

For information

LegCo Panel on Food Safety and Environmental Hygiene

Conversion of Aqua Privies into Flushing Toilets

PURPOSE

This paper briefs Members on the progress of the first four phases of the conversion programme for aqua privies (APs) and the proposal to extend the programme to cover 80 APs per phase in the fifth (Phase 5) and each of the subsequent phases with the aim to completing the conversion by 2012-13.

BACKGROUND

2. At present, the Food and Environmental Hygiene Department (FEHD) maintains about 420 APs, a village-type dry latrine without any flushing system, in various locations in the New Territories and the outlying islands. To meet the rising expectation of the community, FEHD has been working in collaboration with the Architectural Services Department to convert APs into flushing toilets whenever the circumstances permit.

3. To follow up on this initiative recommended by the former Team Clean, FEHD has started since early 2005 to implement under Phases 1, 2A and 2B the conversion of 100 APs which are close to sightseeing spots or at locations with relatively higher usage rate into flushing toilets. By the end of 2007, 97 APs have been converted.¹ In furtherance of the scheme, we sought funding approval of the Legislative Council in July 2007 to convert another 50 APs under Phases 3 and 4. Conversion works have commenced by batches since November 2007 and these two phases are expected to be completed by May 2009.

PHASE 5 OF THE CONVERSION PROGRAMME

4. As set out in the 2008 Policy Agenda, we aim to convert all APs into flushing toilets by 2012-13. We have thus planned to convert another 80 APs into

¹ As regards the remaining three APs, two have encroached on private lots and one of which was demolished. The remaining AP is affected by a road widening project. We are considering reprovisioning options in nearby area.

flushing toilets under Phase 5. We have tentatively shortlisted 80 APs in consultation with the relevant District Councils, as shown at Annex A. A reserve list has also been drawn up to serve as replacements in case some of the APs identified for action could not proceed as planned due to various reasons.

Scope of works

5. The scope of AP conversion works in Phase 5 will be similar to that in previous phases and will broadly include -

- (a) conversion into flushing toilets with alterations to cubicles equipped with pedestal or squatting type water closets;
- (b) replacement of wall and floor finishes; and
- (c) improvement of hand-washing facilities, lighting and ventilation.

6. The converted APs will be connected to nearby public sewers wherever possible. Regarding APs which cannot be connected to public sewers, we will explore other means, such as introducing bio-treatment system with toilet waste treated under a biological process if circumstances permit or converting the existing underground septic tanks into holding tanks for temporary storage of waste supported by frequent desludging. With the completion of Phase 5, a total of 227 aqua privies would have been converted, covering 73 from Yuen Long, 55 from North, 25 from Sai Kung, 22 from Tai Po, 20 from Islands, 14 from Tuen Mun, 9 from Tsuen Wan, 5 from Sha Tin and 4 from Kwai Tsing districts. A summary of the progress of the AP conversion programme by districts is at Annex B.

Project Implementation

7. The capital cost for conversion of 80 APs under Phase 5 into flushing toilets is estimated at \$193.8 million (in Money-of-the-Day prices). We have consulted the relevant District Councils in February and March 2008 and they supported the proposed conversion works. We plan to seek funding approval of the Public Works Sub-committee and the Finance Committee in June 2008. If approved, the conversion works will commence in November 2008 for completion by mid 2010.

SUBSEQUENT PHASES

8. Preparations are in hand for the next phase of the conversion programme. This phase, involving another batch of 80 APs, is expected to commence works in late 2009 for completion in mid 2011. We will seek funding approval from the Legislative Council when more details of the project are ready. Thereafter, we expect three more phases of conversion to turn the remaining some 200 APs into flushing toilets by batches by 2012-13.

APs NOT SUITABLE FOR CONVERSION

9. For a small number of APs which are considered not feasible for conversion into flushing toilets due to technical or site constraints (for example, lack of water or electricity supply), FEHD will carry out general improvement works such as installation of mosquito traps, provision of air fresheners and hand sanitizers. Furthermore, to suppress the emission of smell from septic tanks through squatting holes, FEHD is testing the use of odour-arresting agents to ameliorate the odour problem. If the result is satisfactory, we will extend it to all such APs.

ADVICE SOUGHT

10. Members are invited to note the progress of the AP conversion programme and the proposal to seek funding approval of the Public Works Sub-committee and the Finance Committee for Phase 5 of the AP conversion programme in June 2008.

Food and Health Bureau
Food and Environmental Hygiene Department
May 2008

Conversion of APs into Flushing Toilets – Phase 5
Locations of Aqua Privies to be Converted into Flushing Toilets (Tentative)

