### Message

The provision of a reliable, adequate and good quality water supply is the prime objective of the Works Bureau and the Water Supplies Department. To achieve this, we have set our initiatives in the year ahead to enhance the standard of our services for meeting the changing needs of the community.

We will continue to maintain close co-operation with the Guangdong Authority for a reliable and continuous supply of water from Dongjiang; expand our water supply infrastructure; maintain and improve its condition; and ensure that the water supplied is always clean, safe and conforms to the World Health Organisation standards.

Measures including wider use of information technology are being implemented to enhance efficiency. Customer services are also being upgraded to better satisfy customer needs.

Your comments or suggestions, which will help us attain a higher standard in our services, are most welcome.

(Kwong Hon-sang) Secretary for Works

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### Water Supply

Our Policy Objective is to ensure the provision of a reliable, adequate and quality water supply and an efficient water supply service.

Our targets in pursuing this Policy Objective are -

- to enable full water supply each day
- to maintain and improve the water supply infrastructure
- to ensure full compliance with the Guidelines for Drinking Water Quality of the World Health Organisation at connection points
- to improve customer satisfaction with the water supply service

### **Key Result Areas (KRAs)**

To ensure that this Policy Objective can be achieved, we must deliver results in a number of key areas, that is, we must –

Ι	Identify water supply needs and secure water resources	Page 3
II	Improve the water supply administrative and regulatory framework	Page 4
III	Expand the water supply infrastructure to meet increasing demand	Page 6
IV	Maintain and improve the condition of the water supply infrastructure	Page 8
V	Ensure the quality of water supplied to customers	Page 10
VI	Improve customer services in the provision of water supply	Page 12

The following sections of this booklet explain the importance of these KRAs, describe the broad thrust of our efforts, and outline the indicators which we are using to assess progress. Each section lists the new key initiatives being taken to achieve our objectives and pinpoints the agency accountable for each initiative and the specific targets which we intend to meet.



### Identify water supply needs and secure water resources

We aim to plan water resources so as to ensure a continuous, reliable supply of water for Hong Kong. We plan supply requirements on the basis of providing a full 24-hour supply of both potable and flushing water.

As Hong Kong's own water resources are insufficient to meet demand, we have been sourcing additional water from Guangdong since 1960. In 1989, we entered into a long-term agreement with the Guangdong Authority for the supply of water from Dongjiang up to the year 2000 and beyond. Earlier this year, both sides reached agreement which updates the 1989 agreement and takes us into the next decade with a reliable water supply. We continue to co-operate closely with the Guangdong Authority to ensure the smooth implementation of the agreements.

#### Indicator

Our main indicator of progress in this area is the sufficiency of the provision of water to meet the increase in demand.

Initiative	Target
To co-operate with the Guangdong Authority to ensure the smooth implementation and updating of the Dongjiang water supply agreement  (Works Bureau)*	To hold at least one high-level business meeting and two technical sub-group meetings with the Guangdong Authority annually to discuss and resolve problems

<sup>\*</sup> the brackets denote the agency with lead responsibility for the initiative



# Improve the water supply administrative and regulatory framework

Managing the supply of water to all consumers in Hong Kong is a challenging administrative and managerial task. To improve efficiency, we are implementing the measures recommended in a recent management review of Water Supplies Department (WSD). In order to capitalise on the benefits available from information technology, we have embarked on an Information Systems Strategy Study to identify opportunities for improvement in this area. We also keep our systems and procedures under constant review to ensure cost-effectiveness in delivering quality water supply services.

WSD is responsible for the control of waterworks installations in building developments and the licensing of plumbers through the enforcement of the Waterworks Ordinance and Regulations. We will regularly review and update the ordinance and regulations in order to meet the changing requirements of society.

#### Indicator

Our indicator of progress in this area is the timely implementation of the efficiency initiatives identified in the management review of the Water Supplies Department.

Initiatives	Targets
To move towards the introduction of a comprehensive information technology system to improve working efficiency (Water Supplies Department (WSD))	<ul> <li>To complete the consultancy study on the Information Systems Strategy by the end of 1998</li> <li>To complete a feasibility study for stage I implementation by the end of 1999</li> </ul>
To set up a Local Area Network (LAN) in regional offices to enhance internal communication (WSD)	To have the network in place by February 1999
To install a new integrated computer system for more efficient management and control of materials and job records (WSD)	To set up the Materials and Job Records Management System by the end of 1999



### Expand the water supply infrastructure to meet increasing demand

Hong Kong's water supply needs continue to expand as the population grows and the standard of living rises. The Water Supplies Department (WSD) plans, designs and builds new projects to extend and upgrade the fresh and salt water supply systems to meet demand. There is also an on-going programme of works to bring water supply to remote villages in the New Territories.

