

## **Legislative Council Panel on Housing**

### **Water Quality in Public Housing Estates**

#### **Purpose**

This paper updates Members on the measures undertaken by the Housing Authority to ensure the quality of fresh water supply in public rental housing, including maintenance arrangements, progress of the replumbing programme and the Housing Authority's participation in the Fresh Water Plumbing Quality Maintenance Recognition Scheme of the Water Supplies Department.

#### **Timely Maintenance for Reliable Performance**

2. The Housing Authority attaches great importance to the proper functioning of the fresh water supply systems in public housing estates. To ensure supply of potable water meeting the established quality guidelines for public housing tenants, the Housing Department conducts regular inspections under the HomeCARE Programme and provides In-flat Repair-on-Demand Services. Estate management staff patrol the common areas in housing estates daily and inspect major building elements and systems, covering all external water pipes along the corridors. For the plumbing systems in common areas including water tanks and water pumps, maintenance staff also conduct regular technical inspections to assess their conditions to ensure that they are functioning properly. If defects such as water seepage or wear-and-tear are identified, repair works involving re-painting or replacement of the defective parts will be carried out immediately.

3. While regular inspections enable early identification of pipe damage or minor problems and facilitate timely repair to prevent malfunctioning, such inspections are primarily confined to common areas and normally do not cover individual flats to avoid causing inconvenience to tenants. Tenants are therefore encouraged to report to the estate management any water supply problems in their flats, such as insufficient water pressure and water discolouration. Inspections will be carried out promptly upon receiving tenants' reports. Detailed investigation, water pressure tests, water sample analysis and any necessary repair works will be carried out as soon as possible as appropriate. If internal corrosion of water pipes exceeds the established standard, the pipes in the flats will be replaced.

## **Replumbing for Facility Improvement**

4. Fresh water pipes in the public housing estates completed before 1996 are made of galvanised steel. This type of pipe, widely used in the industry at that time, has a service life of about 12 years. On this basis, we have drawn up a replumbing programme covering 884 housing blocks with galvanised steel pipe systems of 12 years or more. The Housing Department conducts annual condition surveys, which involve inspections and tests on water flow, water clarity, water pressure, pipe samples and the external condition of the pipes, on these aged systems in order to determine the priority of replumbing works. While the 12-year benchmark facilitates programme planning, in practice the Housing Department steps up inspection of those systems approaching 10 years of age. In the past decade, 713 public housing blocks, accounting for 80% of the blocks included in the programme, have been replumbed.

5. In 2005-06, we will carry out replumbing works for 39 building blocks in the public housing estates set out at **Annex A** at an estimated cost of about \$60 million. In view of tenants' expectations and availability of resources, the Housing Department will expedite the replumbing works for the remaining 132 blocks in the coming four years at an estimated cost of \$200 million. The priority of replumbing will be determined in light of the outcome of condition surveys, water sample tests and assessments. Distribution of the 132 blocks is set out at **Annex B**.

## **Third-party Certification for Enhanced Confidence**

6. To enhance public awareness of the importance of proper maintenance of building plumbing systems, the Water Supplies Department introduced the Fresh Water Plumbing Quality Maintenance Recognition Scheme in July 2002. Under the Scheme, Recognition Certificates are awarded to buildings with proper maintenance for their plumbing systems. The assessment criteria include regular cleansing of water tanks, regular inspections of the plumbing systems by licensed plumbers or qualified professionals, and compliance of recognised water standards in each annual water test. The inspection and maintenance of fresh water supply systems in public housing estates have all along complied with these procedures and requirements. Through participation in the Fresh Water Plumbing Quality Maintenance Recognition Scheme of the Water Supplies Department, we will obtain

third-party quality water certification, thereby boosting tenants' confidence in the quality of potable water in public housing estates. Our aim is to bring all our public housing blocks within the Scheme by the end of 2006. As at 28 February 2005, 385 housing blocks have been awarded certificates under the Scheme. Details are given at **Annex C**.

## **Conclusion**

7. The maintenance arrangements mentioned above help to establish a comprehensive and flexible system to ensure proper functioning of the potable water supply systems in public housing estates and compliance with the prescribed water quality standards. Through participation in the Fresh Water Plumbing Quality Maintenance Recognition Scheme, we also give our tenants further third-party assurance. All these measures show our determination to proactively improve the facilities in public housing estates and enhance the quality of public housing maintenance and management.

