

ACQWS Paper No. 16
Two Proposed Opinion Surveys
on Quality of Water in Buildings 2005

Background

1. On the advice of ACQWS, Water Supplies Department has been promoting the voluntary Fresh Water Plumbing Quality Maintenance Recognition Scheme (FWPQMRS) to the public since 22 July 2002. The Scheme encourages building owners to maintain their plumbing systems to a quality standard so that they can enjoy good quality of water at the taps. As ACQWS in its Meeting No. 6 on 4 April 2002 endorsed that after Stage 1 Actions (mainly on the FWPQMRS) a second customers opinions survey on the quality of water in buildings should be conducted to compare with the one conducted in 2002 (vide paragraph 4.3(iii) of **Appendix 1**), it is now the right time to conduct the second customers opinions survey. This survey will assess the impact of FWPQMRS as interpreted by the customers and gauge the public opinion on water quality in buildings. As also endorsed by ACQWS in the same meeting, a new survey will be conducted on the opinions of building management offices.

Survey Objectives

2. The objectives of the survey on customers opinions are to find out (a) the views of the general public on the quality of tap water, (b) their habit of drinking water, (c) their expectation on water quality, (d) their views on maintenance of internal water supply systems in buildings, (e) their views on FWPQMRS, and particularly, (f) their views on mandatory maintenance requirements through legislation.
3. The objectives of the survey on the opinions of building management offices are to find out (a) the overall views of their clients/residents on the quality of tap water, (b) their practices on maintenance of internal water supply systems in buildings, including tank cleaning and replacement of plumbing, (c) their views on FWPQMRS, and particularly, (d) their views on mandatory maintenance requirements through legislation.

Time

4. It is proposed to call tender(s) in September 2005 to start the surveys in

December 2005 (3 years after the first batch of certificates issued in December 2002 for FWPQMRS) and to finalize the reports in May to June 2006.

Cost Estimates

5. The cost estimate for the customers opinions survey is \$200,000 while that for the survey on the opinions of building management offices is \$180,000.

Coverage, Sampling Method and Size

6. The customers opinions survey covers domestic households in the whole territory by telephone with a random sample size of 1500 respondents (same as in the 2002 survey). The survey on the opinions of building management offices covers all the member companies (about 88 in number) of the Hong Kong Association of Property Management Companies Limited by telephone to find out the right man and then to mail a questionnaire for their filling and return.

Data Items to be Collected in the Customer Opinion Survey

7. The questionnaire used in the 2002 customer opinion survey is at **Appendix 2**. For the customer opinion survey in 2005, it is proposed to collect the following data items (new items are in italic and important item is bolded):
 - a. Perceptions of the public on the quality of tap water in buildings and related quality aspects such as odour, taste, clarity and purity;
 - b. Concerns from those who are dissatisfied with the quality of tap water in buildings and suggested areas for improvement;
 - c. Habit on drinking water;
 - d. Expectation of the quality of tap water such as:
 - i. Whether respondents know that water supplied by WSD is suitable for direct drinking;
 - ii. Whether respondents consider that WSD needs to ensure that tap water is suitable for direct drinking.
 - e. Views on maintenance of internal water supply systems in buildings such as:
 - i. Whether respondents consider it necessary to replace

- deteriorated water supply installations in buildings;
- ii. Whether respondents consider it necessary to clean water tanks in buildings regularly.
- f. *Views on FWPQMRS:*
 - i. *Whether respondents know that the Scheme encourages building owners to maintain their plumbing systems;*
 - ii. *Whether respondents know that the Scheme is voluntary;*
 - iii. *Whether respondents are willing to require the building management to join the Scheme;*
 - iv. *Whether respondents' building has joined the Scheme.*
- g. Views on the Government action to ensure water quality in buildings:
 - i. Whether respondents consider that the Government needs to continue publicity programmes to inform the public that tap water is suitable for direct drinking;
 - ii. **Whether respondents support the Government to make it mandatory for customers to arrange inspection, to keep proper maintenance of water supply installations and to clean water tanks regularly;**
- h. Willingness to pay for plumbing maintenance in buildings:
 - i. Whether respondents are willing to pay for replacing water supply installations to ensure that tap water is suitable for direct drinking;
 - ii. Whether respondents are willing to pay for the expenses to strengthen the cleaning of water tanks and maintenance of water supply installations to ensure that tap water is suitable for direct drinking;

