

### TRADE PRACTICES ACT 1974

### UNDERTAKING TO THE AUSTRALIAN COMPETITION AND CONSUMER COMMISSION GIVEN PURSUANT TO SECTION 87B

By: CITY WEST WATER LIMITED

ACN 066 902 467 of St Albans Road Sunshine Victoria 3020

### BACKGROUND

City West Water Limited ('CWW') is one of three licensed corporatised water retailers in metropolitan Melbourne. The company purchases bulk drinking water supplies from Melbourne Water Corporation and distributes the water to customers in its licensed area. The licensed area encompasses the western region of Melbourne, ranging from inner Melbourne in the east, to as far west as Little River.

Since January 1995 approximately 100 customers in CWW's licensed area have reported water emerging from their water taps which has a cloudy to bluegreen tinge or colour and at times an unpleasant, bitter taste. This phenomenon is known as "blue-green water" and evidences elevated levels of copper in the water as it emerges from customers' taps.

The elevated copper is caused by corrosion of customers' copper piping. The elevated copper is not present in the mains water prior to it entering customers' pipes. The Commission contends that the corrosion is caused by the quality or nature of the water delivered to customers' properties.

The National Health and Medical Research Council - Australian Water Resources *Guidelines for Drinking Water Quality in Australia*, state that copper concentration in drinking water should not exceed 1mg/L and health concerns exist at concentrations over 2mg/L. Once off exposure to a concentration of 30 mg/L copper may cause vomiting, diarrhoea and stomach cramps. Exposure for a number of months to a concentration of 3 mg/L copper can cause liver damage in infants.

Based on customer complaints received by CWW and subsequent testing, it is clear some CWW customers in the suburbs of Delahey, Sydenham and Taylors

Lakes ('problem areas') have been experiencing blue-green water with concentrations of copper on many occasions exceeding the guideline levels.

In response to this problem CWW has over the past 18 months taken various actions including:

- CWW staff and its contractors investigating each reported instance of bluegreen water and providing personal advice and education to affected customers;
- sponsoring a major CSIRO Blue Water Research Project ('CSIRO Study')
   aimed at determining the causes of blue-green water in CWW's licence
   area and possible solutions;
- CWW quality personnel meeting with affected groups of customers to discuss matters related to *blue-green water*;
- CWW providing water usage rebates where necessary to compensate customers experiencing blue-green water for water lost by flushing pipes; and
- CWW providing to customers for short-term loan, electronic copper test kits that allow affected customers to monitor copper levels in their homes or business premises.

The Commission acknowledges CWW has issued some information on *blue-green water* to customers within its licence area, however, the Commission contends CWW had not fully identified the scope of the problem. CWW had also not expressly advised all customers in problem areas of potential *blue-green water* problems. The Commission contends that there is an implied representation that water delivered to customers should be of such a nature that it will meet health standards within customers' premises or homes. The absence of express advice to customers in problem areas relating to the potential for *blue-green water* problems, was viewed as conduct likely to mislead or deceive consumers. Accordingly, the Commission contends CWW through omission may be engaging in misleading conduct contrary to sections 52 and 55 of the *Trade Practices Act*, 1974 ('Act').

### UNDERTAKING

In order to resolve this matter quickly, to meet the Commission's concerns and in being consistent with its position as a responsible corporate entity, CWW undertakes for the purposes of section 87B of the Act that it will:

1. Within 30 days of the date of this undertaking, provide a letter (in the form attached at Attachment "A") to residents in the problem areas where there have been occurrences of *blue-green water*. This material will be provided in English and the other five major languages spoken in CWW's licence

area (ie. Italian, Greek, Maltese, Vietnamese and Mandarin Chinese). The letter alerts residents as to the signs of *blue-green water*, its potential health effects and what steps can be taken to reduce copper levels within the water to safe levels. The letter also states that other local residents have experienced high copper levels in their drinking water. In the event testing discloses other problem areas the same such letter will be provided by CWW to customers in these areas in the same languages as detailed above. CWW will confirm in writing to the Commission that distribution of the letter has taken place within 5 days of the completion of the same.