During the 1997-1998 financial year, we spent \$1.5 billion on Public Works Programme projects to improve the water supply infrastructure. These included water treatment works, service reservoirs, watermains and other ancillary structures for extending water supply to new developments. Major works now in hand include the Ngau Tam Mei Treatment Works; the Tai Po Treatment Works; and service reservoirs, pumping stations and mainlaying in Tuen Mun, Yuen Long, Tsing Yi, Tseng Kwan O, Lantau Island and some urban areas. In the 1998-1999 financial year, we plan to spend another \$2 billion on the expansion of water supply infrastructure to ensure the timely provision of water supply to developments.

#### **Indicators**

- the percentage of projects completed on time to meet development programmes
- the percentage of projects completed within budget

Initiatives	Targets
To provide new water supply infrastructure for new developments (Water Supplies Department (WSD))	To complete all new projects on time and within budget
To improve the reliability of existing water supply systems by providing new linkages (WSD)	To complete the improvements for Tuen Mun/Yuen Long and Sham Tseng/Yau Kom Tau by 2003
To extend metered water supply to Discovery Bay (WSD)	To complete the works by 1999



## Maintain and improve the condition of the water supply infrastructure

Our extensive water supply network represents both a significant asset and a major operational and maintenance responsibility. Regular preventive maintenance is carried out on all waterworks installations, plant and equipment.

To enhance the reliability of the water supply infrastructure, there is a need to upgrade or replace aged watermains and reservoirs to reduce leakage and bursting, thus minimising inconvenience to the public. Proper maintenance is also particularly important for the reservoir and catchwater systems as well as those pipes and reservoirs that may affect the stability of adjacent slopes.

The Water Supplies Department (WSD) has initiated an Asset Management Study to determine the condition of the underground assets (mainly pipes) and the maintenance strategy for the future. We aim to operate and maintain the water supply systems in the most cost-effective manner possible.

#### **Indicators**

- the number of days of full water supply per year
- the time taken to restore the local system after disruption of water supply
- the number of inspections of waterworks installation and maintenance conducted
- the extent of compliance of water supply systems with safety and environmental protection requirements

Initiatives	Targets
To launch a comprehensive and systematic programme to replace and rehabilitate aged watermains, with priority given to the watermains in urban areas and those most susceptible to leakage and bursting  (Water Supplies Department (WSD))	To start in 2000 the first stage of the programme by replacing or rehabilitating 350 km of aged watermains, for completion by 2006
To rehabilitate aged service reservoirs, water treatment works and pumping stations and enhance their facilities and equipment (WSD)	To start the rehabilitation works of aged service reservoirs, water treatment works and pumping stations in 2000
To carry out independent safety inspections on small service reservoirs (i.e., with a capacity not exceeding 25 000 m <sup>3</sup> ) (WSD)	To double the frequency of inspections of small service reservoirs from 2000 onwards

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#### Ensure the quality of water supplied to customers

The supply of clean water is essential to the health of the community. The Water Supplies Department (WSD) is responsible for ensuring that the treated water supplied to consumers is pure, safe and wholesome and conforms to the World Health Organisation (WHO) standards in all respects and at all times. WSD is also responsible for ensuring that salt water for flushing meets the Department's Water Quality Objectives. Conformity with these standards is assured by regular water quality sampling and testing and monitoring of the test results throughout the entire supply and distribution system, i.e., at all source points, in various treatment stages and at consumers' taps.

#### **Indicators**

- the degree of compliance of the quality of fresh water at connection points with WHO standards
- the degree of compliance of the quality of salt water at connection points with WSD objectives

Initiatives	Targets
To enhance control and monitoring of the water gathering grounds and reservoirs  (Water Supplies Department (WSD))	To increase by 15% the frequency of patrolling the gathering grounds and monitoring of water quality in reservoirs by 2000

Initiatives	Targets
To improve quality assurance and laboratory safety in WSD water science laboratories (WSD)	To achieve compliance with WSD's quality assurance procedures and laboratory safety procedures by 2000
To improve the laboratory facilities in Pak Kong and Au Tau Treatment Works (WSD)	To complete the improvements by 1999



# Improve customer services in the provision of water supply

The Water Supplies Department (WSD) is responsible for the provision of efficient and effective services to some 2.2 million registered water consumers. To upgrade our services, we are improving efficiency and effectiveness in dealing with customer enquiries and complaints; publicising the customer services offered and providing information to customers; ensuring timeliness of billing and promptness in updating consumer accounts; and dealing promptly with the processing of new consumer accounts.

#### **Indicators**

- the time taken to process applications for change of account holder
- the response time for attendance to fresh water fault complaints
- the period of notice given for planned suspension of water supply

Initiatives	Targets
To monitor customer feedback on WSD services (Water Supplies Department (WSD))	To conduct a customer opinion survey in 1999
To set up an Intelligent Telephone Call Centre to reduce waiting time for connection by customers (WSD)	To set up the Centre by 1999

Initiatives	Targets
To introduce closure of accounts by taking final readings instead of making estimates (WSD)	To make the new service available by 1999