Major Sub-group Analyses to be Performed in the Customer Opinion Survey

8. Same as in the 2002 survey, the following major sub-group analyses will be performed, subject to the adequacy of sampled customers (say at least 100 in number) in the sub-groups concerned (new item is in italic and important items are bolded):
 - a. Type of housing (public rental housing, subsidized sale flats or private housing);
 - b. Age of buildings (less than 10 years, 10 - < 20 years, 20 years +);
 - c. Tenure of accommodations (renters or owner-occupiers);
 - d. Whether respondents know that tap water comes from roof tank or not

- (using proxy whether respondents living in 7th floor and above or not);
- e. Whether respondents know that tap water is suitable for direct drinking;
- f. Awareness of the party responsible for maintaining water installations inside buildings;
- g. **Whether respondents are willing to pay for the expenses to strengthen the cleaning of water tanks and maintenance of water supply installations to ensure that tap water is suitable for direct drinking; and**
- h. *Whether the building/estate of respondents has been awarded with a certificate of FWPQMRS.*

Data Items to be Collected in the Survey on the Opinions of Building Management Offices

9. Proposed items are:

- a. Requirements of the clients/residents on the quality of tap water in buildings and related quality aspects such as odour, taste, clarity and purity;
- b. Concerns from those who are dissatisfied with the quality of tap water in buildings and suggested areas for improvement;
- c. Knowledge on the quality of tap water such as:
 - i. Whether respondents know that water supplied by WSD is suitable for direct drinking;
- d. Requirements of the clients/residents on maintenance of internal water supply systems in buildings such as:
 - i Whether they consider it necessary to replace deteriorated water supply installations in buildings;
 - ii Whether respondents consider it necessary to clean water tanks in buildings regularly.
 - iii Annual budget per flat.
- e. Building Management Office's views on FWPQMRS:
 - i. Whether respondents know that the Scheme encourages building owners to maintain their plumbing systems;
 - ii. Whether respondents know that the Scheme is voluntary;
 - iii. Whether respondents are willing to put forward to clients/residents to join the Scheme;
 - iv. Whether respondents' building(s) has/have joined the Scheme, percentage and reasons of joining or not joining;

- f. Building Management Office's views on Government Action to ensure water quality in buildings:
 - i. Whether respondents consider that the Government needs to continue publicity programmes to inform the public that tap water is suitable for direct drinking;
 - ii. Whether respondents support the Government to make it mandatory for customers to arrange inspection, to keep proper maintenance of water supply installations and to clean water tanks regularly;
- g. Building Management Office's priority of plumbing maintenance in buildings amongst all types of maintenance works.

Major Sub-group Analyses to be Performed in the Survey on the Opinions of Building Management Offices

- 10. The following major sub-group analyses will be performed, subject to the adequacy of sampled building management offices in the sub-groups concerned:
 - a. Type of housing (public rental housing, subsidized sale flats, private housing, commercial, industrial, serviced flats);
 - b. Age of buildings (less than 10 years, 10 - < 20 years, 20 years +);
 - c. Majority tenure of accommodations in the building (renters or owner-occupiers);
 - d. Whether respondents know that tap water is suitable for direct drinking; and
 - e. Whether the building/estate of respondents has been awarded with a certificate of FWPQMRS.

Advice Sought

- 11. Members' comments are sought on the proposal of the opinion surveys in paragraphs 2 to 10.