- 2. Deliver on an annual basis, a water quality brochure, in a form substantially similar to Attachment "B", to all customers within CWW's licence area. The brochure will describe the types of water quality problems that may occur, the potential hazards, and steps that may be taken to mitigate the problem. Specific references to blue-green water, as well as several other types of water quality issues that may occur from time to time, will be included in the brochure. This brochure will be mailed to all CWW customers with quarterly accounts commencing January 1998. CWW will confirm in writing to the Commission that distribution of the brochure has taken place within 5 days of the completion of the same.
- 3. Implement by no later than 31 January 1998, a systematic testing program, acceptable to the Commission, of random sampling of tap water within customers' premises. The program will be conducted over a period of six months and will be particularly focused on testing in areas in which properties have been subject to copper contamination of drinking water. The program will specifically focus on copper levels in water exceeding NH&MRC guidelines. This specific program will be in addition to existing testing conducted by City West Water in accordance with both its licensing requirements and commitments to customer service. Upon completion of the testing program City West Water will within 30 days confirm in writing to the Commission that the program has been completed. In providing such notice, City West Water will provide the Commission with:
  - details of the total number of houses tested;
  - details of the location of houses tested:
  - details of the total number of tests taken;
  - a summary of testing results and any findings; and
  - details of any copper levels found in excess of NH&MRC guidelines.

The time period between the date of this undertaking and the implementation of the program is to allow City West Water to scientifically determine appropriate sample houses and obtain consents to enter the relevant customers' premises.

4. Immediately advise the Office of the Regulator General ('ORG') and the Commission of the findings of the CSIRO Study upon the Study's completion and assist in determining the party responsible for implementing remedial works. Should the CSIRO Study find CWW the main party

responsible for the *blue-green water* problem, and the Study proposes a solution, CWW will implement that solution within a reasonable time frame given adequate funding being made available. Implementation of any solution will be in consultation with the ORG.

5. In the absence of a satisfactory resolution of the blue-green water problem in CWW's licence area, CWW will provide continued advice, as per the first and second undertakings above, alerting residents to *blue-green water* problems.

CWW accepts that this undertaking is a public document which will be placed on the Commission's public register and that the Commission may otherwise publish and refer to this document at its discretion.

CWW notes that this undertaking in no way derogates from the rights or remedies available to any other person arising from the alleged conduct.

The Common Seal of
City West Water Limited
ACN 066 902 467 was hereunto
affixed in accordance with its
Articles of Association

Director

KIMLEY JOHN WCO

(Print Name)

in the presence of:

Director/Secretary

(Print Name)

MITED

COMMON SEA

This 2 ret day of December 1997

ACCEPTED BY THE AUSTRALIAN COMPETITION AND CONSUMER COMMISSION PURSUANT TO SECTION 87B OF THE TRADE PRACTICES ACT 1974

(Professor Allan Fels)

Chairman

This S day of huly 1997

### ATTACHMENT A



To the Occupier

### BLUE-GREEN WATER—POTENTIAL HEALTH HAZARD

Please read the following information carefully—it may alert you to a possible problem with the water supply at your property.

A small number of property occupiers in your area have reported that the water emerging from their cold water taps has a cloudy to blue-green tinge or colour. At times the water may contain small blue crystals or clumps. This can be accompanied by an unpleasant, bitter taste. Water displaying these characteristics is known as blue-green water.

The blue-green colour is indicative of elevated levels of copper in the water as it emerges from the tap. The elevated copper is not from the mains water supply, but appears to be the result of corrosion of customers' internal copper pipes. At this stage the causes of copper corrosion resulting in *blue-green water* are not known. Furthermore, despite years of world-wide research, means for preventing the problem are also uncertain.

Blue-green water must not be consumed due to the elevated level of copper which is poisonous. Drinking of blue-green water can cause vomiting. Prolonged consumption may have adverse health effects, particularly in children and infants.