Housing, Planning and Lands Bureau  
March 2005

**Annex A**

**Public Housing Estates Included in the Replumbing Programme  
for 2005-06  
(as at February 2005)**

<b>Name of Housing Estate</b>	<b>Number of Blocks Involved</b>
Siu Sai Wan Estate	1
Shek Wai Kok Estate	5
Kwai Fong Estate	1
Kwong Tin Estate	2
Tin Yiu (I) Estate	6
Tin Yiu (II) Estate	6
Tai Wo Hau Estate	3
Shek Yam East Estate	3
Wang Tau Hom Estate (Phase II)	8
Sau Mau Ping Estate	4
<b>Total</b>	<b>39</b>

**Public Housing Estates Included in the Replumbing Programme  
from 2006-07 to 2009-10**

<b>Name of Housing Estate</b>	<b>Number of Blocks Involved</b>
Kwong Tin Estate	2
Tsui Ping (South) Estate	4
Tsz Man Estate	3
Tsz Lok Estate	2
Choi Fai Estate	2
Choi Hung Estate	11
Tsz Ching Estate	3
Ko Yee Estate	2
Ping Tin Estate	3
Lower Wong Tai Sin (II) Estate	7
Kwai Shing East Estate	2
Lung Tin Estate	2
Shek Lei (II) Estate	2
Kwai Fong Estate	2
Shek Lei (I) Estate	1
Cheung Hang Estate	2
On Yam Estate	8
Hing Tung Estate	3
Lai On Estate	5
Wah Fu (II) Estate	5
Yiu Tung Estate	11
Tin Shui (I) Estate	7
Tin Shui (II) Estate	5
Shui Pin Wai Estate	3
Yau Oi Estate	6
On Ting Estate	4
Hau Tak (I) Estate	6
Ka Fuk Estate	3
Wah Sum Estate	2
Lek Yuen Estate	7
Lee On Estate	5
Ming Tak Estate	2
<b>Total</b>	<b>132</b>

**Public Housing Estates Awarded the Fresh Water Plumbing Quality  
Maintenance Recognition Scheme Certificate  
by the Water Supplies Department  
(as at February 2005)**

<b>Name of Housing Estate</b>	<b>Number of Blocks Involved</b>
Cheung Wah Estate	10
Cheung Hong Estate	13
Cheung Wang Estate	7
Choi Hung Estate	8
Choi Ming Court	4
Chuk Yuen (South) Estate	2
Fortune Estate	3
Fu Cheong Estate	10
Fu Shan Estate	3
Fu Tai Estate	11
Fu Tung Estate	3
Fuk Loi Estate	9
Hing Man Estate	3
Hing Tung Estate	3
Hing Wah (I) Estate	3
Ho Man Tin Estate	9
Hong Tung Estate	1
Hung Hom Estate	2
Kai Yip Estate	6
Ko Yee Estate	4

<b>Name of Housing Estate</b>	<b>Number of Blocks Involved</b>
Kwai Chung Estate	4
Kwai Shing West Estate	10
Lai King Estate	7
Lei Muk Shue (I) Estate	3
Lei Yue Mun Estate	3
Long Ping Estate	15
Lower Wong Tai Sin (II) Estate	5
Ma Hang Estate	5
Ma Tau Wai Estate	5
Mei Tung Estate	2
Nam Cheong Estate	7
Nga Ning Court	3
Ngan Wan Estate	4
Oi Tung Estate	4
Ping Tin Estate	8
Sai Wan Estate	5
Sau Mau Ping Estate	13
Shan King Estate	9
Shek Kip Mei Estate	9
Shek Yam East Estate	3
Shek Yam Estate	3
Sheung Lok Estate	1
Shui Pin Wai Estate	7
Shun Lee Estate	7
Shun Tin Estate	11

<b>Name of Housing Estate</b>	<b>Number of Blocks Involved</b>
Tai Hang Tung Estate	9
Tak Tin Estate	1
Tin Chak Estate	6
Tin Tsz Estate	4
Tin Wah Estate	7
Tin Yat Estate	9
Tsui Lok Estate	1
Tsz Ching Estate	11
Tsz Hong Estate	5
Tsz Lok Estate	6
Tsz On Estate	1
Tung Tau (I) Estate	1
Un Chau Estate	5
Upper Ngau Tau Kok Estate	3
Wah Kwai Estate	1
Wah Lai Estate	2
Wo Che Estate	12
Wo Lok Estate	11
Wu King Estate	6
Yat Tung (I) Estate	13
Yau Tong Estate	4
<b>Total</b>	<b>385</b>