Water Supplies Department
August 2005

Appendix 1

The following comments and suggestions were raised at the meeting:-

- (i) Some measurable performance targets for monitoring the implementation programme should be set out.
- (ii) Some short-term and long-term targets should be established to raise the image of WSD, bearing in mind that the public might expect direct answers to their water quality problems in the first stage of promotion.
- (iii) Some forum sessions should be organised for sharing of views among the academics, stakeholders in the trade and WSD.
- (iv) Hotels in HK could be encouraged to highlight the good quality of their tap water to guests.
- (v) Promotion should be targeted to young generations to establish a correct impression of water quality.
- (vi) Priority should be accorded to giving recognition to buildings with good plumbing system so as to encourage owners of old buildings to carry out replumbing work; and
- (vii) Tasks in the implementation programme should be well interfaced with the publicity work.
- (viii) The actual progress of implementation would depend on resources available.

4.2 Plumbing Maintenance Guide

The initial draft Plumbing Maintenance Guide was discussed. It was suggested that

- (i) examples of good practice in plumbing work could be included in the guide and
- (ii) a simpler version of the guide should also be prepared for wide circulation to the general public.

4.3 Customer Opinion Survey

A proposed customer opinion survey to gauge the public opinion on water quality in building was discussed. The survey objectives, coverage, sample size and data collection method of the survey proposal were endorsed at the meeting and the following comments were noted:

- (i) the survey on water quality in buildings should be conducted as a separate survey;
- (ii) the survey should add the following aspects: the willingness of consumers to carry out replumbing, customer's affordability and expectations, attitudes towards drinking direct, housing types and whether interviewees obtain direct supply;
- (iii) a second opinion survey after Stage 1 Actions should be conducted so that a comparison can be made on the impact interpreted by consumers; and
- (iv) another survey should be conducted on the opinion of the management offices.

市場策略研究中心

電話號碼：2415 3777

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M.4499 2002年供水服務及樓宇水質意見訪問

訪問員編號：_____ 開始訪問時間：_____ 結束訪問時間：_____

受訪者姓名：_____ 聯絡電話號碼：_____

致電次數	1	2	3	4	5	6
日期						
時間						
訪問結果						

引言

您好。我姓（講出姓氏），係市場策略研究中心 訪問員。我 受水務署委託進行一個意見訪問，目的係搜集市民對樓宇水質 意見，研究結果將有助政府制定有關水質方面 政策。你所提供 資料會絕對保密。多謝合作。

過濾問題S.1 請問你屋企邊一位家庭成員最清楚你屋企 水喉水 水質呢？

自己本人 1
 其他成員 2- 邀請該成員
 接受訪問，
 然後重覆引
 言，並確定
 該成員係最
 清楚佢 屋
 企 水喉水
 水質

S.2 請問你屋企有冇裝濾水器呢？

有 1
 冇 2

A. 用戶對水喉水質素的滿意程度

A.1 以下我想知道你對你屋企 水喉水 不同方面 滿意程度。
(參考 S.2) 若受訪者屋企有裝濾水器，請同時讀出「我係指未經屋企濾水器過濾 水喉水」

請你用一個“0 – 10 分” 俾分方法表達意見，0 分代表“極之唔滿意”，而 10 分代表“極之滿意”，5 分代表“一般”。

(輪轉讀出 a – d 項)，你滿唔滿意你屋企 (未經過濾) 水喉水 水質呢？“0” 至 “10”分，你會俾幾多分呢？

A.2 你覺得有 乜 因素導致你屋企 水喉水 (逐一讀出於 A.1 表示不滿意的項目) 令你唔滿意呢？仲有呢？仲有冇呢？(可超過一個答案)

	(A.1 & A.2)										
	極之 唔滿意			一般					極之 滿意		
	0	1	2	3	4	5	6	7	8	9	10
a) 清澈無顏色方面	0	1	2	3	4	5	6	7	8	9	10
	<div style="text-align: center;">↓</div> 大廈水箱唔乾淨 1 喉管生鏽 2 水務署過濾食水過程做得唔好 3 其他 (請註明) : _____										
b) 聞落 味道方面	0	1	2	3	4	5	6	7	8	9	10
	<div style="text-align: center;">↓</div> 大廈水箱唔乾淨 1 喉管生鏽 2 水加 太多氯氣 3 其他 (請註明) : _____										
c) 入口味道方面	0	1	2	3	4	5	6	7	8	9	10
	<div style="text-align: center;">↓</div> 大廈水箱唔乾淨 1 喉管生鏽 2 水加 太多氯氣 3 其他 (請註明) : _____										
d) 無雜質方面	0	1	2	3	4	5	6	7	8	9	10
	<div style="text-align: center;">↓</div> 大廈水箱唔乾淨 1 喉管生鏽 2 水務署過濾食水過程做得唔好 3 其他 (請註明) : _____										