Generally speaking, the *blue-green water* is more likely to be present from a tap that has not been used for a while. The colour is therefore most likely to be visible when a tap is opened first thing in the morning.

When blue-green water appears from a tap it generally clears in less than 30 seconds due to introduction of fresh mains water. As the blue-green colour disappears and the water becomes "crystal clear" it may then be consumed.

On the back of this letter, we have addressed some of the common questions asked about blue-green water. Should you experience blue-green water or if you would like further information, please contact Georges Ruta or Xavier Smith at City West Water's water quality department on 9313 8388 (or via email to waterquality@citywestwater.com.au) for further assistance. The company can also make available, for short-term loan, electronic copper test kits that allow affected customers to monitor copper levels in their homes or business premises.

We have also enclosed versions of this letter in the five main languages other than English spoken within City West Water's area. Should you or a member of your family require assistance in another language, please contact the telephone interpreter service on 13 1450 and ask them to contact our water quality department on 9313 8388, to discuss the query.

Yours faithfully

Kimley J Wood

MANAGING DIRECTOR

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In order to assist you in better understanding and managing blue-green water (if you think that you are affected), please refer to the following information:

### What is blue-green water?

Blue-green water refers to the colour of tap water that contains relatively high levels of copper. When present, signs of blue-green water are a cloudy to blue-green tinge or colour, and generally an unpleasant, bitter taste. At times the water may contain small blue crystals or clumps.

### Should blue-green water be consumed?

No. Consumption of blue-green water must be avoided. Prolonged consumption of water containing elevated copper levels can cause adverse health effects.

### Where does the blue-green water come from?

The blue-green colour (or copper) originates from customers' internal/domestic copper water pipes. Copper is released from the pipes (as a blue-green product) due to a form of corrosion taking place.

### Why does the blue-green water occur?

We don't know, despite extensive international research and studies into this problem of corrosion of copper water supply pipes, which occurs from time to time in Australia and throughout the world. City West Water is currently researching the problem with CSIRO.

### What can be done to prevent blue-green water?

Due to the uncertainty on the cause of *blue-green water*, apart from replacing copper pipes with another material, means for preventing or stopping the problem are uncertain.

### What can the affected property occupier do to reduce copper to safe levels?

Consumption of blue-green water can be easily avoided by flushing the tap until the water becomes "crystal clear", indicating that copper levels have been reduced to safe levels. With domestic premises this generally takes less than 30 seconds. However, this can take longer in larger commercial premises with more extensive internal copper pipe networks. When "crystal clear" the water can be consumed. Please contact City West Water immediately if you have experienced blue-green water —this will assist us in tracking its occurrence within our area, provide you with further information and assist our research into its causes.

### **Further Information**

Should you be experiencing *blue-green water* or if you would like further information, please contact Georges Ruta or Xavier Smith at City West Water's water quality department on 9313 8388 (or via email to waterquality@citywestwater.com.au), for assistance.

### ATTACHMENT B

City West Water provides water, sewerage and trade waste services in Melbourne's central business district and its inner and western suburbs.

ĐIỂM QUAN TRỘNG: Tở chỉ dẫn này trình bày về tính trạng nước có màu xanh lá cây đậm/ống nước bằng đồng bị ăn mòn có tiềm năng gây nguy hại cho sức khỏe. Muốn biệt thêm chi tiết, xin gọi sở thông dịch số 13 1450.

IMPORTANTE: in questo opuscolo viene descritto il problema della corrosione dei tubi di rame e dell'acqua "blu-verde". Telefonare all'13 1450 per maggiori informazioni.

importanti: Dan il-fuljett jirreferi ghal ilma blùahdar/therrija ta' kanen tar-ram li ghandha l-potenzial ta' periklu ghas-sahha. Ghal aktar informazzioni cempel 13 1450.

