II. Environment

In the past year, we have been working on 43 pledges, of which :

- we have completed eight;
- we are on schedule with 21;
- five are under review;
- we have encountered some slippage on two pledges but are likely to meet our targets;
- we are taking active measures to speed up the progress on one which is behind schedule; and
- we are pressing ahead with six on-going commitments.

The following sets out the detailed report for each main programme area.

| Air | | | |
|------------------|----|---|---|
| Year | | Pledge | Present Position |
| Action Completed | | | |
| 1997 | 1. | Not to register new diesel private cars beginning in 1998. | The empowering regulation to impose very stringent emission standards on diesel private cars was made in February 1998 and implemented in April 1998. The new standards have effectively restricted diesel private cars from first registration. |
| 1996 | 2. | To examine the feasibility of introducing gas-powered vehicles. | Liquidified petroleum gas (LPG) was recommended as a practicable option. Trials on LPG taxis started in November 1997. Further action to be taken under item 5 below. |

- 1996 3. To provide information to the public on air quality at street level in busy districts by developing and publishing in late 1997 a Roadside Air Pollution Index.
- 1994 4. To study ways of reducing air pollution at transport interchanges and tunnels.

Reports from the Roadside Air Pollution Index commenced on 15 June 1998.

Practice Notes for the control of air pollution in public transport interchanges were issued in March 1998. Air pollution in the tunnels is being monitored by the Department, Transport the Electrical and Mechanical Services Department and individual franchised tunnel operators, with improvement measures being implemented as appropriate.

Action in Progress : On Schedule

- 1997 5. Once the technical issues have been settled, to implement a plan to replace diesel-powered vehicles with LPG or other cleaner technologies as soon as possible.
- 1997 6. To launch a trial of LPGpowered taxis in late 1997 to ascertain their reliability and gauge the necessary operating cost data for devising a viable motor fuel strategy to improve air quality.
- 1997 7. To introduce the more stringent European Union (Phase II) emissions standards on light duty diesel vehicles in 1998.

The Working Group of Diesel to Gas Scheme has identified LPG as a practicable alternative to diesel for taxis. A scheme to apply the LPG technology to the taxi fleet is being worked out.

The LPG taxi trial was launched on schedule and has progressed smoothly. So far, the trial indicated LPG is suitable for use in taxis in Hong Kong. We shall make a decision on the introduction of LPG in taxis in the last quarter of 1998, based on the findings of the trial.

The empowering regulation was made in February 1998 and the new emission standards will come into effect on 1 October 1998.

- 1997 8. To consider increasing the level of fixed penalty fine on vehicles emitting excessive smoke.
- 1997 9. To introduce a control scheme to minimise perchloroethylene emissions, a toxic air pollutant, from dry cleaners.
- 1996 10. To examine proposals to extend the scope and frequency of regular emission inspections on commercial diesel vehicles.

- 1996 11. To step up control of smoky vehicles by introducing more rigorous smoke emission tests and strengthening enforcement against excessive smoke offences.
- 1995 12. To continue our efforts in controlling industrial emissions. By 2000, we plan to cover all major industrial air pollution sources (about 200).

The level of fixed penalty is being reviewed. Consultation with the trade and the public will be conducted on the proposed level.

We are finalising the proposed control scheme in view of the comments received during consultation with the trade. We aim to table the empowering regulation within 1999.

A more thorough emission check was introduced in November 1997 on a sampling basis for vehicles undertaking the annual roadworthiness inspection. The new arrangements have been found to be effective and we will explore the viability of incorporating them as a standard feature of annual vehicle inspections.

An on-road test for light-duty diesel vehicles was found to be more effective than current test methods in screening out defective vehicles. We are aiming to introduce the new test by around mid-1999.

Up to September 1998, we had brought under licensing control about 160 facilities operating specified industrial processes, covering 85% of major industrial pollution sources. 1995 13. To take necessary action to control indoor air pollution after completing the consultancy study by putting in place, by 2001, control programmes which will safeguard the health of more than 300 000 office workers and people in about 70 000 residential premises.

Action in Progress : A Pledge to Catch Up

- 1997 14. To introduce regulatory control to require petrol filling stations to implement vapour recovery systems to reduce benzene emissions.
- 1996 15. To improve the monitoring of air quality by establishing three additional monitoring stations for more comprehensive assessment of air quality.

An inter-departmental working group has been formed to put in place an action plan based on the findings of the study.

We are drafting the regulation and plan to table it in the Legislative Council by end 1998.

We encountered tendering complications for the construction contract and unforeseen engineering difficulties on the proposed sites. These have now been resolved. The Causeway Bay Air Quality Monitoring Station commenced operation in June 1998. The Central Station has been commissioned and will come into operation by October 1998. The Eastern Station has been commissioned in September 1998 and will come into operation by the end of 1998.