A.3 總括講，你滿唔滿意你屋企 水喉水 水質呢？“0”至“10”分，你俾幾多分呢？

若受訪者唔滿意水喉水 水質 (即 A.3 = 0 – 4)，續問 A.4，否則跳至 B 部分

A.4 你認為有邊 方面需要改善呢？仲有呢？仲有冇呢？(可超過一個答案)

	極之 唔滿意	一般										極之 滿意
	0	1	2	3	4	5	6	7	8	9	10	
A.3 整體滿意程度	0	1	2	3	4	5	6	7	8	9	10	
A.4 需要改善 方面	<div style="text-align: center;">↓</div> 清澈方面.....1 聞落 味道方面.....2 入口味道方面.....3 無雜質方面.....4 其他 (請註明) : _____											

A.5 你頭先提及有關水質 問題係你自己或屋企人遇過，抑或係其他人講俾你聽，或者係透過傳媒知道呢？

自己或屋企人遇過 1
其他人講 2
透過傳媒知道 3
其他 (請註明) : 跳至 B.1

A.6 過去十二個月內，你屋企係經常、間中抑或好少遇到你頭先所講 水質問題呢？

經常 1
間中 2
好少 3
過去十二個月內冇遇過 9

B. 飲水習慣

讀出：而家我想同你傾 你平日飲水 習慣。

B.1 你平日 屋企係 (讀出答案 1 – 7) 呢？

直接飲用水喉水 1
飲先過濾再煲滾 水喉水..... 2
飲只曾經煲滾 水喉水..... 3
飲只曾經過濾 水喉水..... 4
飲蒸餾水 5
飲礦泉水 6 跳至 B.3
多數飲非清水 飲品，例如茶、咖啡
、汽水等
其他 (請註明) : _____

B.2 係乜 原因你直接飲水喉水呢？仲有呢？仲有冇呢？(可超過一個答案)

對水質有信心 1
方便 2
慳錢 (如：慳電費、煤氣費、石油氣費) .. 3
節約能源 (如：慳電、煤氣、石油氣) 4 跳至 B.6
其他 (請註明) :

B.3 你係唔係一向 屋企都唔直接飲水喉水呢？

係 1
唔係 2- 跳至 B.5

B.4 係乜 原因你唔直接飲水喉水呢？仲有呢？仲有冇呢？(可超過一個答案)

怕水喉水有細菌 1
覺得水喉水唔乾淨 2
水喉水有雜質 3
水喉水聞落有異味 4
水喉水飲落有異味 5 跳至 B.6
始終冇信心，唔會直接飲用水喉水 6
唔習慣 7
其他 (請註明) :

B.5 係乜 原因你以前 屋企會直接飲水喉水，但而家又唔飲呢？仲有呢？仲有冇呢？(可超過一個答案)

怕水喉水有細菌 1
覺得水喉水唔乾淨 2
水喉水有雜質 3
水喉水聞落有異味 4
水喉水飲落有異味 5
其他 (請註明) :

B.6 請問你有冇曾經飲過放 室內體育館或者公園入面 飲水機 水呢？

有 1
冇 2- 跳至 B.8

B.7 你滿唔滿意呢 飲水機 水 水質呢？“0”至“10”分，你俾幾多分呢？*

極之 唔滿意	一般										極之 滿意
0	1	2	3	4	5	6	7	8	9	10	

* 如有需要，請重覆 0 – 10 分俾分方法。
(即“0”分代表極之唔滿意，“10”分代表極之滿意，“5”分代表一般。)

B.8 如果呢 飲水機 水係有經過濾水器過濾 水喉水，而你有帶水出街，又想飲水，咁你會唔會飲呢 飲水機 水呢？(追問程度)