ΣΗΜΑΝΤΙΚΟ: Αυτό το φυλλάδιο αναφέρεται στο γαλαζοπράσινο νερό διάβρωση των χάλκινων σωλήνων που αποτελεί έναν πίθανό κίνδυνο για την υγεία. Τηλεφωνήστε στο 13 1450 για περισσότερες πληροφορίες.

重要啓導:本冊子介紹有關藍-綠水/網水管腐蝕的信息,這種水會給人體健康帶來潛在的危害。如欲知詳情,請電:13 1420。

13 2642	13 1971	13 1691
Faults and Emergencies:	Account enquiries:	General enquiries:



City West Water

St Albans Road Sunshine Victoria 3020 Locked Bag 350 Sunshine Victoria 3020 web site: http://www.citywestwater.com.au

# The Quality of your Drinking Water



### Responding to customers with water quality problems

City West Water welcomes feedback on water quality from customers with water quality concerns and has a policy of responding to, and where possible, rectifying problems so that customers receive water that meets NH&MRC (1987) quality guidelines.

In line with experiences of water companies all over the world, City West Water receives feedback from a small percentage of customers with water quality problems. Most of the problems that are reported can be grouped into categories such as white water, brown water, bluegreen water, taste/odour and staining.

White Water (water with a milky or cloudy appearance) is generally due to presence of finy air bubbles in the water. The taste is unaffected. Commonly this is associated with mains repair works when air can become trapped in water pipes. A glass of white water will clear quickly. Air in water is harmless, and in practice the problem soon goes away by itself, or after City West Water has flushed the local water main.

Brown Water (water of brown/muddy appearance, possibly containing particles) can be due to presence of sediments in water mains or, possibly rust from older internal galvanised-iron water pipes. A call to City West Water will assist in identifying the cause. Sediments in water mains are generally readily cleared by City West Water arranging for the local mains to be flushed.

Where the brown water is caused by rusting of internal galvanised-iron water pipes, the householder can attempt to manage the problem by flushing internal taps or seeking advice from a plumber.

Taste/odour in water can occur from time to time and is generally apparent as a chlorine-like or earthy-musty taste/odour.

Chlorine dosing of the water supply is kept to a minimum; however, small fluctuations in chlorine levels may be noticeable from time to time.

Earthy-musty taste/odours can occur in areas where water flows are slower due to lower consumption. The problem is generally readily cleared by City West Water arranging for the local mains to be flushed.

**Staining** of fittings such as sinks and shower bases is usually brown or blue, and is generally a reflection of the type of internal plumbing material present (for example, galvanised iron or copper pipes).

Staining of washing can be due to the presence of sediments in water mains or, possibly rust from older internal galvanised-iron water pipes. A call to City West Water will assist in identifying the cause. Sediments in water mains are generally readily cleared by City West Water arranging for the local mains to be flushed.

Where the staining is caused by rust from internal galvanised-iron water pipes; the householder can attempt to manage the problem by flushing internal taps or seeking advice from a plumber.

### **WARNING:**

# POTENTIAL HEALTH HAZAKU

Blue-Green Water (water that has a cloudy to blue-green appearance, possibly containing blue-green particles, and having an unpleasant, bitter taste) occurs at a very small proportion of properties and appears to be the result of corrosion of customers' internal copper water pipes. The problem seems to be generally restricted to cold water pipes. Blue-green water must not be consumed to drinking or in the preparation of food) due to presence of high levels of copper which are poisonous. Drinking blue-green water can cause vomiting. Prolonged consumption may have adverse health effects, particularly in children and infants.

As the blue-green water originates from internal copper pipes (not from the mains supply), customers can manage the problem by introducing fresh mains water via flushing of their taps until the water becomes "crystal clear".

In certain cases corrosion of copper pipes can lead to perforation and leakage.

Copper corrosion occurs in many parts of the world. At present, the cause of (or solution to) such copper corrosion is not known; however, City West Water is actively researching means of better understanding and preventing the problem.

Customers experiencing blue-green water should contact City West Water immediately on 13 2642 for further information and advice.