Good progress has been made with the following commitment in the past year. We will continue to work on it on an on-going basis.

Year

Pledge

1996 16. To find new ways to reduce harmful emission from motor vehicles on our roads.

Noise

Year

Pledge

Present Position

Action Completed

1996 1. To phase out the use of noisy diesel and steam hammers in built-up areas starting from late 1997. Technical Memorandum on Noise from Percussive Piling was revised in May 1997 to phase out noisy diesel, pneumatic and steam hammers in four stages at six-month intervals. The first stage of control started on 1 April 1998.

Action in Progress : On Schedule

1997 2. On the basis of the findings of the feasibility study on traffic noise mitigation measures for existing roads to be completed in mid-1998, to review our policy for providing redress against excessive traffic noise from existing roads. Consultants have completed the feasibility study on retrofitting noise mitigation measures on existing atgrade roads and the Environmental Protection Department is reviewing the draft final report. The study has also been extended to cover retrofitting noise mitigation measures on existing flyovers; this new phase of the study commenced in June 1998 and will be completed by early 1999.

1996 3. To ensure that the railway companies reduce noise by monitoring the programme of the Mass Transit Railway Corporation to reduce noise from its rolling stock and depot. Retrofitting works for rolling stock will be completed by 1999.

Good progress has been made with the following commitment in the past year. We will continue to work on it on an on-going basis.

Year

Pledge

1996 4. To ensure that the railway companies reduce noise by monitoring the implementation of the Kowloon-Canton Railway Corporation noise abatement programme.

Waste

Year

Pledge

Present Position

Action Completed

- 1997 1. To make arrangements for the Island East and West Kowloon transfer stations to accept from 1998 privately collected wastes on a voluntary basis.
- 1996 2. To provide training for the Government's "Green Managers" on environmental audits and management systems so that "green" measures can be adopted more widely within the Government.

The Island East and West Kowloon transfer stations have started taking privately collected waste in April 1998.

With the assistance of a consultant, we have successfully completed a training programme to assist bureaux and departments in conducting environmental audits in 1997-1998. The training programme included 17 environmental auditor training sessions for over 350 civil servants from 59 bureaux and departments, production of a training video and the setting up of a telephone helpline.

Action in Progress : On Schedule

1997 3. To implement the ten-year Waste Reduction Framework Plan beginning in 1998. We will examine all processes to see where we can be more efficient in handling and reducing waste. Under the plan, various measures will be implemented to reduce the growth of municipal waste requiring disposal with the aim of extending the life of existing strategic landfills by 11 years.

A number of early initiatives have been implemented. The Framework Plan will be launched in late 1998. 1997 4. In 1998-1999, to draw up a strategy for the disposal of clinical waste, animal carcasses and other special wastes.

- 1996 5. To examine the feasibility of Bulk Waste Reduction Facilities in 1997 to reduce further the amount of waste being disposed of in landfills.
- 1995 6. To modify 13 old landfill sites in the urban areas over the next ten years at a cost of \$2.3 billion, making them environmentally safe for alternative use.

The medical profession and other relevant parties are being consulted on the proposed Clinical Waste Control Scheme. The Environmental Impact Assessment on an alternative disposal option for clinical waste has commenced. The site evaluation exercise for an animal cremator is in progress. Alternative disposal arrangements for security waste have been implemented.

The feasibility study on Waste-to-Energy Incineration Facilities which commenced in September 1997 will take 18 months to complete. The use of materials recovery facilities is being examined. The other options, such as composting, will be further examined at a later stage during the implementation programme of the Waste Reduction Framework Plan.

Restoration facilities at five landfill sites have been substantially completed and are in operation. Construction works for three other landfills have started. Tenders for the restoration of another four landfills have been returned and are being assessed.

Action in Progress : Under Review

- 1996 7. To build additional refuse transfer stations in the Northwest New Territories, North Lantau and the Outlying Islands at a cost of \$1 billion over the next three years. To commission refuse transfer stations at Mui Wo, Cheung Chau and Hei Ling Chau by the end of 1997.
- 1996 8. To complete in early 1998 a low-level radioactive waste storage facility at Siu A Chau, and to close down existing unsatisfactory storage facilities after completion of the new facility.
- 1995 9. To introduce charging for privately collected waste (except household waste) delivered to landfills once agreement has been reached on the detailed charging arrangements with affected parties.

Construction of the additional stations at North Lantau, Mui Wo, Cheung Chau, Peng Chau and Hei Ling Chau had been completed and the stations have commenced operation. The design work for another station at Sok Kwu Wan has commenced. The Northwest New Territories refuse transfer station is under review.

The tender offer for the project was unattractive and the tendering exercise was thus cancelled. Commissioning of the facility will be delayed due to the need to retender and to identify alternative disposal arrangements.

In view of the current economic climate, a review of the programme for introducing the landfill charging scheme was conducted in mid-1998. It was decided that the introduction of the scheme should be postponed.