- | | |
|----------------|---|
| 一定會 | 5 |
| 多數會 | 4 |
| 可能會，可能唔會 | 3 |
| 多數唔會 | 2 |
| 一定唔會 | 1 |

C. 用戶對水喉水質素的期望及保護水質的認知程度

讀出：而家我想知道 你對樓宇水喉水質素 期望。

C.1 水務署提供 食水水質係完全符合國際食水水質標準，同時食水裏面係加 氯氣以確保水有細菌，只要樓宇 水箱同埋喉管有妥善 維修保養，市民係無需煲滾或者過濾 水就可以直接飲用。請問你知唔知道呢？

- | | |
|-----------|-----------|
| 知道 | 1- 跳至 C.4 |
| 唔知道 | 2 |

(參考 B.1 及 C.1) 若受訪者平日 屋企有飲水喉水，而又唔知道水喉水可以直接飲用 (即 B.1 ≠ 1 & C.1 = 2)，續問 C.2，否則跳至 C.4。

C.2 咁 知道之後，你會唔會直接飲水喉水呢？(追問程度)

- | | |
|----------------|----------|
| 一定會 | 5 |
| 多數會 | 4 跳至 C.4 |
| 可能會，可能唔會 | 3 |
| 多數唔會 | 2 |
| 一定唔會 | 1 |

C.3 係乜 原因你唔直接飲水喉水呢？仲有呢？仲有冇呢？(可超過一個答案)

- | | |
|----------------------------|---|
| 怕水喉水有細菌 | 1 |
| 覺得水喉水唔夠乾淨 | 2 |
| 水喉水有雜質 | 3 |
| 水喉水聞落有異味 | 4 |
| 水喉水飲落有異味 | 5 |
| 始終冇信心，唔會直接飲用水喉水 | 6 |
| 唔習慣 | 7 |
| 多數飲非清水 飲品，例如茶、咖啡、汽水等 | 8 |
| 其他 (請註明)： | |

C.4 你認為水務署有冇需要確保水喉水可以直接飲用呢？(即係無需煲滾或者將水喉水過濾就可以直接飲用)

- | | |
|---------|-----------|
| 有 | 1- 跳至 C.6 |
| 冇 | 2 |

C.5 係乜 原因你認為有需要呢？仲有呢？仲有冇呢？(可超過一個答案)

- | | |
|-----------------------|----------|
| 始終冇信心，唔會直接飲用水喉水 | 1 |
| 唔習慣 | 2 跳至 C.7 |
| 其他 (請註明) | |

C.6 你認為水喉水可以直接飲用 最大好處係乜 呢？其次呢？再其次呢？

	最大好處	其次	再其次
方便	1	1	1
慳錢 (如：慳電費、煤氣費、石油氣費) ..	2	2	2
節約能源 (如：慳電、煤氣、石油氣)	3	3	3
即使唔小心飲 都唔會影響健康	4	4	4
其他 (請註明)			

C.7 如果你發現水喉水 水質有問題，你首先會向邊方面尋求解決 方法呢？

水務署 1
屋 苑辦事處/物業管理公司 2
業主立案法團 3
其他 (請註明) :

唔知道 9

C.8 你 住緊 幢樓宇 供水設施，包括公用水管、水泵、水箱等 保養維修工程係由邊個負責呢？

水務署 1
屋 苑辦事處/物業管理公司 2
業主立案法團 3
其他 (請註明) :

唔知道 9

C.9 如果樓宇供水設施陳舊引致水質出現問題，例如食水變黃，你認為有冇需要更換供水設施呢？
(包括公用水管、水泵、水箱等。)

