes of municipal waste per day for containerised bulk transfer to landfills. Six stations have extended the service to private waste collectors.

The Chemical Waste Treatment Centre on Tsing Yi Island has treated more than 758 000 tonnes of chemical waste. Plans are being formulated for the disposal of special waste including clinical waste, animal carcasses and sewage sludge. A storage facility for low level radioactive waste on Siu A Chau was commissioned in 2005. There are 13 closed landfills in Hong Kong. As at to date, the restoration works in 12 closed landfills have been completed, and the sites are safe for beneficial use by the public. Restoration works at the last landfill at Pillar Point Valley was started in October 2004. A soccer-cum-baseball pitch at the restored Sai Tso Wan Landfill was opened in April 2004. Recreational facilities will be progressively developed at other restored landfills.

Apart from government's efforts in waste management, local recycling operations are playing an important role. In 2005 more than two million tones of recyclable waste were recovered with an export value of \$4.5 billion.

Environmental Monitoring and Investigations: The EPD has introduced environmental monitoring schemes and specific investigations to establish an objective basis for local action.

Water quality monitoring includes 82 routinely-sampled stations for inland waters and 154 for marine waters and bottom sediments. The water quality of 41 gazetted beaches is monitored weekly during the bathing season.

Air pollutant levels are measured continuously at 11 general and three roadside monitoring stations. An Air Pollution Index (API) was introduced in June 1995 to provide a simple and concise indication of air quality. From July 1999, information on API has been released every hour via the Internet and telephone hotline.

Surveys of waste generation throughout Hong Kong have been conducted since 1981 to collect information needed for planning future waste disposal facilities.

Most major development projects are subject to environmental monitoring and audit. In 2005, the EPD oversaw about 120 such programmes to ensure that recommendations in the EIA were strictly implemented and appropriate mitigatory actions were promptly taken.

Regional and International Co-operation: To tackle regional environmental issues, Hong Kong has been co-operating with its Mainland partners through the Joint Working Group on Sustainable Development and Environmental Protection between the HKSAR and Guangdong. The two governments have drawn up a regional air quality management plan that aims to jointly

reduce regional pollutant emissions by 20 per cent to 55 per cent by 2010, taking 1997 as the base year. Since November 2005, a regional air quality monitoring network with 16 monitoring stations covering the entire Pearl River Delta has started daily reporting of a Regional Air Quality Index to the public.

The Stockholm Convention became effective to the People's Republic of China (PRC), including the HKSAR, in November 2004. Hong Kong is preparing a Hong Kong Implementation Plan which will form part of the PRC's National Implementation Plan to be submitted to the Conference of the Parties to the Stockholm Convention in November 2006.