Good progress has been made with the following commitments in the past year. We will continue to work on them on an on-going basis.

Pledge

1996 10. To encourage the community as a whole to gradually accept the implications of the "polluter pays" principle.

1996 11. To strengthen liaison and co-operation with the Mainland Authorities on cross boundary environmental issues in 1997 through discussions in the Hong Kong – Guangdong Environmental Protection Liaison Group.

Year

Water

Year

Pledge

Present Position

Action in Progress : On Schedule

- 1997 1. To complete Stage I of the Strategic Sewage Disposal Scheme (SSDS) by 2000.
- 1997 2. To commence the study for SSDS Stage II, dealing with any further treatment and disposal in late 1998.
- 1996 3. Since 1992, we have been implementing a programme to improve sewerage schemes in other parts of the territory at a total cost of around \$7.6 billion (non-High Priority Programme projects). To press ahead with the remaining projects, it is planned to spend about \$4.5 billion over the next five years in improvement works.

The three completion contracts for the six collection tunnels have been awarded and progress is being closely monitored. The target completion date of SSDS Stage I remains unchanged.

The detailed construction study for SSDS Stage II will be commissioned in late 1998 when the preferred treatment option and outfall location for Stage II is finalised.

The whole project is now estimated to cost \$9 billion (at December 1997 prices) due to an increase in the scope of the works. So far about 30% of the works have been completed. It is planned to spend \$460 million in 1998-1999 and about \$6.0 billion over the next five years on improvement works.

Action in Progress : Under Review

 Subject to results of the studies on SSDS Stage II and Stage III/IV, our current plan is to commission these remaining stages of the SSDS in 2004. The target commissioning date of the remaining stages of SSDS is to be reviewed due to the need to reassess sewage flows and loads in view of the latest population projections. 1996 5. То ensure timely commissioning of the sewerage master plan (SMP) works within the High Priority Programme (HPP) before mid-1997 and closely monitor progress of the rest of the programme. The complete HPP will reduce by 70% the flow of pollutants into the harbour from the urban area.

Action in Progress : Behind Schedule

1997 6. The study for SSDS Stage III/ IV, the part of the scheme which will collect the sewage discharging into Victoria Harbour from the northern and northwestern parts of Hong Kong Island, commence in late 1997. Kowloon SMP is now under review in the light of the latest projection of population increase in that area. The Stage III/IV study commenced

17 out of 27 contracts for the SMP

works under the HPP have been

completed. Seven other contracts

are not scheduled for completion

until mid-1999 as a result of delays

arising from difficult site conditions

and contractors' poor performance.

The remaining three minor contracts related to the Northwest Kowloon

SMP (Stage III Phase II) were rescheduled so that the works can be

carried out concurrently with the drainage improvement works in West Kowloon to minimise disruption. The Central and East

The Stage III/IV study commenced in March 1998 and is scheduled for completion in early 1999.

Environmental Impact Assessment

Year

Pledge

Present Position

Action Completed

1997 1. To implement the Environmental Impact Assessment Ordinance in early 1998. The Environmental Impact Assessment Ordinance and its subsidiary legislation on appeal board and fees came into operation on 1 April 1998.

Energy Efficiency and Conservation

Year

Pledge

Present Position

Action in Progress : On Schedule

1997 1. To gradually implement the draft building energy codes starting from 1998.

We have published the Lighting and Air Conditioning Codes and have completed the details of a Hong Kong Voluntary Energy Efficiency Registration Scheme for Buildings for launching in October 1998. Architectural Services Department and Housing Department have agreed to participate in the Scheme. We will publish the Electrical Installation Code in late 1998 and include the Code in the Scheme in 1999.

- 1997 2. In 1998, to examine the feasibility of promoting water-cooled commercial air-conditioning systems in Hong Kong with a view to reducing energy consumption and mitigating environmental problems.
- 1996 3. To further extend voluntary energy-efficiency labelling scheme to washing machines in 1997 and to compact fluorescent lamps by mid-1998.

Tenders for the Preliminary Phase Consultancy Study were invited in July 1998. A consultant will be engaged to conduct the study by October 1998.

The energy-efficiency labelling scheme for washing machines was launched on 15 December 1997. We have extended the energy-efficiency labelling scheme to compact fluorescent lamps by completing the handbook for the application and registration of the scheme in July 1998. This scheme will be launched after consultation with local agents and the World Trade Organisation. Good progress has been made with the following commitments in the past year. We will continue to work on them on an on-going basis.

Year

Pledge

- 1996 4. To conduct energy audits and implement energy management measures in government buildings to save energy.
- 1993 5. To invite individual business to play a greater role in protecting the environment :
 - by conducting environmental and energy audits of their companies;
 - by appointing a "green manager" within their organisations to promote environmental awareness; and
 - by working closely with non-government environmental organisations.