有需要 1
冇需要 2

C.10 如果需要更換你住緊 幢樓宇 供水設施(包括公用水管、水泵、水箱等。)，先可確保水質達到可直接飲用 標準，你 願唔願意夾錢更換呢？

願意 1
唔願意 2
未能決定 9

C.11 你認為夾幾多錢去更換先至合理呢？

HK\$ _____

C.12 你住緊 幢樓宇有冇定期洗水箱呢？

有 1
冇 2
唔知道 8
該樓宇冇安裝水箱 9- 跳至 C.15

- C.13 你認為有冇需要定期清洗大廈水箱呢？
- 有 1
冇 2- 跳至 C.15
- C.14 你認為幾耐洗一次大廈水箱先至適當呢？
- 1 個月 1 次或以上 1
1.1 個月 – 2 個月 1 次 2
2.1 個月 – 3 個月 1 次 3
3.1 個月 – 4 個月 1 次 4
4.1 個月 – 5 個月 1 次 5
5.1 個月 – 6 個月 1 次 6
超過 6 個月才 1 次 7
冇意見 9
- C.15 如果需要加強清洗大廈水箱同埋維修保養你住緊 幢樓宇 供水設施，(包括公用水管、水泵、水箱等。)，先可確保水質達到可直接飲用 標準，你 又願唔願意支付有關費用呢？
- 願意 1
唔願意 2
未能決定 9
- C.16 你認為每月 管理費或者租金要增加幾多作為加強清洗大廈水箱、維修同埋保養 費用先至合理呢？
- HK\$ _____
- C.17 如果政府立例規定業主維修保養樓宇 供水設備同埋定期清洗大廈水箱，你贊唔贊成呢？
- 贊成 1
唔贊成 2
- C.18 你認為政府有冇需要做一 宣傳工作令到市民知道水喉水係可以直接飲用呢？
- 有需要 1
冇需要 2

D. 受訪者資料

讀出： 為 方便統計分析，我想了解 你屋企 居住環境，所有資料會絕對保密，我 只會用 做綜合分析。

D.1 請問你住 邊一區呢？(不讀答案)

<u>香港</u>		<u>新界</u>	
中西區	01	葵青區	10
灣仔區	02	荃灣區	11
東區	03	屯門區	12
南區	04	元朗區	13
九龍		北區	14
油尖旺區	05	大埔區	15
深水 區	06	沙田區	16
九龍城區	07	西貢區	17
黃大仙區	08	離島	
觀塘區	09	離島區	18

D.2 請問你 住緊 地方係你屋企買 、租 、抑或其他呢？

買	1
租	2
僱主提供	3
免租(不包括由僱主提供)	4
其他 (請註明) :	

D.3 請問你 住緊 住宅單位係公屋、居屋、夾屋，抑或係私人住宅單位呢？
若住緊「私人住宅單位」，追問：係多層樓宇、幾層 村屋，抑或其他呢？

公營租住房屋	
(包括房屋委員會及房屋協會 租住單位) ..	1
補助出售房屋	
(包括居者有其屋/租者置其屋/ 中等入息家庭房屋/重建置業/ 可租可買計劃 屋宇單位/ 房屋協會住宅發售或夾心階層計劃 屋宇單位/ 但不包括已補地價 屋宇單位)	2
私人住宅單位	
(包括房屋協會市區改善計劃 屋宇單位、已補地價的補助出售單位，及 多層樓宇房屋單位)	3
別墅/平房/村屋/簡單磚石蓋搭建築物	4
私人臨時房屋，例如木屋，鐵皮屋	5
其他 (請註明) :	

D.4 你 住緊 地方有幾多年樓齡呢？

少過 1 年	1
1 年至少過 3 年	2
3 年至少過 5 年	3
5 年至少過 10 年	4
10 年至少過 20 年	5
20 年至少過 30 年	6
30 年至少過 40 年	7
40 年或以上	8
唔知道	9

(參考 C.12) 若該樓宇冇安裝水箱，跳至 D.6。

D.5 當你住緊 幢樓宇洗水箱 時候，你 屋企會唔會暫停供水呢？

會	1	跳至
唔會	2	D.7
唔知道	9	

D.6 請問你 住幾多樓呢？(讀出答案)

6 樓或以下	1
7 樓或以上	2

D.7 水務署計劃 未來兩年進行一 措施去改善水質，同時計劃 兩年後再做一個意見訪問，了解市民對水質 意見。請問你同意抑或唔同意我 將你 電話號碼俾水務署，以便水務署可以 兩年後再同你 做訪問呢？

同意	1
唔同意	2

- 結束訪問，多謝受訪者 -