	80 APs on Conversion List	14 APs on Reserve List
Islands (5 APs on Conversion List)	* Tai Peng, Lamma Island	-
	* Lo So Shing Village, Lamma Island	-
	* Sha Lo Wan Beach, Lantau Island	-
	* Shap Long San Tsuen, Lantau Island	-
	* Leung Uk Tsuen, Lantau Island	-
Kwai Tsing (4 APs on Conversion List)	Lutheran Village, Tsing Yi	-
	* Cheung Yuen Road, Kwai Chung	-
	* Kau Wah Keng Village	-
	* Sheung Yat Tsuen, Kwai Chung	-
North (29 APs on Conversion List; 4 APs on Reserve List)	Muk Min Tau, Sha Tau Kok	San Tong Po, Sha Tau Kok
	Fu Tei Pei, Fanling (near Sunny Terrace)	* Kwan Tei Tsuen, Sha Tau Kok
	Tai Tau Ling (2), Sheung Shui	# Tsung Yuen Ha Tsuen, Sha Tau Kok
	Man Uk Pin, Sha Tau Kok	# Ping Che Tsuen, Ta Kwu Ling
	Kwu Tung(Tung Fong), Sheung Shui	-
	Kwu Tung(Lung Tang Kok), Sheung Shui	-
	Tsung Pak Long (South), Sheung Shui	-
	Ha Shan Kai Wat (1), Ta Kwu Ling	-
	Ho Sheung Heung San Tsuen, Sheung Shui	-
	Lei Uk Tsuen, Ta Kwu Ling	-
	* Liu Pok Tsuen (South) Playground	-
	* Sze Tau Leng, Sha Tau Kok	-
	* Kat O, Sai O, Sha Tau Kok	-
	* Ha Ma Tseuk Leng, Sha Tau Kok	-
	* Sheung Shan Kai Wat, Ta Kwu Ling	-
	* Tai Po Tin (1), Ta Kwu Ling	-
	* Tai Po Tin (2), Ta Kwu Ling	-
	* Sheung Wo Hang, Sha Tau Kok	-
	* Ma Cho Lung Shun Yee Tsuen (1), Sheung Shui	-
	* Ha Shan Kai Wat (2), Ta Kwu Ling	-
	* Fu Tei Au, Sheung Shui	-
	* Wo Keng Shan, Sha Tau Kok	-
	* Lin Ma Hang, Sha Tau Kok	-
	* Fung Kong (Tong Kok), Sheung Shui	-
	# Tung Kok Wai, Lung Yeuk Tau, Fanling	-
	# Wing Ling Wai, Lung Yeuk Tau, Fanling	-
	# Chuk Yuen Tsuen, Sha Tau Kok	-
# Kan Tau Wai, Ta Kwu Ling	-	
# Tong Fong, Ta Kwu Ling	-	
Sai Kung (7 APs on Conversion List; 1 AP on Reserve List)	Mau Wu Tsai	# Mang Kung Uk Lower Village
	Wai Sum Village	-
	Pak Wai Tsuen	-
	Tai Tung Tsuen	-
	Kei Ling Ha Lo Wai	-
	* Hang Mei Teng	-
* Sai Wan (I), Sai Wan	-	
Sha Tin (2 APs on Conversion List; 1 AP on Reserve List)	Tin Liu Village	Kwun Yam Shan Village
	Tung Lo Wan Hill Top Village	-

	80 APs on Conversion List	14 APs on Reserve List
Tsuen Wan (2 APs on Conversion List; 1 AP on Reserve List)	* Sam Dip Tam Tsuen	Sham Tseng East Village
	# Ting Kau Village	-
Tai Po (4 APs on Conversion List; 1 AP on Reserve List)	Cheung Shue Tan Village Site II	* Sheung Pak Ngau Shek Tsuen
	Tai Hang Village Site I	-
	Chung Uk Tsuen	-
	Chai Kek Village	-
Tuen Mun (9 APs on Conversion List; 1 AP on Reserve List)	Kei Lun Wai	Tin Sum San Tsuen
	Fu Tei Sheung Tsuen	-
	Siu Lam San Tsuen	-
	Tsz Tin Tsuen	-
	So Kwun Wat, Lee Uk Tsuen	-
	Tin Tei Yan Road	-
	* Kwong Shan Tsuen	-
	* San Hing Tsuen, Chung Shan	-
* Pak Kok Tsuen	-	
Yuen Long (18 APs on Conversion List; 5 APs on Reserve List)	Fuk Hing Lane, San Tin	Mei Po Lung Tsuen, San Tin
	Lok Ma Chau Tsuen, San Tin	Sha Po Tsuen, Kam Tin
	Ko Po Tsuen, Kam Tin	Chung Pak Nai, Lau Fau Shan
	Tai Hong Wai, Kam Tin	Yeung Uk Tsuen, Shap Pat Heung
	Ha Pak Nai Tsuen, Lau Fau Shan	* Ng Uk Tsuen, Ping Shan
	Tung Tau Tsuen, Ha Tsuen	-
	Shan Ha Tsuen (1), Ping Shan	-
	San Hing Tsuen, Lau Fau Shan	-
	Hung Cho Tin, Shap Pat Heung	-
	Tai Tong Kuk, Shap Pat Heung	-
	Pun Uk Tsuen, San Tin	-
	Ngau Keng Tsuen, Pak Heung	-
	Lin Fa Tei, Pat Heung	-
	Wah Shing Tsuen, Kam Tin	-
	Kam Tsin Wai, Pat Heung	-
* Sik Kong Wai Tsuen, Ha Tsuen	-	
* Fui Sha Wai, Ping Shan	-	
* Ma Tin Tsuen, Shap Pat Heung	-	

Type 1 conversion method: Conversion of septic tank into holding tank (43 APs on Conversion List and 8 APs on Reserve List)

* Type 2 conversion method: Installation of bio-treatment system (31 APs on Conversion List and 3 APs on Reserve List)

Type 3 conversion method: Connection to public sewers (6 APs on Conversion List and 3 APs on Reserve List)

Progress of the AP Conversion Programme by Districts

District	APs converted/ to be converted in Phases 1 - 4 (nos.)	APs to be converted in Phase 5 (nos.)	APs to be converted in subsequent phases (nos.)	% of APs converted after Phase 5 (%)
Yuen Long	55	18	96	43
North	26	29	67	45
Sai Kung	18	7	35	42
Tai Po	18	4	27	45
Islands	15	5	24	45
Tuen Mun	5	9	23	38
Tsuen Wan	7	2	12	43
Sha Tin	3	2	3	63
Kwai Tsing	0	4	2	67
Total:	147	80	289	44