# The quality of your drinking water

City West Water is responsible for providing the water supply to households and industry throughout Melbourne's central business district, as well as its inner and western suburbs.

The high quality of the water supplied is reflected in its compliance with the standards set in the company's Operating Licence which are based on the National Health and Medical Research Council's (NH&MRC) 1987 Guidelines for Drinking Water Quality in Australia.

City West Water purchases the water it supplies in bulk from Melbourne Water Corporation. The water is principally harvested from Silvan Reservoir, near Mt Dandenong, and its upstream protected catchment and reservoir system. Apart from natural treatment processes taking place [such as sedimentation in major storages], the only active treatment process applied is chlorination.

A small proportion of the bulk water is obtained from Sugarloaf Reservoir and Winneke Treatment Plant where it is filtered and chlorinated.

The bulk water supply is also fluoridated by Melbourne Water Corporation in accordance with the Victorian Health [Fluoridation] Act 1973.

Once the water leaves the major reservoirs it is distributed to customers via a complex network of large water mains, service reservoirs and smaller reticulation mains. This distribution system is sealed and so is protected from external contamination.

City West Water is committed to providing customers with a high quality water supply that meets standards in its Operating Licence as well as Victorian Government requirements.

This commitment involves a number of important activities that include:

- monitoring the quality of the water supply;
- responding to customers with water quality problems;
- cleaning of water mains and local mains flushing;
- technical studies and research; and
- renewal of water mains.

### Monitoring the quality of the water supply

City West Water monitors the quality of its water supply through a comprehensive monitoring program, as well as by feedback from our customers.

The quality of the water being delivered to our customers is monitored on a day-to-day basis from some 250 locations throughout City West Water's licence area. This monitoring alerts the company to changes in quality, and provides data so that the water quality can be assessed against government licence standards and regulations.

A variety of factors are tested including:

- microbiological parameters, which monitor the possible presence of undesirable faecal contamination;
  - physical parameters such as colour and turbidity, which monitor the clarity and appearance of the water; and
- chemical parameters, which monitor levels of substances such as chlorine, iron, fluoride, dissolved salts, aluminium and other heavy metals.

City West Water publishes an annual report on the quality of the drinking water supply—copies can be obtained by phoning 13 1971.

## Cleaning of water mains and local mains

In response to customer feedback and water quality monitoring, City West Water undertakes extensive water mains cleaning aimed at improving the quality of water supplied to customers. Local mains are flushed as required in order to address local water quality problems.

### Technical studies and research

City West Water monitors developments in management of water supply quality through active membership of bodies such as Water Services Association of Australia, the Australian Water and Waste Water Association and the American Water Works Association

It also actively contributes to a major water supply research study being undertaken by the Co-operative Research Centre for Water Quality and Treatment, and is directly involved in studies of blue-green water (copper corrosion).

### Renewal of water mains

As a further part of maintaining and improving water supply quality, City West Water renews approximately 32 km of water mains per year at an approximate annual cost of \$8 million.

### Use of domestic water filters

From time to time, customers ask City West Water for advice on whether there is a need for them to purchase domestic water filters, or on the relative merits of different brands or types of filters.

Given that City West Water's drinking water quality complies with the standards set in its Operating Licence (which are based on the National Health and Medical Research Council's 1987 Guidelines for Drinking Water Quality in Australia), there is no technical need for customers to use domestic water filters in City West Water's licence area.

It is difficult to discuss apparent merits of individual units due to:

- the large number of brands and types of filters available,
- variations in their modes of operation,
- uncertainty with regard to what they are supposed to be effective at filtering.

In many cases, City West Water believes that individual units have little relevance to possibly improving the quality of the domestic water supply. For example, water filters may be claimed to remove substances that are not even present to any significant degree in the water supply. In certain cases filter units have been known to actually cause a deterioration in water quality.

Customers considering purchasing and using water filters should carefully evaluate their own needs, as well as apparent benefits and relevance of individual units. For example, there are specific situations involving industrial applications or medical treatment where the use of specific, purpose-built water filters is applicable.