Consumer communication and feedback	**Conducting consumer surveys of water acceptability** *Technical guidance*	

Information derived from:

- Feedback from water suppliers
- Existing research reports

Related tools:

- Developing a WSP for consumer acceptability
- Collecting and analysing consumer complaint data
- Identifying potential causes of consumer complaints through a WSP approach
- Verifying the achievement of consumer acceptability goals

Important Notes to users:

This document provides information to support improved management of piped drinking water quality by water utilities and other stakeholders. It cannot however be definitive and users must ensure that they assess local factors and particularly take account of any national or regional legislative requirements before use. Where necessary this may also need close collaboration with others. The priority to be given to implementing controls to manage identified water quality risks will depend on a proper prioritisation process by each water supplier.

Summary

Communication with consumers is a key part of assessing and promoting the acceptability of drinking water supplies with consumers. The evaluation of consumer acceptability and knowledge of consumer complaints are important components of assessing the overall effectiveness of a WSP and an essential part of the verification of a WSP. This document summarises the main approaches to the collection and analysis of consumer acceptability through surveys. Methodologies for the collection of data via collection of consumer complaints are covered in detail in the separate tool.

Detailed information

The acceptability to consumers of water supplies in terms of levels and variability of discolouration, taste, odour and related factors will differ considerably from country to country and will depend on a wide variety of cultural, historical, social, economic and regulatory factors. Thus the definition of what is acceptable can only be determined locally by taking into account consumer feedback.

Reaching the consumers who do not complain

The advantage of using consumer complaint information is that it is possible to accurately record all the complaints to a water supplier. However not all consumers will complain and there may be a relatively poor link between consumer dissatisfaction and making a complaint. The recording of consumer complaints as the only measure of dissatisfaction may not adequately represent problems that are continuous and which the consumer does not expect anything can or will be done about it e.g. hardness. Also solely relying on consumer complaints as a measure of the acceptability of the water supply may excessively represent certain consumer groups or problems.

The advantage of surveys is that they can seek to explore why some people complain and why some do not to establish which factors have a significant impact on whether people accept their drinking water. Water suppliers can use this information to assess whether consumers object to a particular source or treatment process and whether for example their age or level of education impact on whether the consumers will complain.

How to carry out surveys

The assessment of acceptability of a water supply by a consumer goes beyond the simple question ‘Do you drink the water supplied to you?’ It is important that the water supplier clearly understands what their consumers mean by the term ‘acceptable water supply’ or discusses the issue of acceptability with

the relevant stakeholders (such as water industry experts, regulators, and consumer representatives) before surveys are carried out.

Case studies illustrate how collecting and analysing feedback from surveys allows the water supplier to rapidly respond to consumer issues. In some countries it is common practice for water suppliers to regularly (e.g. once a month) to contact a relatively small number (100) of their consumers to assess the acceptability of their water supply. This frequent contact with a small number of consumers allows the water supplier to respond quickly to issues which arise in the network and gives rapid qualitative and quantitative assessment of the acceptability of their water compared with a larger more detailed survey carried out less often.

Designing the surveys – deciding who to ask, what questions to ask and how to summarise the results – requires particular experience, expertise and skills which water suppliers may not have in-house. Water suppliers therefore often require specialist companies to carry out larger consumer surveys on their behalf. They are usually carried out at a regular frequency, often monthly or quarterly, but some are one-offs carried out in response to local problems, for PR or other operational reasons. The results of these surveys are reported to the senior management teams and are used as a key indicator by companies in understanding and developing their relationships with their consumers.

How do you choose which consumers to contact?
Surveys of representative samples of consumers can provide statistical information on whether consumers find their water to be acceptable. It is possible to randomly select consumers from throughout the region supplied by the water supplier or choose consumers from different areas for comparison. Who the water supplier chooses to contact will be determined by the aims of the survey and whether it is a long term general assessment of acceptability, comparison of consumer groups or in response to a particular incident. Socio-economic grouping does not appear to influence the tendency of people to complain regarding aesthetic water quality but does affect complaints about low pressure or interruptions.

How big should the survey be?
Most survey companies choose to contact a fairly large number of consumers to ensure statistically significant results (with narrow confidence limits) or because they wish to compare different areas. However when complaint frequencies are small, such as complaints about taste and odour, even quite large samples of consumer will still give a fairly uncertain result. In order to properly assess the results of the survey it is critical to get proper statistical input into the design and interpretation of the survey otherwise there is the danger of misunderstanding the results or making inappropriate comparisons.

How is consumer acceptability measured?
Responses can be recorded and measured in four ways:

- Yes or No e.g. a consumer does complain or does not complain, a consumer can detect a taste or cannot detect a taste
- On a scale e.g. from 1 to 5 with 1= no taste, 2=weak taste, 5=strong taste
- Numerical scale e.g. how many households complained about taste?
- Ratio e.g. % of consumers in an area complaining about taste

Each recording method has its advantages and disadvantages and the choice of which one to use depends on the issue being measured and how the results will be analysed.

Analysis and categorisation
Categorising the responses into the following temporal classifications in order to help identify the cause of the complaint:

- Continuous: A problem that is always present e.g. hardness
- Recurrent: A problem that occurs repeatedly in a predictable pattern. This includes problems that are experienced at broadly the same period of the day each day, or across the same season of the year each year
- Intermittent: A problem that occurs repeatedly but unpredictably

- Transient: An isolated problem that happens occasionally as a 'one-off'

In addition spatial analysis can provide valuable additional information by mapping complaint data onto network plans.

Averting behaviour
Some consumers may not complain but will simply avoid using tap water and will turn to another source (increased purchases of bottled water, home water treatment systems, hauling water and boiling water) or carry out mitigating action (installing water softeners, using water filters). Some studies – but only a small number – have used observed or actual behaviour to indicate consumers' dissatisfaction with taste, odour and perceived purity of tap water. Averting behaviour has been one of the most popular approaches to evaluating drinking water safety in countries where it is an issue. Surveys with consumers and the assessment of averting behaviour can be used to assess the acceptability of water supplies.

Panels
Panels may be made up of experts, consumers who are sensitive to taste and odour or representative consumers as part of a wider survey. Trained panellists are more consistent than untrained panellists but tend to over estimate the average number of consumer complaints about and satisfaction with water quality improvements.

Deliberative research
Deliberative research has been used by water companies in some countries to understand their consumers' views and perceptions of their water supplies in order to establish long term future plans for the next 25 years. Deliberative research is carried out in several stages with the participants going through a stage of 'deliberation' where they investigate and explore all aspects of the water industry over a period of around a week to develop informed views of the issues. Deliberative research is carried out by specialist companies and requires the co-operation and sustained input from the participants and is relatively expensive to carry out.

Reference for further detailed information:

- UKWIR. Acceptability of Water to Customers, 07/CU/02/3. London, 2007
- MWA Consultancy. The Customers' Perspective: Consumers' experiences of a Cryptosporidium incident. Report for CCWater, September 2008

Typical resources needed:
The resources necessary will depend on the scale and level of surveys that are required.

Document creation:

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